



USEA

United States Energy Association

ANNUAL *Report* 2020



Dear USEA Members and Friends,

2020 was a year of profound change for USEA. Like countless other organizations, the unprecedented global pandemic required us to make a swift pivot to technology for all communications. All briefings, trainings, meetings, workshops, and Forums had to be held online. But we adapted quickly and continued business as usual.

In August, after three decades of leadership, USEA Executive Director Barry Worthington unexpectedly passed away. The outpouring of condolences from individuals and organizations around the world was overwhelming. Barry had impacted so many during his tenure.

I was honored when the Board appointed me as Acting Executive Director. Although we miss Barry tremendously, everyone in the USEA family is comforted knowing that every day, we are contributing to the fulfillment of his legacy.

Executive Chairman Vicky Bailey, who graciously stepped back into that role after I became Acting Executive Director, outlines all the incredible work USEA performed in 2020 on the next page. Despite the obstacles and challenges, we forged on and carried out our mission. Vicky was a major part of our success, and her friendship and wisdom were keys to USEA success this year.

This Annual Report will reflect the unusual circumstances of 2020. In a normal year, our staff travels the world at a relentless pace, performing important work in Europe, Asia, Africa, and South America. Usually, we have countless pictures of their extensive travels and journeys, which help illustrate our international impact. I hope you will excuse their absence in this report and will still enjoy reading about all that USEA accomplished in a uniquely challenging year.

Sheila Hollis

Acting Executive Director
United States Energy Association

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A MESSAGE from our Executive Chairman

Dear USEA Members and Friends,

As I look back on 2020, the start of a new decade, I recall the last time we were together in person was in January of that year at the National Press Club hosting our 16th Annual State of the Energy Industry Forum. We had several senior executives and distinguished speakers outlining their expectations for the year ahead. We could not imagine that we would soon be thrown into a time of great uncertainty. No one could have envisioned the global pandemic that was about to erupt in mid-March: a time that would present us with unthinkable public health challenges and a spiraling economic downturn. We were faced, personally, with challenges we had never lived through before. We began the year with our Executive Director, Barry Worthington, at the helm and Sheila Hollis in place as our Chairman.

Following a radical pivot to embrace remote technology, USEA began holding meetings with its many constituencies. The international staff continued performing its vital work on six continents in partnership with USAID, the Department of Energy, and the State Department. In normal times, this would have involved extensive global travel. But, under the new circumstances, the staff very capably managed the programs and relationships remotely. They persevered superbly during this isolating time and I am grateful for their dedication. Almost immediately, every aspect of the energy sector was heavily impacted. Prior projected trajectories for 2020, and likely for many years to come, were dramatically altered. By May 2020, energy demand in the U.S. had fallen to a 17-year low. And yet, new opportunities in energy were simultaneously being created, revealing the dynamism and resilience of this sector.

Then the USEA family was shaken in August of 2020. Unexpectedly, Barry, our beloved Executive Director of 31 years passed away. It would require tremendous resilience and the determination of the Board of Directors and dedicated staff to move forward to fulfill the legacy of Barry Worthington. As a result, with heavy hearts, Sheila Hollis stepped into the role of Acting Executive Director and I became Acting Executive Chairman.

Despite the many challenges, USEA had a very successful year. USEA hosted – virtually, of course -- over 100 webinars and workshops, covering every energy topic imaginable: from modern grid cybersecurity practices, to emerging LNG markets in Southeast Asia, to carbon, capture, utilization, and storage (CCUS) initiatives in Wyoming. There were also two large signature forums: the 2nd Advanced Energy Technology Forum in September and the 30th Annual USEA-Johnson Controls Energy Efficiency Forum, which inducted eight new awardees into the Energy Efficiency Forum Hall of Fame.

Under Sheila's leadership, USEA instituted new forms of communications internally and externally. A weekly newsletter was launched to keep the staff apprised of organizational developments and significant updates. First-ever town hall meetings were coordinated to allow everyone to come together – virtually now – and share news across the organization, celebrating notable accomplishments and milestones. A monthly USEA Newsletter was initiated enabling the broader community to learn about USEA's work and ongoing developments. Finally, the Virtual Press Briefings were reconstituted to highlight advances in energy innovation and technology. For example, USEA sponsored a Virtual Press Briefing on Green Hydrogen to educate the press and the public on this new evolving fuel resource.

