

June 2021 MAC Meetings



Welcome & Introductions



Maureen Moore
Communications Manager

Message from our CEO



H. Wayne Wilkins
Chief Executive Officer

NISC Migration Project Update

Brian Dacaret, Project Manager

NISC Migration Project Update

- ▶ How did the migration go?
- ▶ How have things worked out since migration?
- ▶ How do we measure success?

NISC Migration Project Update

- ▶ How did the migration go?
 - ▶ Emotional
 - ▶ All hands-on deck!
 - ▶ Collaboration and teamwork

NISC Migration Project Update

- ▶ How have things worked out since migration?
- ▶ # Member Registrations: 37,928
- ▶ # App downloads: 6,163
- ▶ Payments
 - ▶ # of payments made: 184,066
 - ▶ Total dollar value received: 29,648,025.59
 - ▶ # of billing cycles completed: 20

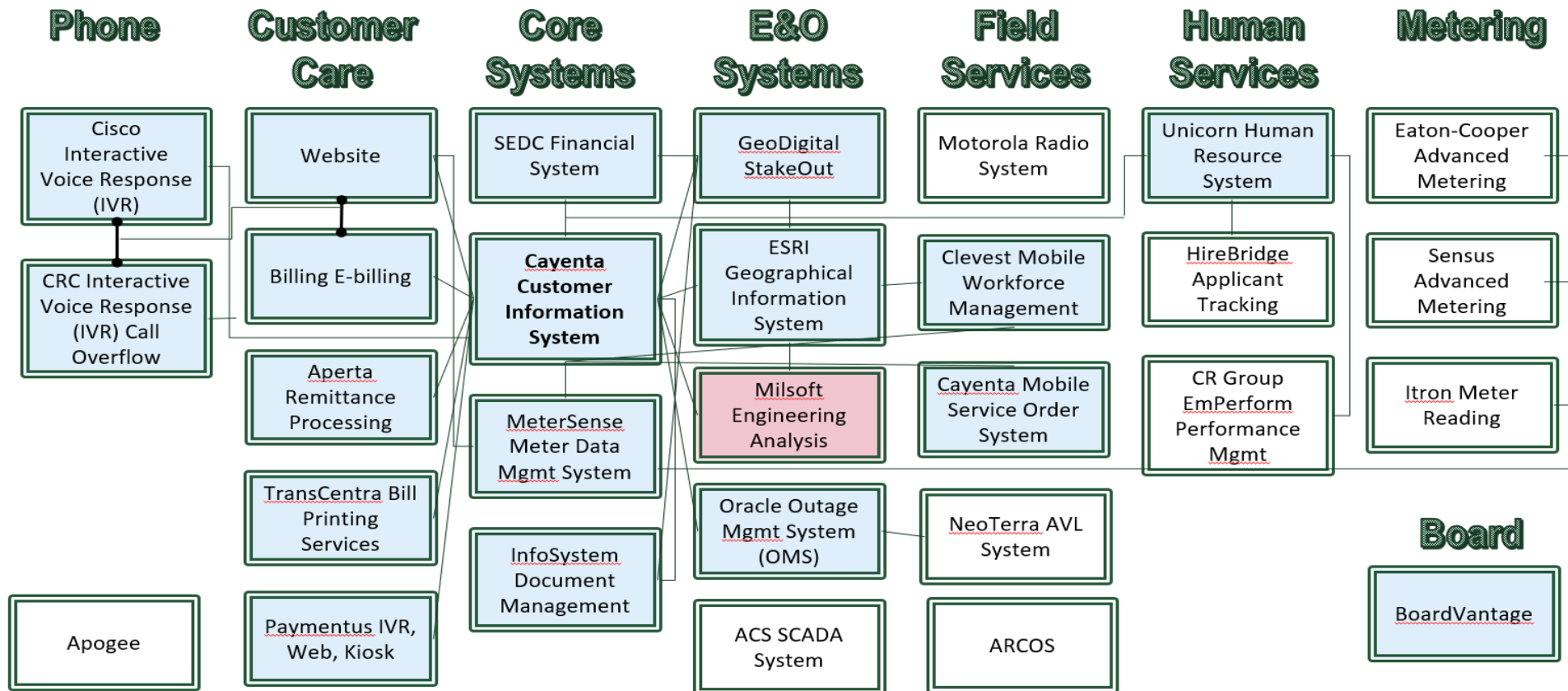
NISC Migration Project Update

- ▶ How do we measure success?
 - ▶ Feedback
 - ▶ Functionality
 - ▶ Efficiencies
 - ▶ Metrics

NISC Migration Project Update

- **Objective-** Consolidate our current distributed technology platform into a single, integrated enterprise system.

EnergyUnited's Best of Breed Technology



NISC Migration Project - Thank you!

Questions?



