

What is a Green Entrepreneur?

Presenter: Bob Irvin

Oct. 27th, 2020

JOULES ACCELERATOR

IDENTIFY – ADVISE – CONNECT

Mission

Prepare the Carolinas for a carbon-free energy future through the commercialization of cleantech innovations.

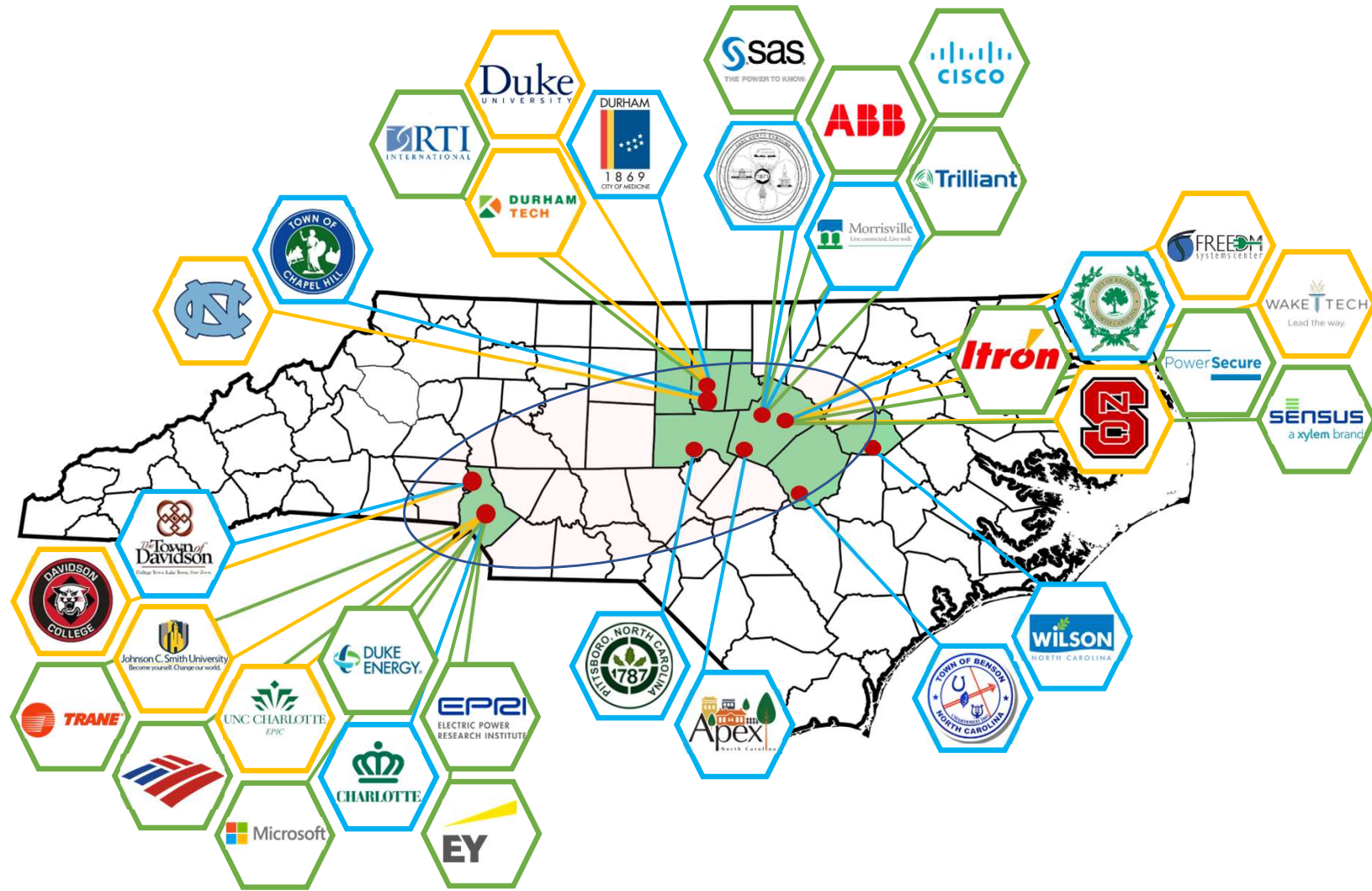
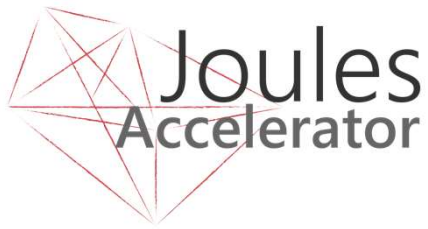
Joules Accelerator is a 501(c)(3) non-profit collaborating with industry, municipal, and university partners to Identify, Advise, and Connect cleantech startups with the Carolinas.



