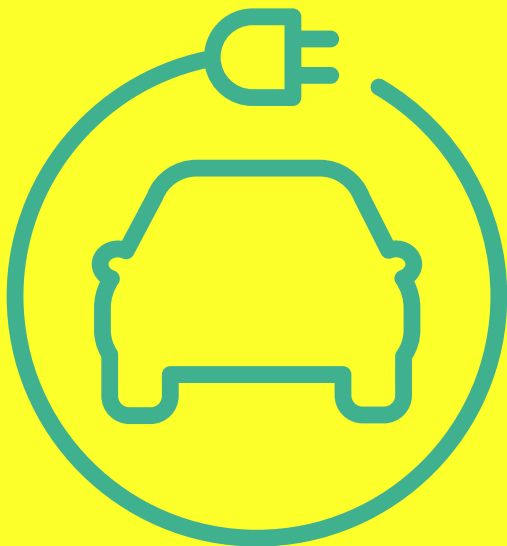
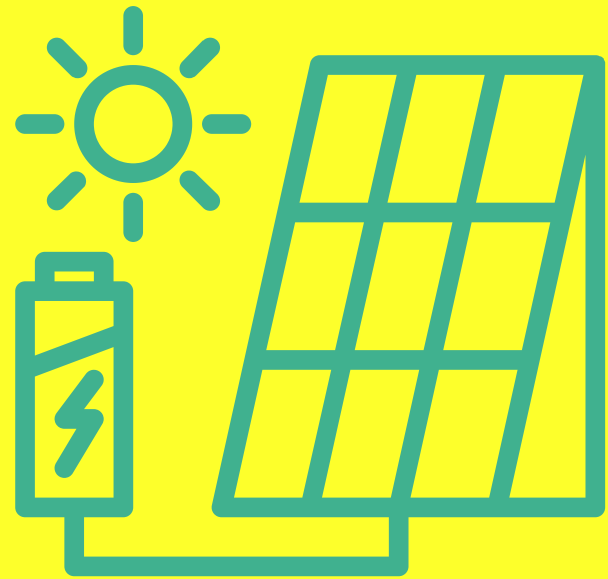


SAT AUG 12 | MSU-Billings | 9a-3:30p

A fun, safe, and educational family-friendly event, showcasing renewable energy and what it can do for you!



**12TH ANNUAL
MONTANA
CLEAN
ENERGY
FAIR**



Billings - Welcome to the 2023 Montana Clean Energy Fair!

01

For over a decade, the Montana Renewable Energy Association (MREA) brought clean energy solutions to Montanans' doorstep through a fun, easy to access event called the Montana Clean Energy Fair. We work hard to bring the fair around the Big Sky State. Past stops included Butte, Helena, Missoula, and Bozeman. And this year, for the first time ever, the power of the Montana Clean Energy Fair is right here in Billings, Montana's largest city. We are proud to witness the positive changes taking place in the world of renewable energy, and the increasing number of local jobs and projects taking shape here in state.

The shift toward renewable energy resources is truly remarkable; there's no putting this train back in the station. With this exciting progress, you may have a lot of questions about how it all applies to you. Can cold climate heat pumps truly be effective in Montana winters? Does an EV car work for my family vacation to Yellowstone? And what kind of financing and incentives are out there for going solar at my home, ranch, school, or place of business?

Whether you've considered going solar, pursuing a career in the clean energy sector, or teaching your kids about where electricity comes from when we flip on the light switch, the Montana Clean Energy Fair is the ideal place to find answers and inspiration. The Clean Energy Fair pairs well with our Billings community events happening this weekend, like the Downtown Farmer's Market and the Yellowstone Air Show.

Our lineup of educational workshops will cover diverse topics such as rooftop solar, energy storage solutions, the scoop on electric vehicles, off grid living, heat pumps, renewables and efficiency for ag properties, and the latest innovations and policies in the sector.

Chat with real world electric car owners and car dealers from the area during the car show. Drop by the array of engaging kids' activities, including building model solar cars, solar ovens, face painting, and a bouncy castle! Plus, we'll be raffling off many great prizes from local businesses, along with a grand prize of a 500-watt commuter electric bike!