Integrated Vegetation Management (IVM) 2021

Steve McCorkle

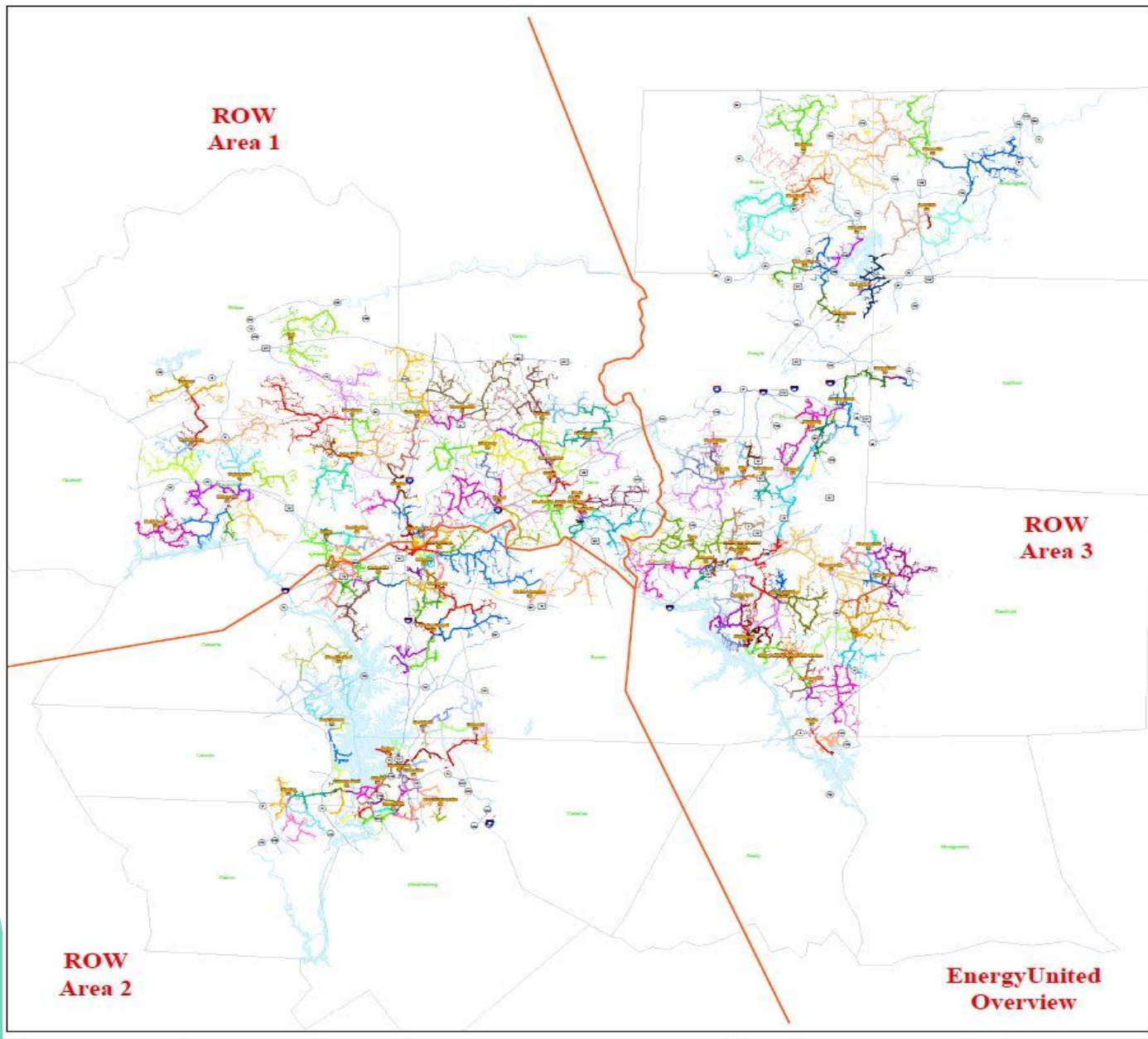
R/W Supervisor

Jimmy Brown

Manager of Maint. Services

EnergyUnited System Overview

- ▶ Provide Electric Service in 19 Counties to over 125,000 members
- ▶ 200 Miles of Transmission
- ▶ 81 Delivery, Substation, & Tower Sites
- ▶ 254 Circuits
- ▶ 6943 Miles Dist. Overhead
- ▶ 4419 Miles Dist. Underground
- ▶ 11,562, Total Miles Energized
- ▶ 5 Employees in Department



What is an Easement/ Right-of-Way (R.O.W) and Why is it important?



- ▶ A utility easement is a legal designation on land or property where the property owner grants utility companies the right of physical access and to construct and maintain their facilities on a designated area of the land.

Necessary Why?

- Allows all members to benefit from safe, reliable, economical service.
- Reduces the cost of constructing facilities by allowing a more uniform route or path for line to be utilized.
- Protects the cooperatives rights to provide reliable service to it's members.

What Does an VM Program Look Like?

