

CFC SUSTAINABILITY BOND REPORT

POWERING THE FUTURE
OF RURAL AMERICA

August 2023





“CFC and our member cooperatives are focused on providing essential services to rural Americans, including many underserved communities, which is a core principle of our business model. We had a very positive experience financing our members’ broadband projects with our first Sustainability Bond issued in 2020. We were pleased to continue our support of the electric cooperative network and the communities it serves with a second Sustainability Bond”

— *Andrew Don, CEO, CFC*

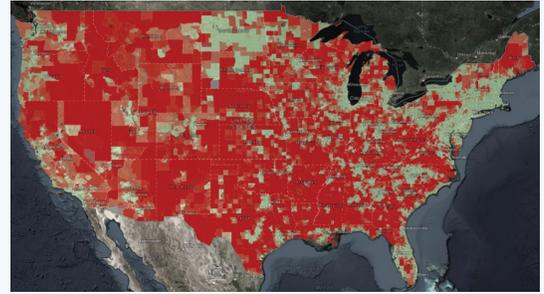
CFC Issues Second Sustainability Bond

In August 2022, CFC successfully issued its second \$400 million Sustainability Bond that exemplifies the convergent interests of electric cooperatives and society.

Through the issuance of sustainability bonds, CFC aims to finance improved access to essential services for underserved communities.

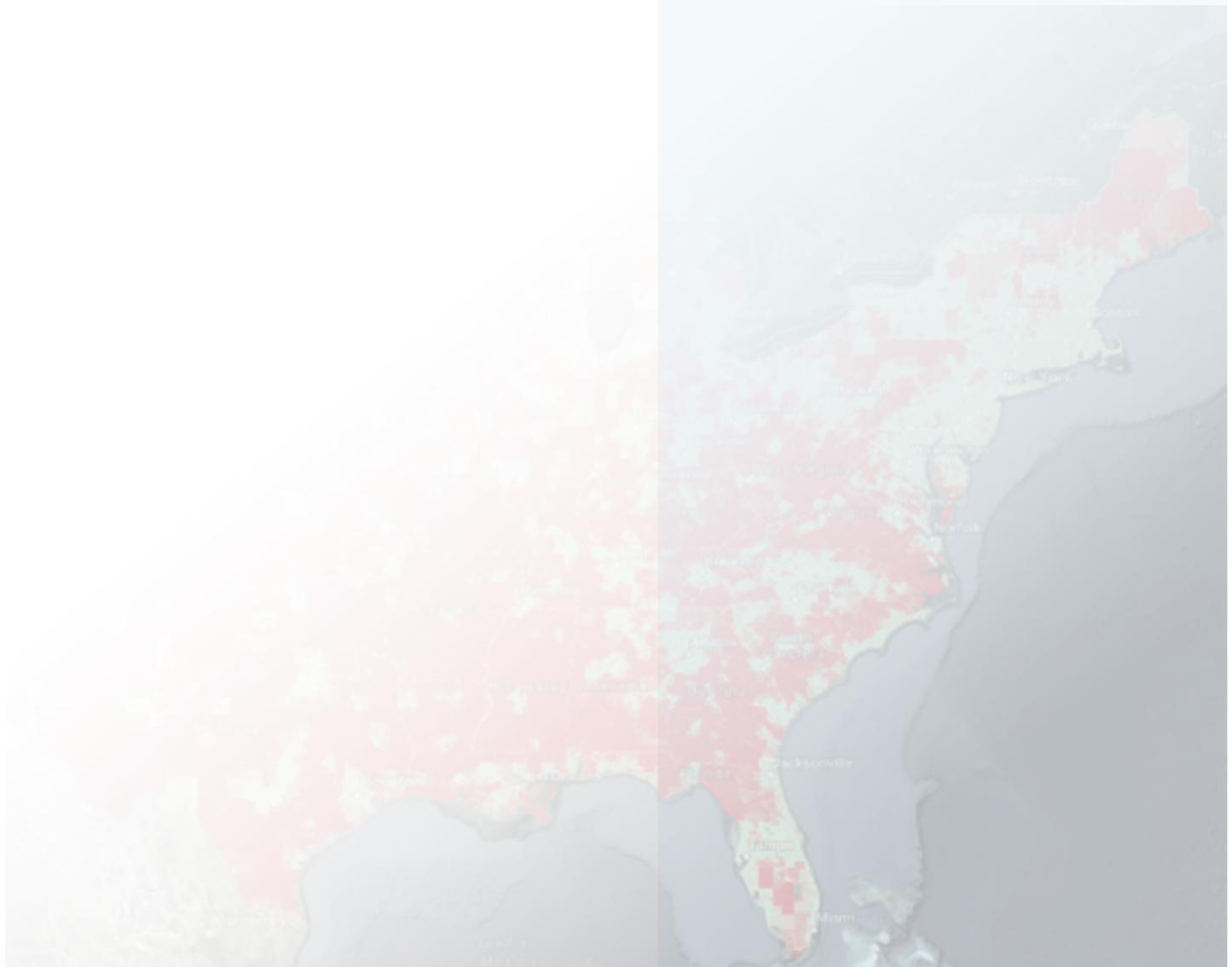
All of the net proceeds from the second bond have been allocated to loans that finance access to high-speed broadband services for underserved and rural populations in communities served by CFC member cooperatives.

