Revitalizing North Dakota Energy Communities – we will begin shortly!

In the meantime, please note:

Slides, webinar recording, and resources will be posted to EnergyCommunities.netl.doe.gov and sent by email.

Enter questions into the Chat box to “All Panelists.”
Revitalizing North Dakota’s Energy Communities

Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization

Briggs M. White, Ph.D.
Deputy Executive Director

September 2021
Revitalizing North Dakota’s Energy Communities

Poll 1:

1) What region of North Dakota are you from?
   Region 1: Tri County
   Region 2: Souris Basin
   Region 3: North Central
   Region 4: Red River
   Region 5: Lake Agassiz
   Region 6: South Central
   Region 7: Lewis and Clark
   Region 8: Roosevelt-Custer
   Outside of North Dakota (put in chat)

2) Which agency is your organization most likely to submit an application to in the coming year?
## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speakers/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00 – 1:05 p.m.</td>
<td>Welcome</td>
<td>Briggs White, Deputy Executive Director, Energy Communities IWG</td>
</tr>
<tr>
<td>1:05 – 1:30 p.m.</td>
<td>Opening Remarks</td>
<td>Brian Anderson, Executive Director, Energy Communities IWG &amp; Director, NETL</td>
</tr>
<tr>
<td></td>
<td>Distinguished Guests</td>
<td>Lt. Gov. Brent Sanford, Senator John Hoeven, Senator Kevin Cramer, Geoff Simon, Executive Director, Western Dakota Energy Association</td>
</tr>
<tr>
<td>1:30 – 2:30 p.m.</td>
<td>Federal Funding to Support Energy Communities</td>
<td>Briggs White, Deputy Executive Director, Energy Communities IWG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Angela Martinez, Alex Smith, U.S. Economic Development Administration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kate Gordon, Department of Energy (DOE)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Matthew Magruder, Department of Interior (DOI)</td>
</tr>
<tr>
<td>2:30 – 2:50 p.m.</td>
<td>Federal Funding Q&amp;A</td>
<td></td>
</tr>
<tr>
<td>2:50 – 3:00 p.m.</td>
<td>Closing Remarks</td>
<td></td>
</tr>
<tr>
<td>3:00 p.m.</td>
<td><strong>Formal Program Concludes</strong></td>
<td></td>
</tr>
</tbody>
</table>
Submit Questions in Chat

All attendees muted.

Send topic questions in Chat to all Panelists by clicking the chat icon on the bottom right of screen.

Send technical assistance questions in Chat to Host.
Final Reminders

Slides, webinar recording, and resources will be posted to EnergyCommunities.netl.doe.gov and sent by email.

Enter questions into the Chat box to “All Panelists.”
Opening Remarks

Distinguished Guest Speakers

- Brian Anderson
  Executive Director, Energy Communities IWG
  Director, NETL

- Lt. Gov. Brent Sanford

- Senator John Hoeven (video)

- Senator Kevin Cramer (video)

- Geoff Simon (video)
  Executive Director, Western Dakota Energy Association
Empowering Workers Through Revitalizing Energy Communities

The Workforce of the Future

Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization

Brian J. Anderson, Ph.D.
Executive Director, Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization

Director, National Energy Technology Laboratory
The Interagency Working Group (IWG) was established by Executive Order 14008, Sec. 218, on Jan. 27.