- ▶ Historically most utilities relied solely on mechanical means as the chief means to keep their easements clear of vegetation that could result in interruptions to service or hinder the restoration of service. This included the following methods.
 - Bucket Trimming (individuals working from aerial platforms)
 - Mechanized Trimming (Sky Trim/Jarraff telescoping boom trimmer)
 - Mechanical Mowing (Forestry Mulching Mowers)
 - Conventional Crews (climbers)
 - Hand Cutting (crews walking and cutting underbrush and saplings with chainsaws)

Bucket Trimming (individuals working from aerial platforms)

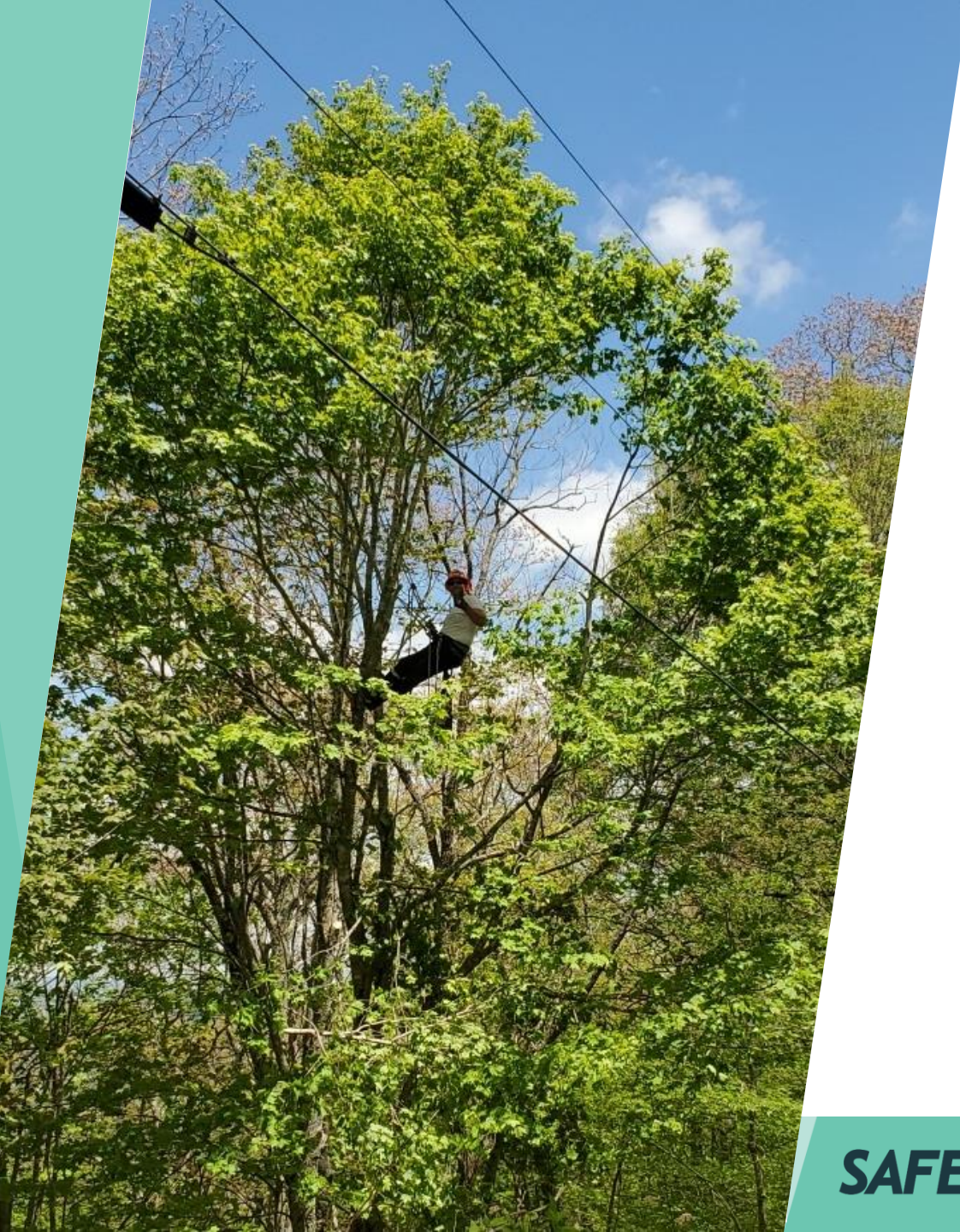


Mechanized Trimming (Sky Trim)



Mechanical Mowing (Forestry Mulching Mowers)





Conventional Crews (climbers)

SAFETY INTEGRITY COMMITMENT EXCELLENCE

What Does an IVM Program Look Like?

- ▶ An IVM program by general definition, utilizes mechanical, cultural, chemical, and biological treatment methods to establish a low growing stable plant community in hopes of resisting invasion of tall growing tree and woody brush species that would otherwise interfere with our ability to provide safe, reliable, cost efficient service.