USEA's mission -- to support lifting those in energy poverty out of it and offer them access -- remains an imperative. Environmental justice issues are becoming increasingly more important. The world is moving toward decarbonization of the energy sector by 2050, and it requires all of us – every corner of the planet – to help meet that goal. Energy demand is also expected to double by mid-century, as millions gain energy access for the first time. Although the challenges ahead are daunting, they are surmountable, if we agree to collaborate. We are inextricably linked to all parts of the world. Energy is the lifeblood of all economies, including the U.S., and the time has never been more critical to spur economic growth. USEA has never been more needed in the world, and there has never been more action on important energy issues.

The word resilient is used many times in this message. It is an important word for those in our industry as we strive "to keep the lights on". It describes the humanitarian effort that it took in 2020 from governments, corporations and individuals to stay the course. It brings to mind my visit a couple of years ago to Yosemite National Park. I was struck by the granite rock formation, El Capitan, the massive giant sequoias, and the mighty flowing Yosemite Falls. All are resilient, still standing, and lasting through time. USEA will keep moving forward. USEA will continue to convene technical briefings and workshops to educate all stakeholders about the advances in energy. The expansion of knowledge is essential for the betterment of us all. USEA begins 2021 well on its way to a bright future with new and promising opportunities.

Vicky Bailey
Executive Chairman
United States Energy Association

Executive Chairman
United States Energy Association
VICKY A. BAILEY



Founder
Anderson Stratton
International, LLC

Counsel
United States Energy Association
JOHN BUCHOVECKY



Partner
Van Ness
Feldman, LLP

Treasurer
United States Energy Association
ROBERT GEE



President
Gee Strategies
Group, LLC

Secretary
United States Energy Association
BRIAN KEARNS



Chief Financial Officer
U.S. Energy
Association

MERRIBEL S. AYRES



Principal
Lighthouse Consulting
Group, LLC

KARY CAUTHEN



Vice President, Federal
Government Affairs
Cheniere Energy, Inc.

KAREN ALDERMAN HARBERT



President & CEO
American Gas
Association

DONALD R. HOFFMAN



President & CEO
EXCEL Services
Corporation

SHEILA HOLLIS



Acting Executive Director
United States Energy Association

KRISTA JOHNSON



Head, U.S. Government Relations
Shell Oil Company

MARIA KORSNICK



President & CEO
Nuclear Energy Institute

THOMAS R. KUHN



President
Edison Electric Institute

MAJIDA MOURAD



Vice President,
Government Relations
Tellurian, Inc.

RICH NOLAN



President & CEO
National Mining Association

CHARLES PATTON



Executive Vice President,
External Affairs
American Electric Power

STANLEY PORTER



Vice Chairman, U.S. ER&I
Deloitte LLP

JAMES B. ROBB



President & CEO
North American Electric
Reliability Cooperation

RANDALL B. ROE



Vice Chairman (Ret.)
Burns & Roe

EDMUND O. SCHWEITZER III



President, Chairman of the Board
& Chief Technology Officer
Schweitzer Engineering Laboratories

ROGER SMITH



Vice President, Business
Development & Strategy
Fluor Corporation

MIKE SOMMERS



President & CEO
American Petroleum Institute

DALE WALSH



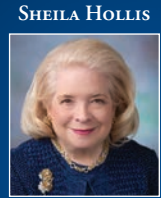
Vice President, Corporate Affairs
Chevron Corporation