The IWG released an Initial Report with recommendations to catalyze robust economic activity and support workers in America’s energy sector.
• Identified **25** priority Energy Communities

• Coal communities identified as immediately challenged

• Additional analyses forthcoming

Figure 2 in the report. The IWG recommends focusing initial federal investments in areas with high concentrations of coal-dependent jobs.
$38B in potential funding

The Looney Ridge mine in Wise County, VA

COORDINATE

CATALYZE

TARGET
Calls to Action

- **Stakeholder engagement opportunities**
  - Sign up at new website/follow social media
  - Attend webinars and workshops

- **Support coalitions and matching funds**

- **Provide input on priority IWG workstreams**
  - Stakeholder Engagement
  - Targeting Federal Investments
  - Capacity-Building/"One-Stop Shop"
Federal Funding to Support Energy Communities

- **US Economic Development Administration (US EDA)**
  Angela Martinez, Alex Smith

- **Department of Energy (DOE)**
  Kate Gordon

- **Department of Interior (DOI – Office of Surface Mining Reclamation and Enforcement)**
  Matthew Magruder
Economic Development Administration (EDA) American Rescue Plan

INVESTING IN AMERICA’S COMMUNITIES
EDA’s Mission

To lead the federal economic development agenda by promoting innovation and competitiveness, preparing American regions for growth and success in the worldwide economy.

- Increase America’s global **ECONOMIC COMPETITIVENESS**
- Support **COMMUNITY-LED ECONOMIC DEVELOPMENT**
- Help communities develop **RESILIENT AND AGILE** local economies
EDA’s Investment Priorities

- Equity
- Recovery & Resilience
- Workforce Development
- Manufacturing
- Technology-Based Economic Development
- Environmentally-Sustainable Development
- Exports & Foreign Direct Investment

To learn more about EDA’s Investment Priorities, visit: https://eda.gov/about/investment-priorities/
Eligible Entities for EDA funding

Eligible lead institutions or regional coalition members include a(n):

- District Organization of an EDA-designated Economic Development District (EDD);
- Indian Tribe or a consortium of Indian Tribes;
- State, county, city, or other political subdivision of a State, including a special purpose unit of a State or local government engaged in economic or infrastructure development activities, or a consortium of political subdivisions;
- Institution of higher education
- Public or private non-profit organization or association acting in cooperation with officials of a political subdivision of a State

EDA does not provide funding to for-profit entities or individuals
EDA in North Dakota

Economic Development Districts
• Lake Agassiz Regional Council
• Lewis and Clark Regional Development Council
• North Central Planning Council
• Red River Regional Council
• South Central Dakota Regional Council
• Souris Basin Planning Council
• Tri-County Regional Planning Commission

University Center
• University of North Dakota

Tribal Planning Grantees
• Spirit Lake Tribe
• Standing Rock Sioux Tribe
• Three Affiliated Tribes
• Turtle Mountain Band of Chippewa Indians
$3 Billion in American Rescue Act funding to Invest in America’s Communities

This historic investment will support bottom-up, economic development focused on advancing equity, creating good-paying jobs, helping workers to develop in-demand skills, building economic resilience, and accelerating the economic recovery for the industries and communities hit hardest by the coronavirus pandemic.
American Rescue Plan funding to invest in:

**Jobs for Today**
- Good Jobs Challenge
- Travel, Tourism, & Outdoor Recreation

**Communities Built for All**
- Economic Adjustment Assistance
- Indigenous Communities
- Coal Communities Commitment

**Regions for the Future**
- Build Back Better Regional Challenge
- Statewide Planning, Research, & Networks
EDA’s $300 million Coal Communities Commitment will ensure support for coal communities as they recover from the pandemic and create new jobs and opportunities.

Definition: Communities and regions that can demonstrate how changes in the coal economy have resulted or are anticipated to result in job losses and layoffs in any coal-reliant commercial sector.

To demonstrate eligibility, applicants must provide appropriate third party economic and demographic statistics that document the extent to which contractions in the coal economy have negatively impacted the community or region.
Coal Communities Commitment
EDA Coal Communities Investments
North Dakota

**ND Assoc. of Rural Electric Cooperatives, Lineworker Training Facility (2020), $4,068,372:**
Addresses the local and regional need for a resilient and skilled workforce by constructing a new lineworker training facility in Morton County. The new facility will accommodate year-round training to support rural communities need for a diverse and skilled workforce.