- **90 Day Program**
- **2 Cohorts per Year**
- **52 Portfolio Startups**
- **\$20MM Local Investment**
- **160 Advisors**
- **100+ Local Jobs**

Ecosystem Partners

**ECONOMIC DEVELOPMENT
ADMINISTRATION
\$1.5MM FOR REGIONAL CLEANTECH INNOVATION**



On August 30th 2018, Joules and the Research Triangle Cleantech Cluster (RTCC) applied for the 2018 Economic Development Administration's (EDA) Regional Innovation Strategies (RIS) i6 Grant. On December 4th, the program was awarded \$750,000 in federal funding over three years for joint programming between Joules Accelerator and RTCC. The funding is matched dollar for dollar by local sponsors, for a total budget of \$1.5MM over three years.

52 Portfolio Startups



Europe



North America



Australia

FOOD, WATER, SOCIAL JUSTICE

- Goodr – Atlanta, GA
- Local Roots – Los Angeles, CA
- Varuna IoT – Houston, TX
- Infinite Cooling – Cambridge, MA
- State of Place – Natick, MA
- Good Solar – Charlotte, NC
- Carbon Insights – Durham, NC
- Normative – Stockholm, SWE

STORAGE

- Ardent Edge – Charlotte, NC
- NETEnergy – Chicago, IL
- ZapGo – Charlotte, NC
- Go Electric – Indianapolis, IN

ELECTRIC VEHICLES

- AMPLY – San Francisco, CA
- Chanje – Los Angeles, CA
- Ride Circuit – Miami, FL
- EverCharge – San Francisco, CA
- Flux Hybrids – Raleigh, NC
- Weave Grid

BUILDING EFFICIENCY

- Building Clarity – Durham, NC
- PlottWatt – Raleigh, NC
- Agentis Energy – Chicago, IL
- Harvest Thermal – SF, CA
- Hearth Labs – San Francisco, CA

IOT & GRID MANAGEMENT

- PowerLinesPro – Sydney, AUS
- Switched Source – Chicago, IL
- Athena Power – Washington D.C
- IND Technologies – Melbourne, AUS
- Aurtra – Brisbane, AUS
- Breezi – Raleigh, NC
- Arch Systems – Palo Alto, CA
- GridX - Munich, GER
- Line Vision – Sommerville, MA
- Flood Mapp – Fortitude Valley, AUS

ARTIFICIAL INTELLIGENCE

- SparkCognition – Austin, TX

ROBOTICS & ANALYTICS

- RoadBotics – Pittsburgh, PA
- Xtelligent – Los Angeles, CA
- Airspace Systems – San Leandro, CA
- TheoremGeo – Charlotte, NC

COOLING & DECARBONIZATION

- Dynamhex – Kansas City, MO
- EnKoat – Phoenix, AZ
- BlueBox – Dallas, TX

ADVANCED MATERIALS

- Mosaic Materials – Berkeley, CA
- Flite Tech – Montreal, CAN

WEARABLES

- Proxxi – Vancouver, CAN
- Tacit – San Francisco, CA
- CN2 – Atlanta, GA
- ITD – Charlotte, NC

RENEWABLES

- Eavor – Calgary, CAN
- Alion Energy – San Francisco, CA
- Yotta Energy – Austin, TX

POWER CONTROL

- Atom Power – Charlotte, NC
- 3DFS – Pittsboro, NC

Market Trends 2020

COVID 19



Strong VC participation amid accelerated digitized workforce

New Funds



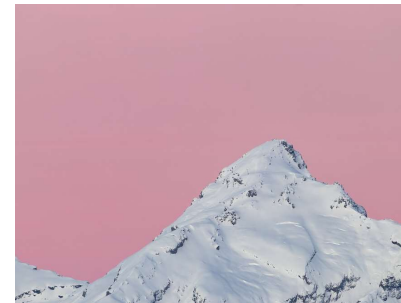
Expansion of climate focused funds: Prime, BlackRock, Amazon, Microsoft

More Acceleration



Greater number of cleantech accelerator programs: EPRI, GTL Texas, 3D

Corporate Climate Action



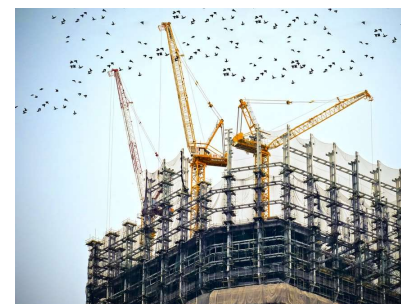
Direct participation in climate focused startup action: Stripe, Microsoft, utilities

Workforce Digitization



Accelerated timeline for remote work software development and adoption

\$2T



House Dems put forward a detailed \$2T climate investment plan

Cohort Screening Process

Past Technology Areas of Focus

SEEKING STARTUPS WITH THE FOLLOWING

- Post seed and pre Series-A funding
- A strong founding team
- Ability to demonstrate traction
- A scalable and applicable product or service