IVM Methods & How We Apply Them



- ▶ Mechanical - Cyclical trimming schedule based on r/w widths and tree species found on our system. Adds high value to our program and will always be necessary.
- ▶ Chemical - Low Volume Herbicide Applications (LVH) that target specific species that are incompatible with overhead powerlines. Adds high value to our program by essentially eliminating the need to mechanically mow the floor outside of our normal cycle.
- ▶ Cultural - Mostly used in an agriculture setting. For example crop rotation, avoiding overgrazing, and soil amendment. Not applicable to our program.
- ▶ Biological- Technique that utilizes natural enemies of targeted species. For example, goats to control kudzu. Not applicable to our program.



Low Volume Herbicide Application (LVH)

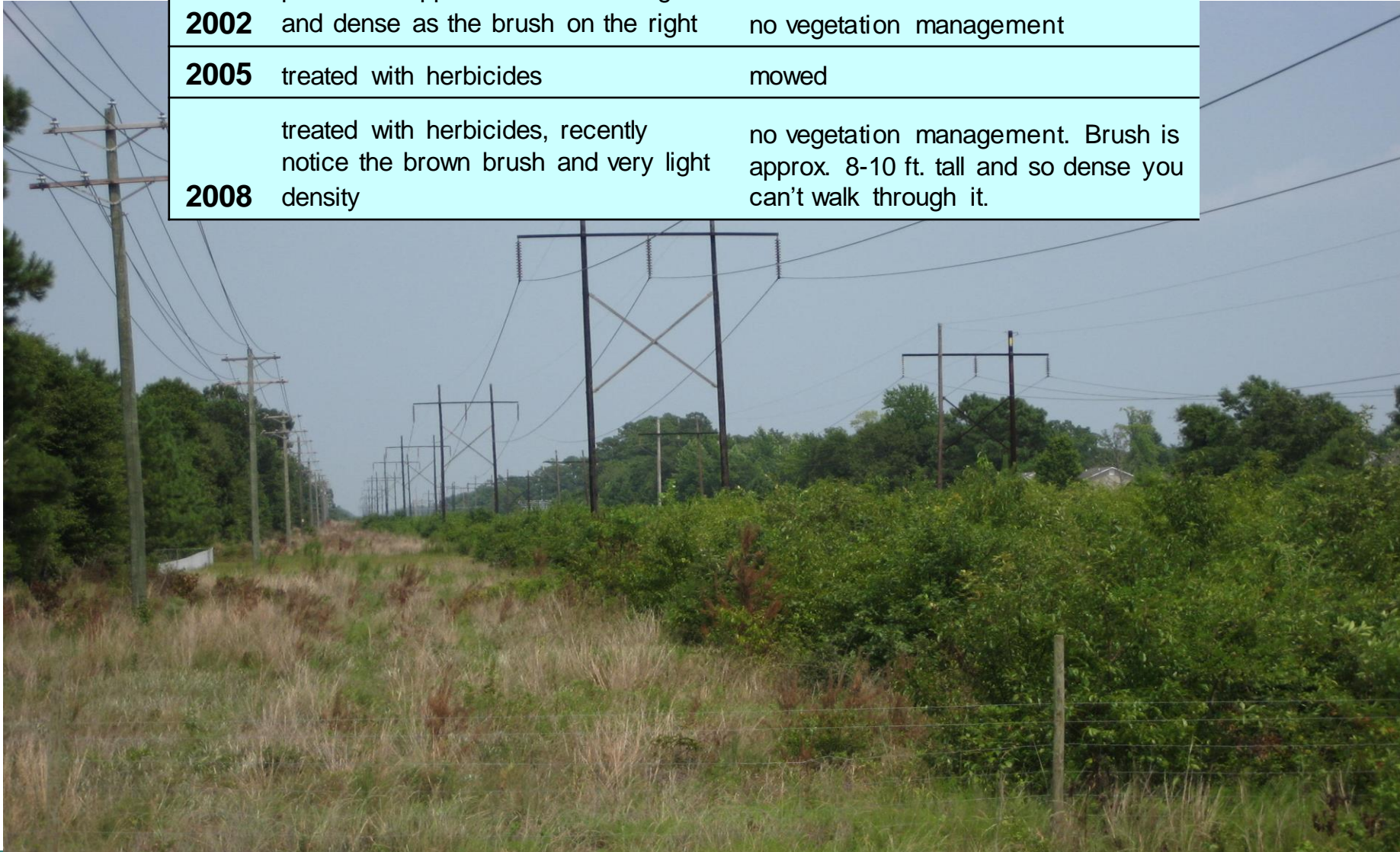
- ▶ Employee newer chemistry (low use rate products.)
- ▶ Apply selectively to certain target species.
- ▶ Minimizes amount of Herbicide used (backpack application)
- ▶ Promotes vegetative species diversity (avoids monoculture.)
- ▶ As stem count decreases, so does volume of Herbicide used.