The event promises to be both educational and celebratory for all ages. So gather your friends and family, and join us for the Montana Clean Energy Fair on August 12th. We can't wait to see both new and familiar faces and warmly welcome those visiting from near and far. Mark your calendars and spread the word about this incredible event that celebrates clean energy, cost savings, sustainability, and a bright future for our community and the planet.

See you there!



Christopher Borton
Fair Coordinator
(MREA)

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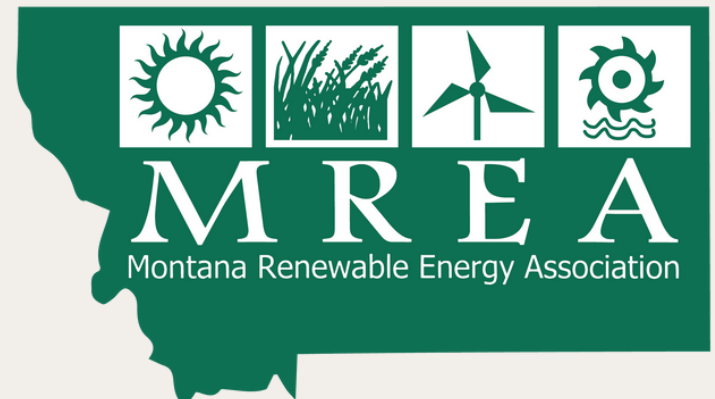
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Sponsors & Exhibitors



MONTANA CLEAN ENERGY FAIR MASTER SCHEDULE

9:00A - FAIR BEGINS

Outdoor exhibitor tables open

Kids activities and raffle open

10:00A - WORKSHOPS

- Consumer's Guide to Going Solar (Room A)
- The Wild World of Water Heaters (Room B)

11:00A - WORKSHOPS

- Solar Electric Basics (Room A)
- Electric Vehicles: Show & Tell (Room B)

12:00P - WORKSHOPS

- Clean Energy for Schools (Room A)
- AgriSolar (Room B)

1:00P - WORKSHOPS

- Living Off-Grid (Room A)
- Energy Savings Through Your Power Company (Room B)

2:00P - WORKSHOPS

- Funding Your Rural MT Energy Project (Room A)
- Tribal Sovereignty with Renewables (Room B)

3:00 - 3:20P - RAFFLE

WINNER ANNOUNCEMENTS

E-bike and raffle prizes at MREA Headquarters tent from 3:00 to 3:20.

3:30P - FAIR ENDS

(Check out the optional home solar tour!)

4:00P - SOLAR HOME TOUR

Pick up directions for the off-site solar home tour at MREA Headquarters tent.



FOOD AND DRINK:

Coffee & baked goods available for purchase in the AM. Lunch available from 11A-1P at the SubConnection Jazzman's Cafe (MSUB Liberal Arts Building).

WORKSHOPS

10:00 AM: CONSUMER'S GUIDE TO GOING SOLAR (ROOM A)

Meranda Bass, Montana Energy Office, Department of Environmental Quality
Paul Herendeen, Clearwater Credit Union

I'm thinking about solar electricity – where do I start? Learn how to set appropriate solar goals for your home or business, estimate costs, find a contractor, and review solar bids. Plus, our speakers will go over the incentives, tax credits, low interest loans, and other programs that can help you finance your renewable energy project. Find out which incentives will work for you, and see how your investment will net returns. This session is a must for anyone who's interested in the exciting market of solar energy.

10:00 AM: THE WILD WORLD OF WATER HEATERS (ROOM B)

Jeff Downer, Liquid Solar and Legacy Heat Pumps

Water heating makes up a third of a building's energy demand. With lower-cost solar PV and new innovative water heaters, there are many ways to improve on standard yet inefficient water heating systems. Learn how to save green by going green! We'll compare tank & tankless; electric & gas; solar thermal & solar PV; and the rising popularity of heat pump water heaters.

11:00 AM: SOLAR ELECTRIC BASICS (ROOM A)

Ryan Orwig, Harvest Solar

What is solar electricity all about? Learn the hows and whys of switching to solar (photovoltaics). Millions of people and businesses are doing it around the world and there's never been a better time to produce your own power from the sun. Multiple grants and funding options are available as well, so what's holding you back?