**Bismarck State College, Health Sciences Equipment Project (2019), $415,256:**
Supports the expansion of additional lab and classroom space for innovative educational exploration that will address the hiring needs of the businesses in western North Dakota.
## American Rescue Plan Funding

<table>
<thead>
<tr>
<th>Notice of Funding Name</th>
<th>REGIONAL (DRO)</th>
<th>NATIONAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>STATEWIDE PLANNING</td>
<td>TRAVEL, TOURISM, &amp; OUTDOOR RECREATION</td>
</tr>
<tr>
<td>Funds Available</td>
<td>$1 million per state (Non-competitive)</td>
<td>$19,849,552 (Competitive) $42,180,297 (Non-competitive)</td>
</tr>
<tr>
<td>Purpose</td>
<td>Invest in economic plans, research to assess EDA’s programs, and support for EDA stakeholder communities</td>
<td>Accelerate communities impacted by COVID-related travel and tourism decline through state grants and competitive grants</td>
</tr>
<tr>
<td>EDA Investment Rate</td>
<td>100%</td>
<td>80% (Competitive) 100% (Non-competitive)</td>
</tr>
</tbody>
</table>
Economic Adjustment Assistance

*Invest in infrastructure, technical assistance, planning, and revolving loan programs through competitive grants available to every community*

- Most flexible American Rescue Plan program; intended to fund non-construction and construction activities not already part of another Notice of Funding Opportunity (NOFO).
- A wide range of technical, planning, workforce development, entrepreneurship, and public works and infrastructure projects are eligible for funding under this program.
Travel, Tourism, & Outdoor Recreation

Accelerate communities impacted by COVID-related travel and tourism decline through block grants to states and competitive grants

State Grants

- Award allocations to each state and territory based on economic development indicators in the leisure and hospitality industries

- Can fund destination marketing, but cannot fund economic diversification projects

Competitive Grants

- Assist communities that suffered economic injury because of job losses in travel, tourism, or outdoor recreation sectors

- EDA prefers projects that directly support the travel, tourism, and outdoor recreation sectors; but will consider diversification projects

- Cannot fund local destination marketing
Indigenous Communities

Develop projects designed to create the conditions for economic growth in Indigenous communities and to accelerate economic recovery from the pandemic

- Additional $100 million in Economic Adjustment Assistance (EAA) funds will specifically support Indigenous communities and can be used to fund nontraditional EAA projects, like health centers

- A wide range of technical, planning, workforce development, entrepreneurship, and public works and infrastructure projects are eligible for funding under this program

- This competition is open only to Indian Tribes, as defined in EDA’s regulations, nonprofits serving Native Hawaiians, and nonprofits serving Native Pacific Islanders

100% grant rate – No match required
Good Jobs Challenge

Strengthen regional systems to train workers with in-demand skills through employer-driven training models that support participants with wrap-around services and employer commitments to hire

System Development
Funding to help an organization establish and develop workforce systems and sectoral partnerships

Program Design
Funding to develop skills training curriculum and materials, secure technical expertise to train workers, and secure employer commitments to hire

Program Implementation
Funding for non-construction projects to provide workforce training and connect workers with quality jobs, including wrap-around services

National Competition
Deadline: January 26, 2022
Build Back Better Regional Challenge

Transform economically distressed communities through substantial investment in regional growth clusters

- Proposals should include regional coalitions, industry support, and high-impact projects with a shared vision for a regional growth cluster
- One key coordinating entity per region
- 3-8 projects per regional cluster
- $100M to the Coal Communities Commitment

Projects can include:
Planning | Infrastructure | Workforce | Entrepreneurship
Build Back Better Regional Challenge

Two-Phased Approach

Phase I: 50-60 regions awarded technical assistance grants to finalize plans for project clusters

Total: ~$500,000 per region

Phase II: 20-30 regions from Phase I regions awarded implementation grants from full project cluster applications