LVH Results

- ▶ Side by side with natural regeneration (*Liquidambar styraciflua*).



Year	Distribution line on left	Transmission line on right
2002	treated with herbicides Brush present at application was as large and dense as the brush on the right	no vegetation management
2005	treated with herbicides	mowed
2008	treated with herbicides, recently notice the brown brush and very light density	no vegetation management. Brush is approx. 8-10 ft. tall and so dense you can't walk through it.





Absence of an LVH Program
Increased Stem Density = Increased Maintenance Cost

Kudzu (*Pueraria montana*) Vines

Introduced 1876

Spread through the 30's and 50's for erosion control.

For utilities it leads to access issues, potential equipment damage, and possible outages.

Before LVH Treatment



After Single LVH Treatment

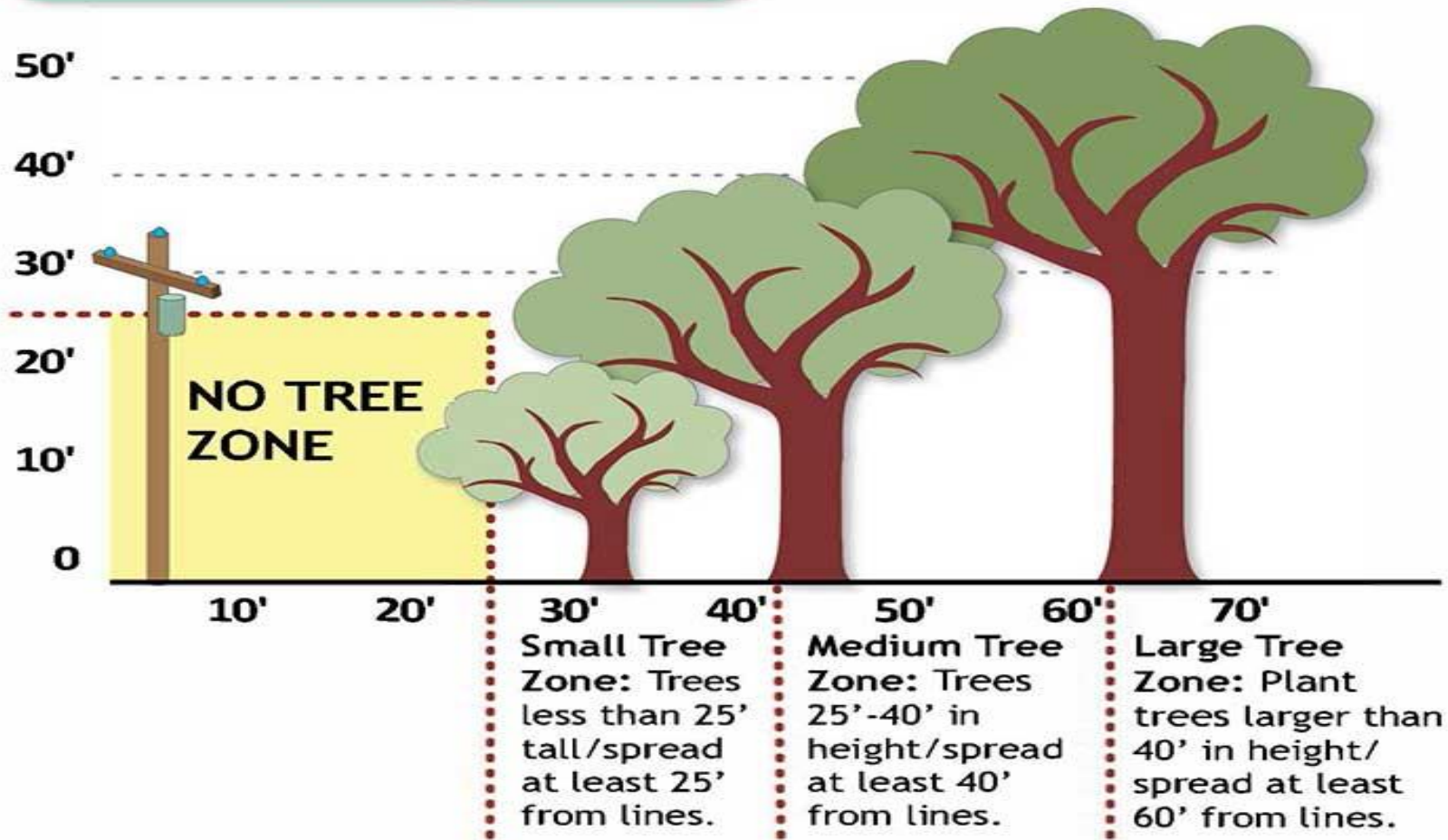




What
Members can
do to help!

Right Tree Right Place

Tree Planting Guide











Call 811 before planting

- ▶ Have utilities marked prior to avoid damage during planting process.