Broadband Need



Areas in red show where the median fixed broadband internet speeds are below 25 Mbps download and 3 Mbps upload—the FCC's current benchmark for fixed broadband service.

Source: U.S. Department of Commerce National Telecommunications and Information Administration



Project Evaluation



Project Evaluation

CFC's Sustainability Bond Framework is overseen and governed by the CFC treasury team, which is led by the CFC CFO.

CFC business units identify and evaluate projects based on the eligibility criteria and in consultation with the CFC treasury team. Final approval will be made by the CFO.



Eligible Projects

Eligible Projects means investments, expenditures or disbursements made after August 1, 2019 for projects that meet one or more of the Eligibility Criteria (as defined below), including the development or implementation of new and ongoing Eligible Projects (including research and development and related supporting expenditures).



Eligibility Criteria

Access to Essential Services for underserved and rural populations includes investments, expenditures or disbursements related to fund the construction, improvement, acquisition or maintenance and operation of facilities and equipment needed to provide a broadband service.



Broadband Access Benefits

- Increased Productivity: Enable remote work, foster economic development, job growth, rural entrepreneurship and innovative technologies.
- Improved Operations: Provide reliable, real-time internet connectivity to farms and rural businesses.
- Enhanced Healthcare Options: Increase access to telemedicine.
- Educational Opportunities: Expand access to online, remote distance learning for rural students and vocational training for adult learners.
- Competitive Entrepreneurship: Expand rural entrepreneurship.