STARTUPS RECEIVE

- Access to the Joules network
- Low friction engagement – fast, free, easy
- Rapid “yes” or “no” for piloting

APPLICATION PROCESS

- Go to www.joulesaccelerator.com/apply
- Complete the one page executive summary
- Email it to apply@joulesaccelerator.com

Cohort 7	 HVAC	 Carbon	 Fintech/Clean Tech
Cohort 6	 Electrification	 Grid Tech	 HVAC
Cohort 5	 Smart Cities	 Workforce	 Grid Tech
Cohort 4	 EV	 Water	 Food Security
Cohort 3	 AI	 Indoor Ag	 Smart Grids
Cohort 2	 Robotics	 AR/VR	 IoT & Sensors
Cohort 1	 DERs	 Advanced Analytics	 Energy Efficiency
Cohort 0	 Energy Management	 Advanced Analytics	 Wearables

Cohort 7 Startup Search

200+

**STARTUP PORTFOLIOS VIEWED OF FUNDS,
ORGANIZATIONS, AND NETWORKS**

2000+

STARTUPS VIEWED

50

INVITED TO INTERVIEW

Startup Characteristics

- Average Age: 2 Years
- Funds Raised: <\$1M
- Countries Represented: 3



JOULES ACCELERATOR COHORT 7


Guest Host



GRETCHEN O'HARA
VP, US AI & Sustainability Strategy & Partnership
Microsoft

As VP, AI Country Strategy & Sustainability Partnership at Microsoft, Gretchen is building the path for Microsoft's US acceleration of its Artificial Intelligence, cloud and sustainability initiative to become carbon negative by 2030. AI and Sustainability will change and shape how we live, it is through strategic partnerships, innovation, and ecosystem activation that Microsoft will achieve these ambitious goals.

HARVEST THERMAL
SAN FRANCISCO, CA
harvest thermal Reduce emissions by 90% and bills by 40% for heating and cooling with the Harvest Pod.



Jane Melia
Co-Founder & CEO

FLOOD MAPP
FORTITUDE VALLEY, AUSTRALIA
Flood Mapp Immediately generate asset specific maps in response to rapid flooding.



Juliette Murphy
Co-Founder & CEO

HEARTH LABS
SAN FRANCISCO, CA
Hearth Labs Quickly quantify heat transfer in the built environment with LiDAR and advanced analytics.




Nicholas Houchois
Founder & CEO

FLITE TECH
MONTREAL, CANADA
FLITE Modify surfaces with laser technology to prevent rust, fouling, and ice without coatings



Dan Cohen
Founder & CEO

YOTTA ENERGY
AUSTIN, TX
Yotta Energy Provide scalable, affordable, and decentralized solar + storage.




Jennifer Gallegos
Dir. of Strategy

NORMATIVE.IO
STOCKHOLM, SWE
Normative.io Simplify corporate sustainability with transparent ESG impact accounting on all purchases



Kristian Rönn
CEO

LINE VISION
SOMMERVILLE, MA
Line Vision Increase the capacity of transmission lines with in-the-moment situational awareness.



Alex Houghtaling
VP Sales

CARBON INSIGHTS
DURHAM, NC
Carbon Insights Translate spending behavior into a carbon footprint score - and offset with partners.



Shannon Parker
Co-Founder & COO

Kickoff:
September 30th
Programming: Oct, Nov,
Graduation:
January

Success



COMMUNITY ENGAGEMENT
EDUCATE REGION ON THE DECARBONIZED ECONOMY

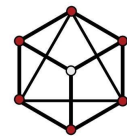
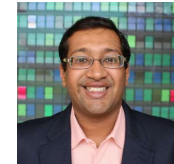
BUSINESS DEVELOPMENT
PILOTS AND INVESTMENT DOLLARS FOR STARTUPS

ECONOMIC DEVELOPMENT
NEW JOBS IN AN EXPANDING AND DISRUPTIVE SPACE

Startup Case Study - WeaveGrid

When Joules initially engaged with WeaveGrid, the team consisted of just the two cofounders and the rough outline of a product. Over the last 18 months, WeaveGrid has raised \$2MM in seed funding, hired an additional 10 FTEs, grown to become a standard solution across domestic markets, and is engaged in a seven-state opportunity with Duke Energy.

"The feeling remains just as strong as after our first Joules session back in March - this has been a really excellent program given the level of access we've been able to have within Duke. We can't thank you enough for that. The fact that we could get three really strong meetings during my 24-hour trip to NC was very powerful. I continue to believe that programs like Joules should have the goal of helping startups reduce their sales cycle to companies like Duke, and I think you are doing a great job to help there."



APOORV BHARGAVA
FOUNDER & CEO

WEAVEGRID
San Francisco, CA

Founded: 2018

Number of Employees: 12

Value Proposition: Connects utilities to vehicles through telematics data and improves overall charge scheduling efforts.

Thank you.