APWA UNIFORM COLOR CODE FOR MARKING UNDERGROUND UTILITY LINES



 PROPOSED EXCAVATION	 COMMUNICATION, ALARM OR SIGNAL LINES, CABLES OR CONDUIT
 TEMPORARY SURVEY MARKINGS	 POTABLE WATER
 ELECTRIC POWER LINES, CABLES, CONDUIT AND LIGHTING CABLES	 RECLAIMED WATER, IRRIGATION, AND SLURRY LINES
 GAS, OIL, STEAM, PETROLEUM OR GASEOUS MATERIALS	 SEWERS AND DRAIN LINES

**For all locate requests, call
811 or 1-800-632-4949**

**Need the status of a locate?
1-877-632-5050**

Contact EnergyUnited before Planting



Opportunities for improvement we're considering going forward.

- ▶ Improving Outage Data Collection Going Forward.
- ▶ Updating the Right-of-Way Section Of Our Website
- ▶ Evaluating a Tree Replacement for Tree Removal Program



Questions??

Co-op Updates



Maureen Moore

Communications Manager

COVID-19 Update

- ▶ Continue communicating safety protocols in accordance with CDC guidelines.
- ▶ Employees who are at least two weeks post-vaccination and are not displaying symptoms are not required to wear masks in offices.
- ▶ EnergyUnited continues to work with members who have past due balances to offer flexibility through our nine-month repayment plan.



Advanced Metering Infrastructure (AMI)

- ▶ EnergyUnited has deployed nearly 100 % of its Sensus Advanced Metering Infrastructure (AMI).
- ▶ Members can now see hourly and 15-minute interval energy use data in My EnergyHub thanks to our new meters and enterprise system.



DC Fast Charging Stations

- ▶ EnergyUnited celebrated the installation of its two new DC Fast charging stations in Statesville and Mocksville on May 27 and 28.
- ▶ Thanks to MAC members Barry Henline (Statesville) and Jason Sprague (Lake Norman) for attending these events.



Cybersecurity Update

Colonial Pipeline Ransomware Overview



Adversary sent phishing email.



Victim opened email attachment, providing the adversary access to the Colonial Pipeline's network.



Adversary (Dark Side) deployed ransomware.



Ransomware encrypted critical business data.



Colonial took its IT & OT systems offline, disrupting fuel supply across more than 5,500 miles across the Southeast.



Colonial paid \$4.4M ransom to get systems back online.

New Community Solar Offering Coming Soon!

BENEFITS OF COMMUNITY SOLAR



Reduces air and water pollution and greenhouse gases.



Reduces our dependence on fossil fuels like coal and natural gas.