Report

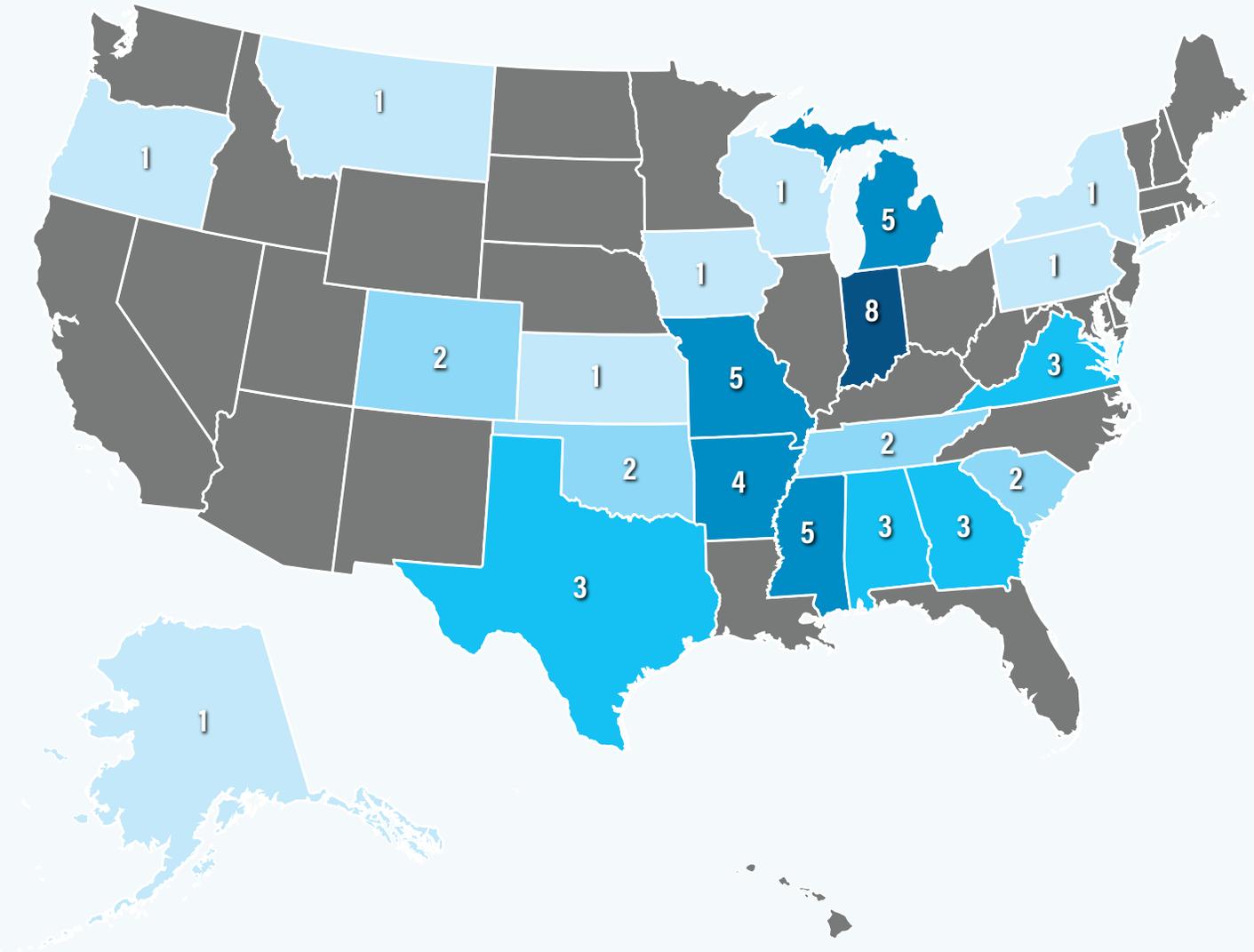
CFC Sustainability Bond Details

- ▶ Issue Date: August 17, 2022
- ▶ Tenor: 10 years
- ▶ Issued Amount: \$400 million
- ▶ ISIN: US637432NW12

Use of Proceeds

- ▶ Number of Projects/Cooperatives Supported: 55
- ▶ Project Categories: 100% Broadband
- ▶ Geographic Allocation of Projects: 21 States

Broadband Projects by State



“CFC’s Sustainability Bond is a great example of how you can align what’s good for CFC, our members and their communities.”

— *Andrew Don, CEO, CFC*

Case Studies



Broadband Case Study

ACCESS TO ESSENTIAL SERVICES—BROADBAND

Introduction

Cullman Electric Cooperative's (CEC) service territory spans four rural counties—Cullman, Winston, Morgan and Lawrence—in north-central Alabama. The region is located north of Birmingham and south of Huntsville and includes the cities of Addison, Cullman and Good Hope as well as Smith Lake and Bankhead National Forest.

The region's economy is driven by poultry, agriculture production and industrial manufacturing. Prior to this project, more than half of CEC's members did not have access to high-speed broadband and some members did not have access to any internet or cellphone service.

Benefits of Broadband

By providing next-generation utility broadband service through its subsidiary, Sprout Fiber Internet, CEC is able to help members do schoolwork from home, work from home, enjoy watching movies with family, gaming and many more opportunities. Commercial companies are now able to receive affordable and reliable internet at their offices. Sprout also offers voice and wireless services to its members.

Sprout walks hand-in-hand with its community by providing reliable internet to churches, community centers, town halls and parks. It offers educational help to its members on how to use the new technology.

One of the biggest projects Sprout is working on is providing fiber connectivity to all of CEC's substations and downline devices. CEC currently has over 50 downline devices on fiber connectivity with hundreds more planned. Once these devices are operational, CEC will be able to reduce members' power downtime by isolating outages between reclosures.

This smart-grid architecture also provides line workers with a real-time understanding of what is going on in CEC's network by providing instantaneous information from their equipment.