DANIEL YERGIN



Vice Chairman
IHS Markit

Board of
DIRECTORS 12.31.20



SHEILA HOLLIS
*Acting
Executive Director*



BRIAN KEARNS
Chief Financial Officer



SHARON LUCAS
*Senior Accounting
Coordinator*



LINDA LEE
Receptionist



WILL POLEN
Senior Director



MARJORIE JEAN-PIERRE
Program Director



ANDREW PALMATEER
Program Director



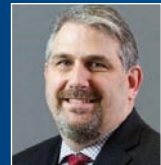
ALBERT DOUB
Program Director



ELLIOT ROSEMAN
Program Director



MICHAEL MOORE
Program Director



STEVE HERRIN
Program Director



TRICIA WILLIAMS
*Deputy Program
Director*



SARAH M. BLANFORD
*Deputy Program
Director*



ANTHONY BITONTI
*Senior Program
Coordinator*



NATALIA FOMINYKH
*Senior Program
Coordinator*



BEATA BIALY
*Senior Program
Coordinator*



JOHANNA KOOLEMANS-BEYNEN
*Senior Program
Coordinator*



SARAH THORNE
*Senior Program
Coordinator*



MARINA BARNETT
*Senior Program
Coordinator*



ELISE VOORHIS
*Senior Program
Coordinator*



DEREK BURKE
*Senior Program
Coordinator*



MICHELLE LITTLEFIELD
*Program
Coordinator*



IRENE SUAREZ
*Program
Coordinator*



JAKE SWANSON
*Program
Coordinator*



DOMINIC LEVINGS
*Program Coordinator,
Communications*



NICOLE BUCKLEY
*ETAG
Communications*



BRENDON THOMAS
Program Coordinator



ERNEST WYATT
Program Coordinator

USEA
Staff
12.31.20

USEA *Members 2020*

ADI ANALYTICS LLC

ADVANCED ENGINEERING
ASSOCIATES INTERNATIONAL

AECOM CORPORATION

AEGIS INSURANCE SERVICES, INC.

AMERICAN COAL COUNCIL

AMERICAN COUNCIL OF
ENGINEERING COMPANIES

AMERICAN ELECTRIC POWER

AMERICAN FUEL & PETROCHEMICAL
MANUFACTURERS

AMERICAN GAS ASSOCIATION

AMERICAN PETROLEUM INSTITUTE

AMERICAN PUBLIC POWER
ASSOCIATION

AMERICAN SOCIETY OF
MECHANICAL ENGINEERS

AMSTERDAM & PARTNERS, LLP

ANDERSON STRATTON
INTERNATIONAL, LLC

ANTERIX, INC.

ASSOCIATION OF ENERGY
ENGINEERS

ASSOCIATION OF OIL PIPE LINES

ASTM INTERNATIONAL

BATTELLE PACIFIC NORTHWEST
LABORATORY

BECHTEL

BLACK & VEATCH CORPORATION

BROOKHAVEN NATIONAL
LABORATORY

BURNS AND ROE ENTERPRISES, INC.

CANARY, LLC

CATALISTO

CHEMONICS INTERNATIONAL, INC.

CHENIERE ENERGY, INC.

CHEVRON CORPORATION

CLIFTON LARSON ALLEN, LLP

COMBINED CYCLE JOURNAL

CONOCO PHILLIPS

CONTOUR GLOBAL

CYBERCON

DAI GLOBAL, LLC

DELAWARE OFFICE OF COMMUNITY
SERVICES

DELOITTE & TOUCHE, LLP

DUANE MORRIS LLP

ECODIT

EDISON ELECTRIC INSTITUTE

ELECTRIC POWER RESEARCH
INSTITUTE

ENBRIDGE

ENCHANT ENERGY CORPORATION

ENERGY & MINERAL LAW
FOUNDATION

ENERGY EQUIPMENT &
INFRASTRUCTURE ALLIANCE

ENERGY MARKETS GROUP, INC.

ENERGY POLICY INSTITUTE OF
AUSTRALIA

ENGIE NORTH AMERICA

ERNST & YOUNG

ESS, INC.

ESTA INTERNATIONAL

EXCEL SERVICES CORP.

EXELON CORPORATION

EXXONMOBIL CORPORATION

FLUOR CORPORATION

GAS SYSTEMS ENGINEERING, INC.