Total: ~$25-75m, up to $100M per region

Phase 1 Deadline: October 19, 2021

100% grant rate

Phase 2 Deadline: March 15, 2022

80:20 match rate
Resources

Visit our website for resources: [www.eda.gov/arpa](http://www.eda.gov/arpa)

- One-page overviews
- NOFO webinars
- FAQs
- Applicant support tools
Contacts

Economic Development Representative
Alex Smith
720-402-7686
asmith1@eda.gov

Deputy Economic Development Representative
Ali DeMersseman
720-237-6079
ademersseman@eda.gov
Revitalizing North Dakota’s Energy Communities
By scaling up the development and deployment of clean energy technologies, DOE will put Americans to work building a new clean energy infrastructure and economy, while making sure that every American worker and community can benefit from—and see their future in—clean energy solutions.
Key Offices

Office of Fossil Energy and Carbon Management

Energy Efficiency and Renewable Energy

Office of Electricity

Loan Programs Office
<table>
<thead>
<tr>
<th>Bioenergy Technologies Office</th>
<th>Hydrogen Fuels Cells Technology Office</th>
<th>Geothermal Technologies Office</th>
<th>Advanced Manufacturing Office</th>
<th>Water Power Technologies Office</th>
<th>Weatherization and Intergovernmental Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Define key economic and environmental sustainability indicators and priorities</td>
<td>• Regional clean hydrogen production and end use opportunities</td>
<td>• Investigating deep direct use of geothermal resources to heat and cool the 2000-acre WVU Morgantown campus.</td>
<td>• Industrial Assessment Centers WVU, NC State, Lehigh, Georgia Tech, Syracuse, University of Alabama, University of Dayton, University of Kentucky, and Case Western Reserve</td>
<td>• TVA testing a floating pumped storage hydropower (PSH) membrane in Melton Hill Reservoir, TN</td>
<td>• State Energy Program</td>
</tr>
<tr>
<td>• Estimate regional feedstock availability and transport costs</td>
<td>• Collaboration on H2EDGE and Center for Hydrogen Safety on training and workforce development</td>
<td>• Open funding opportunity for Wells of Opportunity</td>
<td>• Combine Heat and Power Technical Assistance Program</td>
<td>• Performing a PSH innovation study that includes using abandoned mines</td>
<td>• Weatherization Assistance Program</td>
</tr>
<tr>
<td>• Identify key potential markets and transitions</td>
<td>• Hydrogen Shot “111” - $1 for 1 kg clean hydrogen in 1 decade</td>
<td>• Topic aimed at transition oil and gas fields to geothermal</td>
<td>• Better Buildings Program –provides energy and water assessment tools and case studies</td>
<td>• Evaluating options for nonpowered dams to support Appalachia in partnership with USACE</td>
<td></td>
</tr>
</tbody>
</table>
Fossil Energy & Carbon Management Priorities

**Demonstrate and Deploy Point Source Carbon Capture**
RD&D for CCS in the power and industrial sectors to enable wider, strategic commercial deployment to meet net-zero emissions goals by 2050.

**Advance Carbon Dioxide Removal & Low Carbon Supply Chains for Industry**
Research, develop, and demonstrate CDR approaches by investing in direct air capture and mineral carbonation projects and develop novel approaches to recycle carbon emissions.

**Low-Carbon Industrial Supply Chains**
Develop novel approaches to recycle carbon emissions into value-added products such as concrete, steel, chemicals, and fuels using systems-based carbon management approaches consistent with realizing a net-zero carbon economy by 2050.

**Accelerate Zero-Carbon and Carbon-Neutral Hydrogen (H₂)**
Develop technologies that leverage the natural gas infrastructure for H₂ production, transport, storage, & use, coupled to carbon management.

**Reduce Methane Emissions**
Develop technologies and deploy regional initiatives to monitor and reduce methane emissions from fossil fuel infrastructure including coal, oil, and gas.