Future projects include installing smart meters with a fiber connection at all members' homes, which will provide real-time information to residents and CEC's staff of power usage to better plan system-wide usage.



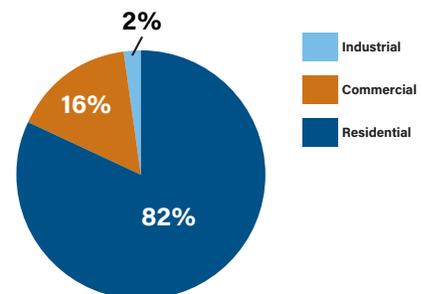
Cullman, Alabama

- 47,500 members.
- 6,400 miles of line.



Cullman, Alabama

- Project started in Q2 2020.
- Project expected to be complete in Q4 2025.
- Internet and phone services provided.
- Internet speeds (download/upload):
 - 300 Mbps/300 Mbps.
 - 1 Gbps/1 Gbps.
 - 2 Gbps/2 Gbps.
- 2,600 miles of fiber planned.
- 1,200 miles of fiber completed.
- 7,000 subscribers.
- Type of customers:





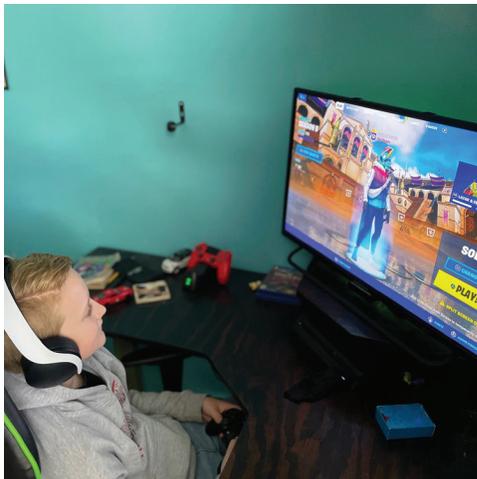
MEMBER TESTIMONIALS

"[Sprout is] nothing like the cable company. The guy that came and hooked us up was great. I would definitely call and talk to them about it."

— **Mary S., Subscriber**

"My son is a gamer and I have not heard one complaint, so that tells me it must be pretty good."

— **Roman G., Subscriber**





CEO OF CULLMAN ELECTRIC COOPERATIVE

“Sprout Fiber Internet is building a reputation for providing superior internet speed and reliability along with outstanding local customer service. Sprout was founded with the cooperative business principles that have helped Cullman Electric Cooperative improve the quality of life in our community for the past 86 years, and it is why we are confident Sprout Fiber Internet will play an essential role in helping our community grow and thrive for years to come.”

– Tim Culpepper



Broadband Case Study

ACCESS TO ESSENTIAL SERVICES—BROADBAND

Introduction

HomeWorks Tri-County Electric Cooperative’s service area includes parts of 13 counties in rural-central Michigan: Barry, Clare, Clinton, Eaton, Gratiot, Ingham, Isabella, Ionia, Jackson, Mecosta, Montcalm, Osceola, and Saginaw. The headquarters is located northwest of Lansing and east of Grand Rapids. The cooperative’s service territory is primarily residential and serves the areas outside of the region’s cities and towns.

The region’s economy is driven by a large agriculture industry, along with a prevalence of woodworking, education, healthcare, and leisure activities.

In 2016, Federal Communications Commission data showed that less than 47% of HomeWorks’ service territory had access to internet speeds greater than 10 Mbps download and 1 Mbps upload. That same year, HomeWorks conducted a survey that showed 86% of its membership believed that quality internet service would have a positive impact on their quality of life.



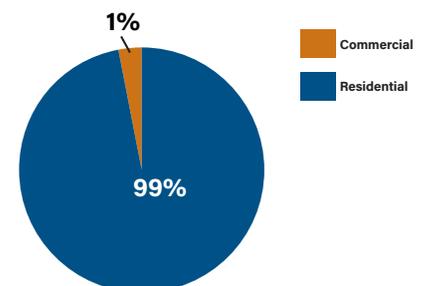
Portland, Michigan

- 24,000 members.
- 3,402 miles of line.