11:00 AM: ELECTRIC VEHICLES: SHOW AND TELL (ROOM B)

Neal Ullman, Montana Energy Office, Department of Environmental Quality
Mark Juedeman, EV Driver | Rancher | Conservation Advocate

Get the low-down on electric cars and what they have to offer you and your community. Learn about technology options, charging, price trends, and more. Plus, learn about plans for charging transportation infrastructure around the state. This workshop ends with a hands-on show and tell from EV car owners – this electric car show is a truly unique event for Montanans!

12:00 PM: CLEAN ENERGY FOR SCHOOLS (ROOM A)

Winona Bateman, Families for a Livable Climate
Michelle Uberuaga, Mom's Clean Air Force

As parents, teachers, and community members, we have the power to achieve electrification and clean energy choices for Montana's schools. This workshop focuses on three key aspects: 1) Discover the potential benefits and challenges of transitioning to electric school buses. 2) Learn about innovative options for improving energy efficiency within educational facilities. 3) Foster sustainable learning environments for the next generation.

12:00 PM: AGRISOLAR (ROOM B)

Carl Berntsen, National Center for Appropriate Technology (NCAT)
Anna Adair, National Center for Appropriate Technology (NCAT)

Want to learn how to tap into the sun twice? Once for free electricity and the other for aiding in your farm or ranch operations. This tremendous opportunity for low-impact solar development – complementary to agriculture – is known as "AgriSolar." The AgriSolar Clearinghouse is a U.S. Department of Energy funded relationship-building, information-sharing network. It connects businesses, land managers, and researchers with trusted resources to support the growth of co-located solar and sustainable agriculture. These opportunities include grant and funding options for solar co-located with crops, grazing, beekeeping, pollinator habitat, aquaculture, dairies, and crop processing.

1:00 PM: LIVING OFF-GRID: SOLAR AND WIND SOLUTIONS (ROOM A)

Christopher Borton, Sage Mountain Center

Trying to power a tiny home, RV or remote house? Or do you just want to be more self-sufficient? Learn the basics of off-grid technologies, such as small wind generation, solar electricity, battery storage, and load planning and management. Hear first-hand what it takes to cut the power cord and your power bills.

1:00 PM: ENERGY SAVINGS THROUGH YOUR POWER COMPANY (ROOM B)

Kevin Owens, Educator and Former Utility Executive

Learn the multiple benefits of conserving energy with help from your power company! You will walk away from this workshop with tips for finding energy and water-efficient appliances, lighting, and equipment savings through your local utility. This presentation will help you understand how you can lower your energy bills by using less, and will also cover the critical role efficiency plays in sizing renewable energy systems.

2:00 PM: FUNDING YOUR RURAL MONTANA CLEAN ENERGY PROJECT (ROOM A)

Lad Barney, USDA – Rural Development, Montana Office
Daniel Layton, USDA – Rural Development, Montana Office

Operating a farm or ranch at any scale is an energy intensive endeavor. From irrigation pumps to operating equipment, there is ample opportunity for cost savings through efficiency and clean energy offsets. Did you know that the USDA Rural Development Montana Office is a wealth of knowledge to make your rural farm/ranch or small business clean energy project a reality? In this session, talk directly with USDA-RD staff about the funding and help available.

2:00 PM: TRIBAL SOVEREIGNTY WITH RENEWABLES (ROOM B)

To be Announced

Learn about the opportunities and challenges faced by Native American tribes in harnessing renewable energy through the lens of the Northern Cheyenne Tribe. This workshop delves into the potential of solar, wind, and other sustainable energy sources, highlighting their role in promoting tribal sovereignty, economic development, and energy independence. On the same token, find out about challenges and how energy burden changes the Northern Cheyenne Tribe's approach to a clean energy transition.



PRESENTER BIOS

ANNA ADAIR | NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY

Anna Adair is the Energy Program Assistant at the NCAT. She grew up on a small tobacco and cattle farm in Virginia and is excited to help farmers learn about agrisolar opportunities through NCAT's AgriSolar Clearinghouse.