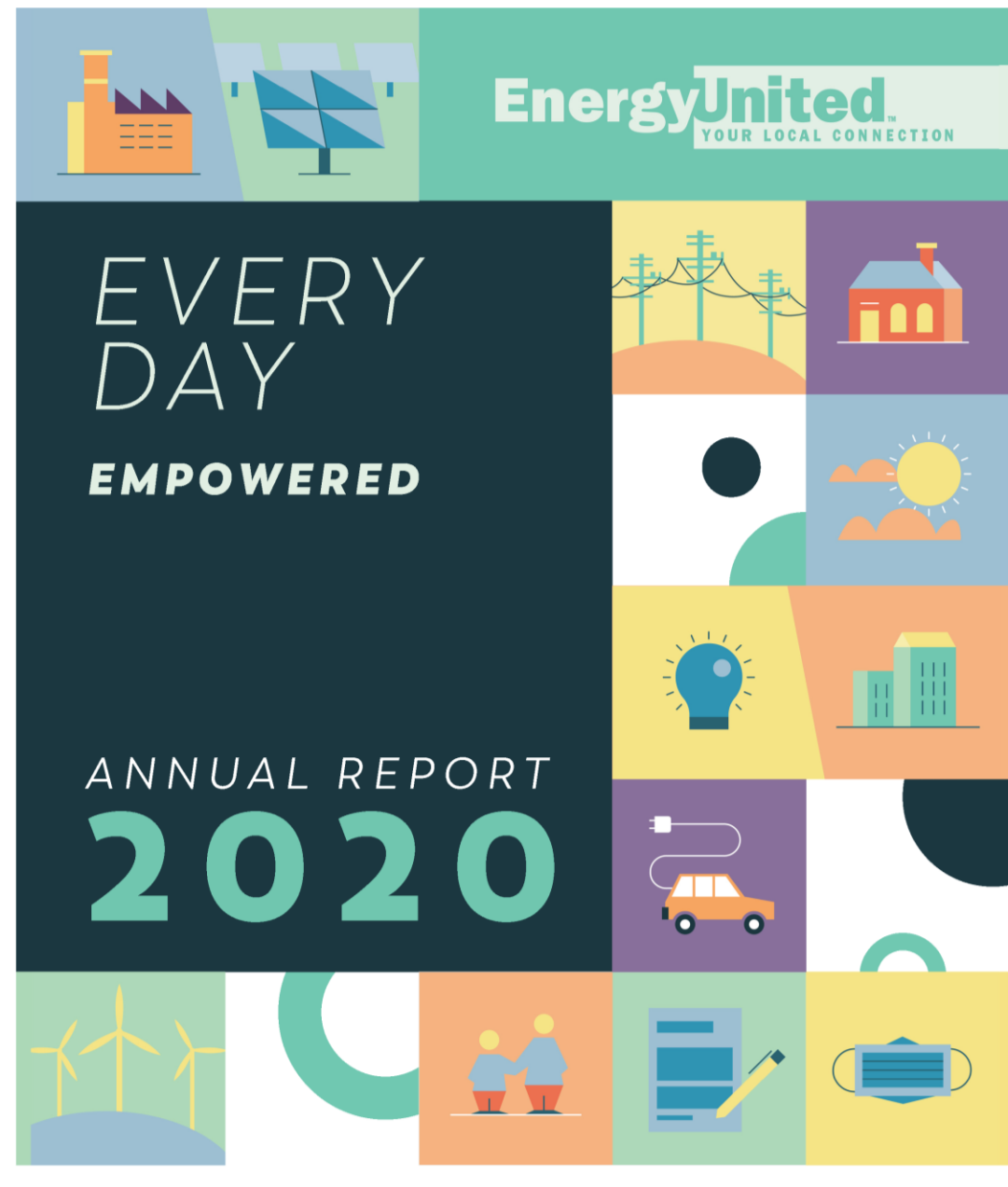


Is an environmentally friendly renewable and abundant energy source.



Makes solar energy more affordable for everyone.

2020 Annual Report



2020 Sustainability Report, Digital Branding Campaign and Front Porch Forum Update



Digital Branding

 **EnergyUnited**
Published by Grace LaMontagne · April 26 ·

Check out how we've been Doing Better Together with our 2020 Sustainability Report.



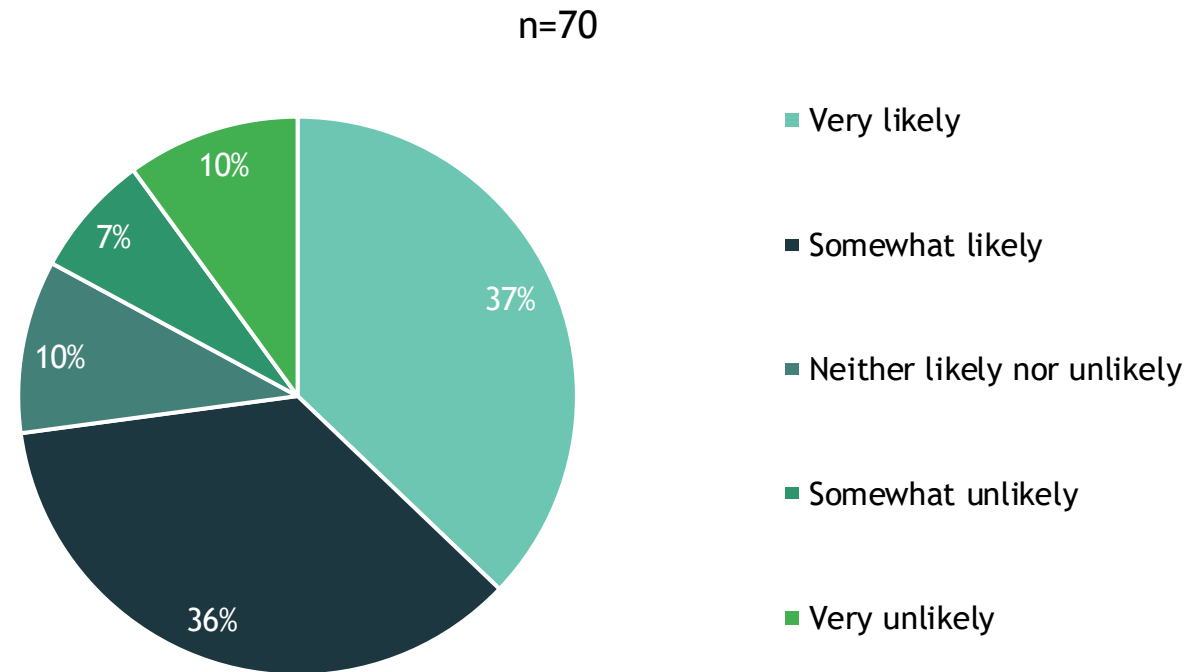
ENERGYUNITED.COM
Brighter Tomorrow, Today
EnergyUnited is the largest electric cooperative in North Carolina serving...

[Learn More](#)

Front Porch Forum

Almost three-quarters of members indicated they would be “very likely” or “somewhat likely” to visit EnergyUnited’s website to view the 2020 Sustainability Report. Participants were asked if there was anything that would make them more likely to view the 2020 Sustainability Report on the website. Many members indicated that they would like an email reminder. Their verbatims comments can be found on the following slides.