Portland, Michigan

- Project started in May 2018.
- Completion in June 2023.
- Internet and phone services provided.
- Internet speeds (download/upload):
 - 100 Mbps/100 Mbps.
 - 200 Mbps/200 Mbps.
 - 400 Mbps/400 Mbps.
 - 1 Gbps/1 Gbps.
- 2,116 miles of fiber planned.
- 2,116 miles of fiber completed.
- More than 10,000 subscribers.
- Type of customers:





Benefits of Broadband

A reliable internet connection is crucial for HomeWorks' rural members to be able to attend school and work from home. Now, more than ever, the opportunity to participate in remote work and online schooling is allowing those living in rural regions to have access to the same types of resources as those living in large cities.

The pandemic created a unique challenge for the cooperative, but also proved the value of the fiber-optic network that it started deploying in 2018, as many of its members, including several Co-op employees, were able to transition to working and attending school from home seamlessly. It also proved the importance of an internet connection for accessing telehealth and e-commerce, especially in rural areas.



MEMBER TESTIMONIAL

"As a business, having fiber internet takes away the uncertainty. [Before having HomeWorks Connect], we would have problems losing our phones and problems with credit card authorizations. When you have unreliable internet, it affects everything in day-to-day operations."

— **Chopper Schrauben**, owner of The Wagon Wheel restaurant, Portland, MI

"I work for companies all around the world. You know, these are software companies that have offices everywhere. When I am in a Teams meeting or something online, they always ask me about my internet, because it just never drops; it just seems so crisp. I said, 'You know what, I live in the middle of nowhere, and I have the fastest internet of any place in the world that I've ever lived.' Nothing has been as fast as the internet that I have in Portland, Michigan."

— **Kirk Noren**, HomeWorks member



CEO OF HOMEWORKS TRI-COUNTY

“Over 80 years ago, HomeWorks Tri-County was founded to provide electric service to rural mid-Michigan residents who had been left behind by the state’s larger, investor-owned utilities. Today, we’re proud to be repeating that history with our HomeWorks Connect fiber internet project, which is delivering reliable rural broadband access to our members who have been underserved by larger internet providers for too long.”

– Chris O’Neill





Broadband Case Study

ACCESS TO ESSENTIAL SERVICES—BROADBAND

Introduction

Orange County Rural Electric Membership Corporation's (REMC) service territory spans five rural counties—Crawford, Lawrence, Martin, Orange and Washington—in southern Indiana. The region is located south of Indianapolis and northwest of Louisville and includes the cities of French Lick, Orleans, Paoli and West Baden Springs, as well as the resort area of Patoka Lake.

The region's economy is driven by agriculture, manufacturing, mining, warehousing and distribution, and ecotourism. The cooperative's service territory includes some of the lowest income areas in the state. Prior to the project's implementation, about 63% of Orange County EMC members had intermittent internet service and those with broadband service had speeds of less than 10 Mbps/2 Mbps.



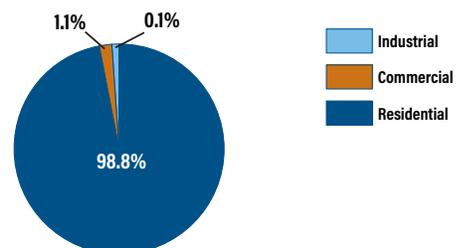
Orleans, Indiana

- 7,937 members.
- 1,311 miles of line.



Orleans, Indiana

- Project started in October 2018.
- Expected to be complete in October 2025.
- Internet, phone, security and managed services provided.
- Internet speeds (download/upload):
 - 100 Mbps/100 Mbps.
 - 1 Gbps/1 Gbps.
- 944 miles of fiber planned.
- 1,975 miles of fiber completed.
- 9,495 subscribers.
- **Type of customers:**





Benefits of Broadband

Orange County Fiber's broadband project has enabled its members to take advantage of remote work, telehealth, video conferencing, online education and streaming services—benefits that were previously unavailable. Families no longer need to drive to town to access high-speed internet to complete homework assignments.

The cooperative finished approximately 60% of its originally scoped project before the pandemic. Construction continued throughout the COVID-19 shutdowns as members were asked to stay home as much as possible and had to further rely on their internet connection for communication, education and other purposes.

Orange County REMC has seen its membership grow since it started the fiber project, with its growth rate more than doubling.