WINONA BATEMAN | FAMILIES FOR A LIVABLE CLIMATE

Winona Bateman is the founder and executive director of Families for a Livable Climate. She sees storytelling as a key way to make connections across differences, create meaning in our lives, and envision an equitable and thriving future. Ms. Bateman has a Bachelors of Arts in Biology from Carleton College, and Masters of Fine Arts in Media Arts from the University of Montana. She lives with her husband and sweet daughter, and enjoys growing food, cooking, and spending quiet time in the woods.

LAD BARNEY | USDA – RURAL DEVELOPMENT, MONTANA OFFICE

Lad Barney currently serves as the Montana Business Cooperative & Programs Director for USDA Rural Development. Prior, he served as Area Director for RD Missoula & Kalispell offices since August 2008. Lad has also worked as the Director of the Small Business Development Center at the Kalispell Chamber of Commerce for five years. On a daily basis, Lad encourages his staff with strong leadership and flexibility in the dynamic world of federal programs, state resources and the business community.

MERANDA BASS | MONTANA ENERGY OFFICE, DEPT. OF ENVIRONMENTAL QUALITY

Meranda Bass is an Energy Resource Professional at the Montana Energy Office at the Department of Environmental Quality. Meranda grew up in Great Falls and attended the University of Montana. After graduating with a BS in business administration she moved to Helena to start her career at the Montana Department of Environmental Quality. Meranda has worked for the Montana Energy Office at DEQ for 7 years and has been managing the Alternative Energy Revolving Loan Program since 2020.

CARL BERNTSEN | NATIONAL CENTER FOR APPROPRIATE TECHNOLOGY

Carl Berntsen is an Energy Engineer with NCAT creating media for the AgriSolar Clearinghouse, developing energy code education materials for the Residential Energy program, and technical assistance in Commercial Energy services. He is a Livingston native who's been involved in the construction industry for 10 years in many different capacities.

CHRISTOPHER BORTON | SAGE MOUNTAIN CENTER

Christopher Borton is director, co-founder, and designer of the award-winning Sage Mountain Center LLC, an off-grid educational facility promoting personal and environmental awareness. For over 25 years Sage Mountain Center has provided sustainable living education in everything from straw bale/cordwood construction and solar/wind power to organic gardening, composting toilets and vegan/vegetarian living. A fourth-generation home-builder, Chris is a founding board member of the Montana Renewable Energy Association and continues to consult and give lectures and seminars to promote proven sustainable methods.

JEFF DOWNER | LIQUID SOLAR AND LEGACY HEAT PUMPS

Jeff Downer of Legacy Heat Pumps grew up in Billings and Eastern Montana on his family farm. With a varied background in technical and mechanical trades, he is currently devoting his time to the hydronic industry, with a focus on the evolving heat pump technology.

PAUL HERENDEEN | CLEARWATER CREDIT UNION

Paul Herendeen is the Director of Impact Market Development at the Clearwater Credit Union, where he works to develop lending programs with positive social outcomes. Prior to finance, he worked for ten years as an environmental scientist studying forests, water, and climate.

MARK JUDEMAN | EV DRIVER | RANCHER | CONSERVATION ADVOCATE

Mark Juedeman grew up on a ranch near Craig MT, graduated from MSU-Bozeman, and worked for 30+ years in the energy industry as a geophysicist. Following retirement, he and his wife moved back to Montana to live in Helena, help out on the family ranch, and volunteer with local nonprofits and city government working on sustainable agriculture, clean energy, and resilient communities. They have been working towards powering their lives with clean energy, starting with plug-in Prius (2012) and Prius Prime (2017) hybrids to a full battery electric vehicle Chevy Bolt in 2018 which draws from their net-metered solar PV system.

DANIEL LAYTON | USDA – RURAL DEVELOPMENT, MONTANA OFFICE

Daniel Layton currently serves as a Montana Business Cooperative and Programs Specialist for USDA Rural Development bringing prior experience in financial and risk assessment planning, consulting high-risk situations in many different capacities, and community development through the public, private, and not-for-profit sectors. As a 5th generation Montanan, he is committed to delivering Rural Development energy programs to underserved areas of Montana including Tribal Nations, agricultural producers, and small businesses.

