



October 3, 2024

KUB Renewable Program Highlights & Discussion



Committed to Renewable Energy

KUB Environmental, Social, and Governance Goal: *Advance the development of 400 MW of new-to-the-Valley renewable energy projects by 2030*

- Green Invest
- Generation Flexibility
- Community Solar



Green Invest

- First-of-its-kind agreement with TVA to purchase solar from new projects in the Tennessee Valley
- Cost-effective option to add renewable energy to KUB's energy mix
- KUB contracted for 325 MW at three sites:
 - Golden Triangle – Columbus, MS (70 MW)
 - Optimist – West Point, MS (200 MW)
 - Tullahoma, TN (55 MW)
- Once completed in 2027, Green Invest projects will provide clean energy for ~14% of KUB load

Generation Flexibility

- Authorized by TVA Power Supply Expanded Flexibility Agreement
- Allows KUB to self-supply 5% of electric load

Generation Flexibility Goals:

- Achieve significant power cost savings
- Advance ESG renewable energy goal
- Demonstrate KUB's commitment to a cleaner environment



Flexibility Program Details

- KUB Flexibility Volume =
 - 32.7 MW non-solar **OR**
 - 81.7 MW solar **OR**
 - Some combination of the two
- Interconnection/Hosting Options
 - KUB Interconnected: Local system offsetting TVA power purchase
 - TVA Interconnected: Purchased from third-party and TVA reimbursement
 - Aggregated Valley Partner: Purchased from or in coordination with other LPC
 - End-Use Customer: Excess generation purchased from customer system

Flexibility Implementation Approach

- Review and assess Generation Flexibility options
- Prioritize local solar potential, through competitive procurement
- Supplement local solar with additional sites across Tennessee Valley
- Consider short-term options to fill development gaps
- Align investments with customer service and cost-saving opportunities

Flexibility Project Preview*

Project	Estimated Capacity	Expected KUB Board Review	Estimated Operation Date
Biomass Project (Three-year short-term)	Non-solar: 32 MW → 15 MW (tiered)	Fall 2024	Fall 2024
Green Invest Conversion	Solar: 20 MW	Approved	Jan 2025
LPC Aggregated Project	Solar: 33 MW	Fall 2024	Dec 2027
Local Solar Partnership	Solar: ~20 MW	Winter 2024	Dec 2026
Small Solar Site(s)	Solar: ~4 MW	TBD	TBD

Estimated 2028 Impacts

- Annual Savings: \$4 Million
- Solar Installed: 73-77 MW

KUB Community Solar

- Knoxville's First Community Solar Project
- Partnership between KUB, TVA, and the City of Knoxville
- Located at City Public Works Building
- Implemented as TVA Flexibility Research Project – separate from KUB's 5% Flex Allocation
- Provides KUB customers option to support local solar

**Program Launch Date: April 2023
(100% subscribed as of August 2024)**

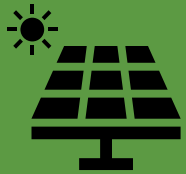


By the Numbers

1 MW array
2,202 panels

1.36 gigawatt hours generated annually
964 metric tons of CO₂e emissions avoided annually

Community Solar Model: How It Works



KUB owns, operates, and maintains the shared community solar array

Customers sign up for a portion of the array through a monthly subscription



Subscribers are credited for their portion of the renewable energy produced

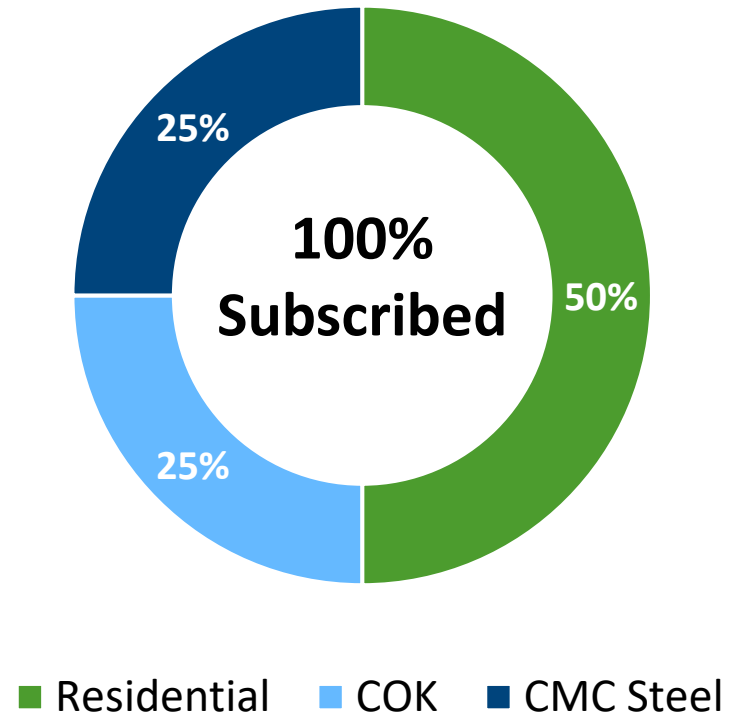
Benefits of Community Solar

- Supports local renewable energy
- Leverages economies of scale to make solar more affordable
- No upfront costs or ongoing maintenance
- Provides access to solar for those that cannot install it at their properties

Subscription Details

- **2,115 shares** available for all residential and commercial customers
- No required annual commitment or upfront fee
- **\$5 per share monthly subscription fee;** receives on average **\$3.61 monthly credit**
- Each share generates roughly **640 kWh of renewable energy** annually
- Option to donate bill credit to **Project Help** (\$4,601.88 donated since program start)

Community Solar Subscriptions



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Breakout Option #1: Generation Flexibility

As Flexibility projects begin to take shape, how can KUB raise community awareness?

- As a customer, what information would you like to know about KUB's Flexibility investments?
- Are there particular concerns we should anticipate from our customers or community?
- Do you have ideas for helping celebrate milestones as projects break ground and come online?

Breakout Option #2: Community Solar

What should KUB consider as we evaluate options and opportunity for an additional Community Solar project?

- Do you expect high interest in an additional community solar offering?
- What is the outcome (or “product”) that matters most for potential customers of KUB Community Solar? Renewable energy? Electricity cost offset? Price stability?
 - How important is location?
- What should KUB consider to ensure equity is part of the community solar framework?