SUBSCRIBER TESTIMONIALS

“What I appreciate the most is the unlimited data usage. I had to be careful with my previous ISP because I had limited data. I could get more if needed, for an extra charge, but I thought that was very unfair. Fiber is the way to go!”

— **D. Scare**

“As a remote employee, often working from home, I struggled with poor, unreliable cell and internet service. Orange County Fiber has eliminated all the issues I used to have. Very dependable and exceeds my expectation.”

— **R. Weaver**



ORANGE COUNTY REMC CEO AND GENERAL MANAGER

“We know high-speed internet is a big need for students to do their schoolwork from home and parents who work from home.”

– **Matt Deaton**





Broadband Case Study

ACCESS TO ESSENTIAL SERVICES—BROADBAND

Introduction

Tri-County Electric Membership Corporation's (EMC) service territory spans eight rural counties—Jones, Baldwin, Putnam, Bibb, Jasper, Twiggs, Wilkinson and Morgan—in central Georgia. The region is located southeast of Atlanta and includes the cities of Eatonton, Gray, Macon and Milledgeville, as well as the resort areas of Lake Sinclair and Lake Oconee.

The region's economy is driven by aerospace, healthcare and hospitals, kaolin, warehousing and distribution, and heritage and ecotourism.

Despite having nine internet service providers in the area, only three overlapped, leaving large pockets of unserved and underserved members. A survey conducted by the cooperative in 2020 showed that a majority of its members had a need for a high-speed internet solution in its service area.



Tri-County EMC

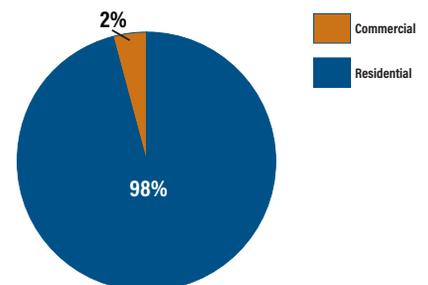
Gray, Georgia

- 22,800 accounts.
- 2,800 miles of line.



Gray, Georgia

- Project started in May 2021.
- Expected to be complete in October 2023.
- Internet and phone services provided.
- Internet speeds (download/upload):
 - 250 Mbps/250 Mbps.
 - 1 Gbps/1 Gbps.
- 1,350 miles of fiber planned.
- 1,250 miles of fiber completed.
- 5,100 subscribers.
- Type of customers:





Benefits of Broadband

Tri-County EMC's goal for the broadband expansion was to bring to its rural community the same level of connectivity and internet speeds that residents in large cities have had for years. No matter where a subscriber lives, the fiber network provides that same speed and latency.

Tri-CoGo lets subscribers do more from home: work remotely, upload photos and stream entertainment. They are no longer left out of the digital marketplace that was once unattainable in the cooperative's rural communities. Tri-CoGo Installer with Yard Sign

Tri-CoGo provides high-speed broadband to numerous community, state and federal facilities. These include county fire stations and recreation complexes as well as state and federal forestry and wildlife refuge facilities. Gigabit fiber service is also available to two, and soon to be three, industrial parks within three different jurisdictions.



SUBSCRIBER TESTIMONIALS

"I couldn't work from home. Couldn't Zoom. I had no service. It wasn't fast enough or reliable. I was running off my phone. So it changed my whole life and I will be the first one to say everyone should have Tri-CoGo."

— **Sandy D.**

"I don't have to worry about any sort of crashes or problems with lag or high ping. It's consistent. I can do my schoolwork from the comfort of my home and get everything done and not have to worry."

— **Jonathan S.**



COO OF TRI-COGO

"I firmly believe that high-speed internet will be a catalyst for economic development, just like rural electrification. Access to 100% fiber, high-speed internet for every member of Tri-County EMC may have the largest impact on business development and quality of life since Tri-County EMC brought electricity to rural middle-Georgia in 1939."

— **Greg Mullis**



Management's Assertion

Management's Assertion

National Rural Utilities Cooperative Finance Cooperation (CFC) asserts that as of February 28, 2023, an amount greater than the net proceeds of \$395.9 million from the August 17, 2022 offering of the 4.15% Collateral Trust Bonds due December 15, 2032 (the "2022 Sustainability Collateral Trust Bonds") was used to finance or refinance, in whole or in part, new or existing Eligible Projects that meet the Eligibility Criteria defined as Access to Essential Services.