RYAN ORWIG | HARVEST SOLAR

Ryan Orwig is a Project Manager for Harvest Solar in Billings. He has over a decade of experience in the solar industry with a strong background in construction. Ryan enjoys the challenge and the reward of working in the ever-evolving industry. When Ryan isn't on a roof or helping homeowners and businesses go solar, you may find him snowboarding, mountain biking, or camping in Montana's great outdoors.

KEVIN OWENS | EDUCATOR AND FORMER UTILITY EXECUTIVE

After 46 years in the electric utility industry, Kevin Owens recently retired from his position as the General Manager of Beartooth Electric Cooperative, a member-owned rural electric cooperative serving Stillwater, Sweetgrass, and Carbon Counties. With experience in leadership for both investor-owned and member-owned energy providers in his storied career, Kevin brings insight into beneficial electrification, rate structures, and strategic investments that help both consumers and electricity providers thrive.

MICHELLE UBERUAGA | MOM'S CLEAN AIR FORCE

Michelle Uberuaga is the Montana state coordinator. She helped launch the Moms Clean Air Force chapter in Montana in 2015 and has grown Moms to nearly 4,000 Montana members. Michelle also serves as the Executive Director of a community-based conservation group, Park County Environmental Council (PCEC). From 2011 to 2021, Michelle worked as an environmental attorney and managed her own private law practice specializing in land use and energy work at the Public Service Commission.

NEAL ULLMAN | MONTANA ENERGY OFFICE, DEPT. OF ENVIRONMENTAL QUALITY

Neal Ullman works on clean transportation funding opportunities including school bus replacements, electric vehicle charging stations, and more at DEQ. He previously worked on clean energy issues at the state legislature, as an energy policy advisor to a member of Congress, and for the national Clean Cities program at the U.S. Department of Energy.

KIDS' ACTIVITIES

KIDS' CORNER

9a-3:30p

- Bouncy castle
- Face painting
- Coloring and drawing station

SOLAR COOKING CREATIONS

11a-12p

- Ages 6+
- Build your own solar oven, treats provided!

RECYCLED ART PROJECTS

12p-1p

- Ages 6+
- Get creative and reduce, reuse, recycle!

MODEL SOLAR CARS

1p-2p

- Ages 8+
- Build and race model cars powered by the sun!



ALL ELECTRIC CAR SHOW



Learn from electric car owners and dealers from right here in Billings and surrounding areas. Featuring new and used models from Tesla, Chevy, Kia, and Volkswagen. Curious how EVs and charging stations work in Montana? Come to the Clean Energy Fair to ask the experts.



ELECTRIC BIKE RAFFLE AND PRIZES

Enter for YOUR CHANCE to WIN a 21-speed e-bike and great prizes from Patagonia, Natural Grocers, Diamond X Beer Co., Meadowlark Brewing, and more. Tickets are \$5 each or 5 for \$20. Winners announced from 3 - 3:20p. Must be present to win!



Find all event details at www.MontanaRenewables.org/clean-energy-fair

THANK YOU TO OUR SPONSORS

05

Clean & Green



J.C. Kennedy Foundation

Gold



Silver



ClockTower Inn
Billings, Montana



Bronze



EXHIBITORS

Montana Clean Energy Fair



Learn. Gather. Celebrate.

- Bozeman Green Build
- CED Billings
- Citizens Climate Lobby Billings
- Clearwater Credit Union
- Elgin Sweeper Company
- Families for a Livable Climate
- Harvest Solar
- Mom's Clean Air Force
- Montana Conservation Voters
- Montana DEQ Energy Office
- Montana Environmental Information Center
- Montana Health Professionals for a Healthy Climate
- National Center for Appropriate Technology
- Northern Plains Resource Council
- Onsite Energy
- Purelight Power
- Sierra Club Montana Chapter
- USDA Rural Development, Montana Office
- Yellowball Roofing & Solar



Montana Renewable Energy Association (MREA) is a 501c3 nonprofit dedicated to advancing renewable energy through education, advocacy, and industry engagement.



We are made up of consumers, supporters, and professionals creating a clean-powered economy that changes lives for the better.



Support our work - follow this QR code!



MREA
PO Box 276
Helena, MT 59624