**Advance Critical Minerals, Rare Earth Elements, Carbon Utilization, and Mine Remediation**
Improving REE separation/recovery technologies to manufacture products from CO₂ and carbon ores to address current market and process economics. Advancing R&D to address abandoned mines.

**Increase Efficient Use of Big Data and Artificial Intelligence**
Use AI, machine learning, and data analysis to create learning algorithms within large dataset to help discover new material, optimize processes, and run autonomous systems.

**Address the Energy Water Nexus**
Improve our efficient use of scarce water resources advance water remediation technologies to address the environmental impacts related to produced or displaced water associated with oil, gas, and coal industries, in addition to that associated with dedicated CO₂ storage.

**Invest in Thoughtful Transition Strategies**
Invest in technologies and approaches and deploy regional initiatives to help create an equitable and just transition to a net-zero carbon economy in energy communities.
# Office of Electricity Workstreams

**Advanced Grid Research & Development**
- Develops and manages projects for “next generation” electricity delivery technologies and supporting activities to accelerate their introduction into the marketplace.

**Energy Resilience**
- Works with electricity system partners and stakeholders to modernize the grid and ensure equitable and adequate transmission capacity across the United States.

**Grid Operations Technology**
- Engineers end-to-end systems for grid modeling, operations, security, measurement, and synchronization at scale.

**Power Marketing Administrations**
- Western Area Power Administration
- Bonneville Power Administration
- Southeastern Power Administration
- Southwestern Power Administration

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Patricia A. Hoffman,
Acting Assistant Secretary; Principal Deputy Assistant Secretary, Office of Electricity
Conversion to Clean Energy Assets

- Redevelopment of abandoned sites can mitigate the economic impact of plant and mine closures
- Redevelopment can leverage significant portions of the existing asset to accelerate clean energy deployment at a lower cost
- Transmission access point can be particularly valuable...especially in MISO

Options that Could Potentially Be Eligible for DOE Loans & Loan Guarantees

- Nuclear (SMRs and Microreactors)
- Numerous technologies are expected to have NRC licenses by 2025
- Hydrogen
- Battery Energy Storage System (BESS)
- Solar and Wind
- Can help utilities meet state RE mandates
- Require larger tracts of land that may not be available on the existing footprint
- Thermal Energy Storage (TES)
- Great match with labor skillsets from previous coal-fired generation facility
DOE’s Annual Procurement Process Flow - Notional

**Follow the Money**
- President’s Request Budget (PBR)
- House Committee Mark
- Senate Committee Mark
- Annual FY Appropriation

**Structure the Opportunity**
- Generate Spend Plans for all Programs
- Complete Acquisition Planning Process
- Identify Portfolio of Procurements to be Initiated
- Schedule Critical Path Milestones

**Conduct the Competitive Phase**
- Develop Planning Documentation
- Publish RFP or NOI
- Issue Procurement
- Initial Screening, Qualify Applications
- Develop Consensus, Score Applications

**Select, Negotiate and Award Projects**
- Select and Announce Winners
- Initiate Negotiations
- Finalize Awards

**Advance the Technology**
- Technology Maturation Planning
- Technology Readiness Assessments
- Independent Program/Project Peer Reviews
- Inform Future R&D Needs

**Timeline**
- **Follow the Money**
  - Ongoing
- **Structure the Opportunity**
  - June-December
- **Conduct the Competitive Phase**
  - January-June
- **Select, Negotiate and Award Projects**
  - July-September
- **Advance the Technology**
  - Ongoing
Resources

• Contact us
  • We’ll connect you with the right person

• Signup to receive notifications
  • FedConnect.gov – funding
  • DOE Programmatic Listservs – newsletters & events

• Partner with National Labs
  • Technical Assistance
  • Regional POC

• Network at Program and Project Review Meetings
  • Meet partners
  • Hear the latest
Abandoned Mine Land (AML) Program

Matthew Magruder
Program Analyst, Division of Reclamation Support
The Surface Mining Control and Reclamation Act of 1977 (SMCRA) established the Title IV Abandoned Mine Land (AML) Program to address AML issues created before SMCRA’s enactment.