CFC is responsible for the completeness, accuracy, and validity of the information in the 2022 Sustainable Bond Allocation Report.

CFC's Sustainability Collateral Trust Bonds Eligibility Criteria for Use of Proceeds

"Eligible Projects" means investments, expenditures or disbursements made after August 1, 2019 for projects that meet one or more of the Eligibility Criteria (as defined below), including the development or implementation of new and ongoing Eligible Projects (including research and development and related supporting expenditures).

"Eligibility Criteria" means the following:

Access to Essential Services for underserved and rural populations includes investments, expenditures or disbursements related to funding the construction, improvement, acquisition or maintenance and operation of facilities and equipment needed to provide a broadband service.

2022 Sustainability Collateral Trust Bonds Allocation Report (as of February 28, 2023)

Net Proceeds from the 2022 Sustainability Collateral Trust Bonds:	\$395,956,000
Issuance Date:	August 17, 2022
Description of the Bonds:	\$400 million 4.15% Collateral Trust Bonds due December 15, 2032
Outstanding Balance as of February 28, 2023 of Loans Made for Eligible Projects that meet the Eligibility Criteria defined as Access to Essential Services for the Period February 27, 2021 to April 30, 2022 ¹	\$711,149,148
Number of Access to Essential Services Project Loans:	184
Percent of Net Proceeds Used to Finance or Refinance, in Whole or in Part, New or Existing Access to Essential Services Projects:	100%
Unallocated Net Proceeds:	\$0

¹For the purposes of allocating the net proceeds of the 2022 Sustainability Collateral Trust Bonds, management has selected the period of February 27, 2021 to April 30, 2022.



KPMG LLP
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McLean, VA 22102

Independent Accountants' Review Report

To National Rural Utilities Cooperative Finance Corporation Board of Directors and Management:

We have reviewed management of National Rural Utilities Cooperative Finance Corporation's ("CFC") assertion on page 20 of the CFC Sustainability Bond Report that as of February 28, 2023, an amount greater than the net proceeds of \$395.9 million from the August 17, 2022 offering of the 4.15% Collateral Trust Bonds due December 15, 2032 (the "2022 Sustainability Collateral Trust Bonds") was used to finance or refinance, in whole or in part, new or existing Eligible Projects that meet the Eligibility Criteria defined as Access to Essential Services ("the Management Assertion"). CFC's management is responsible for its assertion. Our responsibility is to express a conclusion on the Management Assertion based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the review to obtain limited assurance about whether any material modifications should be made to the Management Assertion in order for it to be fairly stated. The procedures performed in a review vary in nature and timing from, and are substantially less in extent than, an examination, the objective of which is to obtain reasonable assurance about whether the Management Assertion is fairly stated, in all material respects, in order to express an opinion. Accordingly, we do not express such an opinion. Because of the limited nature of the engagement, the level of assurance obtained in a review is substantially lower than the assurance that would have been obtained had an examination been performed. We believe that the review evidence obtained is sufficient and appropriate to provide a reasonable basis for our conclusion.

We are required to be independent and to meet our other ethical responsibilities in accordance with relevant ethical requirements related to the engagement.

The procedures we performed were based on our professional judgment and included:

- inquiring of management to obtain an understanding of CFC's Eligible Projects and the Access to Essential Services Eligibility Criteria as defined on page 20 of the CFC Sustainability Bond Report (the "Eligible Projects" and the "Eligibility Criteria").
- inquiring of management to understand the processes and systems used to aggregate data and evaluate, approve, and allocate net proceeds to finance or refinance new or existing Eligible Projects that meet the Eligibility Criteria.
- inspecting supporting documentation for a selection of Eligible Projects to evaluate whether they meet the Eligibility Criteria.
- evaluating the Management Assertion for consistency with our understanding of the Eligibility Criteria and other review procedures performed.

Our review was limited to the Management Assertion. Accordingly, we do not express a conclusion or any other form of assurance other than on the Management Assertion.

Based on our review, we are not aware of any material modifications that should be made to the Management Assertion in order for it to be fairly stated.

KPMG LLP

McLean, Virginia
August 16, 2023

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**National Rural Utilities
Cooperative Finance Corporation**