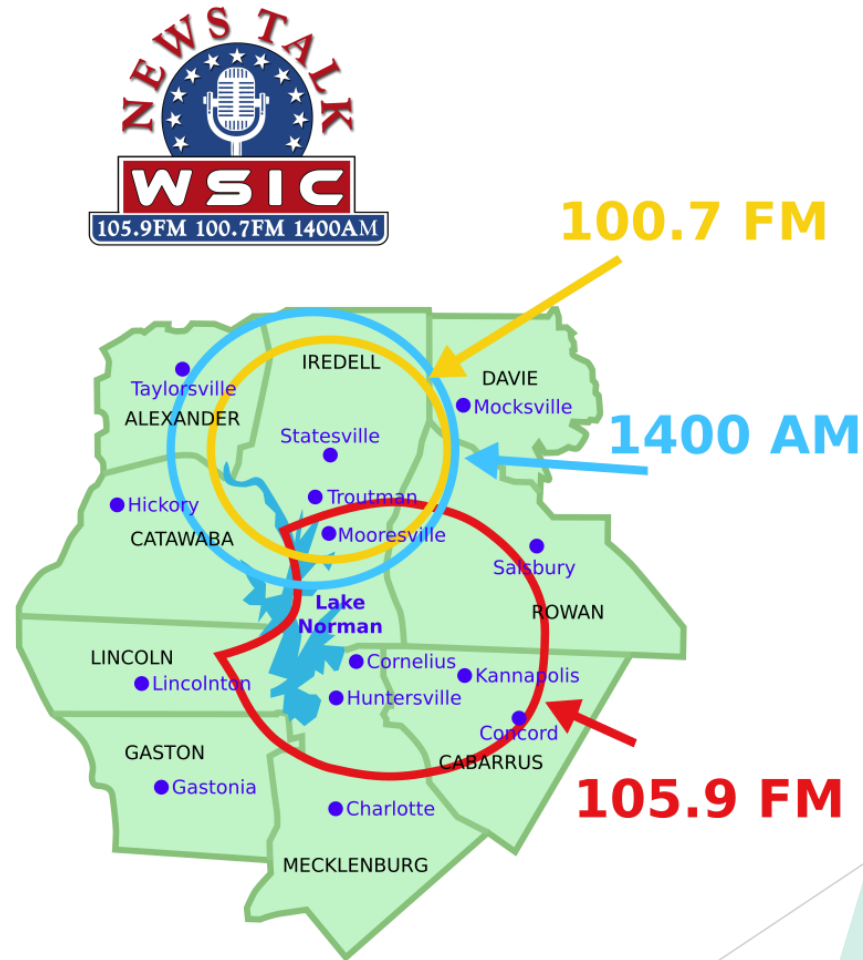
EnergyUnited is working on a second Sustainability Report that will share insights from our 2020 sustainability initiatives. The 2020 Sustainability Report will only be shared electronically, and we plan to publish it on our website in April. How likely would you be to visit our website to view the 2020 Sustainability Report?



2021 Virtual Annual Meeting

EnergyUnited will be partnering with WSIC to host our 2021 Annual Meeting virtually.

Save the Date for
September 16 - 4:00 p.m



Scholarship Winners

EnergyUnited has selected Sadie Essic (Davie High) and Amaya Hanley (William A. Hough High) as our two scholarship winners for *Empowering the Future*.



Now accepting Bright Ideas applications!



*Teachers, bring your
creative learning
project ideas to life!*

Projects sponsored locally since 1994 by

EnergyUnited
YOUR LOCAL CONNECTION



Apply now!
NCBrightIdeas.com

Early bird deadline: August 16, 2021

Deadline: September 15, 2021

Cooperative Leadership Camp Winners



Connor Robinson
Lake Norman Charter



Sydney Loflin
HOPE Academy

Youth Tour Winners

EnergyUnited has selected Connor Robinson (Lake Norman Charter), Sydney Loflin (HOPE Academy), Alexandra Maynard (East Forsyth High) and Arianna Allen (William A. Hough High) as our four Virtual Youth Tour winners.



Recipe Collection

DO YOU WANT TO BE FEATURED IN
OUR COOKBOOK?

SUBMIT YOUR FAVORITE
"ANYTHING CHOCOLATE" RECIPE TO BE
PART OF OUR 2021 COOKBOOK COLLECTION!



PLEASE SUBMIT YOUR RECIPE NO LATER THAN JUNE. 20TH
BY EMAILING EU-COMMUNICATIONS@ENERGYUNITED.COM

Questions?



Our Next Meetings

- ▶ October 7 - Statesville
- ▶ October 14 - Lexington
- ▶ October 28 - Lake Norman
 - ▶ 5:30 - 7:30 p.m.