Achieving the Title IV Mission

- Creating a nationwide program to address legacy mining issues
- Assisting States and Tribes develop and implement their AML Programs
- Providing reclamation grants annually based on coal fee collections
AML Program Responsibilities

AML Program Status: 25 States and 3 Tribes have approved Title IV AML reclamation programs.

<table>
<thead>
<tr>
<th>Title IV Responsibilities</th>
<th>State and Tribal Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Accomplish Reclamation Priorities</td>
<td>• Identify Reclamation Priority for Funding</td>
</tr>
<tr>
<td>• Review Reclamation Plans and Activities</td>
<td>• Implement Reclamation Plans and Activities</td>
</tr>
<tr>
<td>• National Environmental Policy Act (NEPA) Review</td>
<td>• Update e-AMLIS</td>
</tr>
<tr>
<td>• Maintain inventory of AML problems (e-AMLIS)</td>
<td>• Procure Contractors to Conduct Reclamation</td>
</tr>
<tr>
<td>• Financial Assistance</td>
<td></td>
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</tbody>
</table>

Carrick Mine Highwall in North Dakota

Carrick Mine Reclamation in North Dakota
20 Uncertified States have not completed reclamation of all the priority coal sites

5 Certified States and 3 Indian tribes have certified that all coal reclamation priorities have been completed. Tribes include: Crow Tribe, Hopi Tribe, Navajo Nation
Title IV AML Program

Abandoned Mine Land Grant Distribution Process

Treasury Funds

Certified States and Tribes

Uncertified States

Minimum Program States

AML Grants (preset formula)

OSMRE

Active Coal Mines

AML Fund

States/Tribal Share

Federal Expense Share

Historic Coal Share
AML Funding in North Dakota

Minimum program states received a minimum of $3 million minus 5.7% in FY 2021

Fiscal Year AML Reclamation Grant Distributions: www.osmre.gov/resources/grants.shtm
Types of AML Problems

The Priority is to Reclaim Coal Problems per SMCRA

**PRIORITY 1**

*Extreme danger to public health and safety or environment*

Examples:
- Dangerous highwalls
- Subsidence
- Portals

**PRIORITY 2**

*Adverse effects to public health and safety or environment*

Examples:
- Priority 1 problems, but less dangerous

**PRIORITY 3**

*Adverse effects to land, water resources, and the environment*

Examples:
- Slurry
- Spoil area
- Pits

*Decreasing urgency of threat to public safety and environmental effects*

OSMRE maintains a database of these AML sites (98% coal) in the enhanced Abandoned Mine Land Inventory System (e-AMLIS).
AML in North Dakota

$37,121,361 unfunded AML inventory in North Dakota, as of 9/30/20:
• Priority 1: $0
• Priority 2: $37,016,361
• Priority 3: $105,000

Source: OSMRE’s enhanced AML Inventory System (eAMLIS)

Can AML funds be leveraged with other Federal funds?
Yes, but AML funds can only be used for reclamation.

For more information on funding specific sites, please contact:
Dean Moos, Director, AML and Reclamation Divisions
North Dakota Public Service Commission
Phone: (701) 328-4099
Email: dmoos@nd.gov
Yolande Norman-Moore, Chief, Division of Reclamation Support
ynorman@osmre.gov

Sterling Rideout, Assistant Director, Program Support Directorate
srideout@osmre.gov
Poll 2:

1) What are top challenges your organization faces in accessing federal funds?

2) What additional support do you need to successfully pursue federal funds?
Thank you!

Interagency Working Group on Coal and Power Plant Communities and Economic Revitalization

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@EnergyCommunitiesUS
@energycommunitiesus