GAS TECHNOLOGY INSTITUTE

GEE STRATEGIES GROUP, LLC

GEO THERMAL RESOURCES COUNCIL

GORRELICK, TIEVY & ASSOCIATES

GRANT THORNTON

HUNTON ANDREW KURTH, LLP

ICF INTERNATIONAL

IDAHO NATIONAL LABORATORY

Continued on next page

USEA
Members 2020 *(continued)*

IHS MARKIT	NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION (NRECA)	SOLAR TURBINES
INTEK INC.		SOUTHERN COMPANY
INTERSTATE NATIONAL GAS ASSOCIATION OF AMERICA	NATURAL GAS SUPPLY ASSOCIATION	STRATEGEN CONSULTING LLC
JOHNSON CONTROLS, INC.	NEXANT, INC.	STRATEGIC POWER SYSTEMS, INC.
JORDAN CAPITAL MANAGEMENT	NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION	SUMMIT POWER GROUP
K&M ADVISORS LLC	NUCLEAR ENERGY INSTITUTE	SYNFUELS AMERICAS
KAISERWETTER ENERGY ASSET MANAGEMENT	NUSCALE POWER	TELLURIAN INC.
KPMG, LLP	OLIVER WYMAN CONSULTING	TENNESSEE VALLEY AUTHORITY
LAWRENCE LIVERMORE NATIONAL LABORATORY	ONGRID OPTIONS	TETRA TECH
LEHIGH UNIVERSITY	PEABODY ENERGY	THE ABRAHAM GROUP, LLC
LIGHTHOUSE ENERGY GROUP	PEPCO HOLDINGS	TULANE UNIVERSITY
LG ALLIES	PETCO INTERNATIONAL LLC	U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
LONDON ECONOMICS INTERNATIONAL, LLC	PLANNING & FORECASTING CONSULTANTS	U.S. DEPARTMENT OF ENERGY
LUTRON ELECTRONICS	POWER ENGINEERS	UNIVERSITY OF FLORIDA
METHANOL INSTITUTE	PRICEWATERHOUSECOOPERS, LLP	UNIVERSITY OF MINNESOTA DULUTH
MORGAN STANLEY	SACRAMENTO MUNICIPAL UTILITY DISTRICT	UNIVERSITY OF SOUTHERN CALIFORNIA
MORGAN, LEWIS & BOCKIUS LLP	SCHWEITZER ENGINEERING LABORATORIES	UTILITIES TECHNOLOGY COUNCIL
MOTT MACDONALD	SEGURA CONSULTING, LLC	VAN NESS FELDMAN, P.C.
NATIONAL ENERGY FOUNDATION	SHELL OIL COMPANY	WEST FINANCIAL SERVICES, INC.
NATIONAL MINING ASSOCIATION	SIEMENS CORPORATION	WESTINGHOUSE ELECTRIC COMPANY
NATIONAL OCEAN INDUSTRIES ASSOCIATION	SMART ELECTRIC POWER ALLIANCE	WORLEY PARSONS
	SOLAR ENERGY INDUSTRIES ASSOCIATION	<i>(As of September 2020)</i>

2020 FORUMS
AND
Flagship Events



Chair of the Board Sheila Hollis delivers opening remarks for the event.

16TH ANNUAL STATE OF THE ENERGY INDUSTRY FORUM

Thursday, January 23, 2020

USEA’s annual State of the Energy Industry Forum brings together distinguished energy industry leaders, including association executives, lawmakers, regulators, diplomats, thought leaders, and journalists to discuss the most significant energy issues facing our country and the world for the upcoming year.

At the 16th Annual State of the Energy Industry Forum, held at the National Press Club in Washington, D.C., USEA convened 20 senior executives from leading energy associations to share their outlook and insight for the coming year. The speakers represented the entire energy spectrum: natural gas, solar, coal, oil, wind, geothermal, gases, and other renewable sources.

Despite the varying energy perspectives of the speakers, many of those in attendance at the Forum noticed a theme of unity and harmony woven throughout their presentations.

Former USEA Executive Director Barry Worthington recognized this development. After the Forum, he wrote the following:

“The remarkable circumstance was how much in agreement the fiercely competitive sectors found themselves.

“Everyone applauded the energy abundance that Americans are witnessing – compared to the energy scarcity that we faced just a few years ago. Everyone applauded the low prices that consumers and the U.S. economy are benefitting from. One speaker suggested that the average household in America was spending about \$2000 less on energy than ten years ago. And everyone applauded that fact that our industry is becoming increasingly clean. And everyone committed their sector to becoming increasingly reliable and environmentally sensitive.

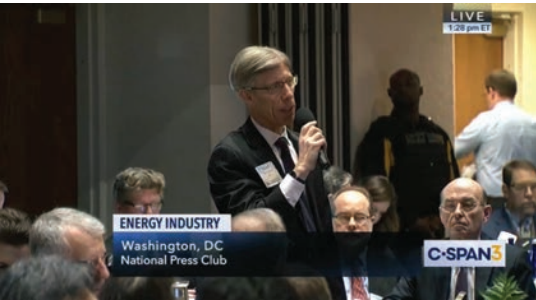
“The State of the Energy Industry is indeed strong. And getting stronger. And our industry is committed to continuing to provide increasingly safe, affordable, abundant and cleaner energy to our country and our customers.”



Dena Wiggins of NSGA and Charlie Riedl of CLNG participate in the panel discussion.



Maria Korsnick of the Nuclear Energy Institute.

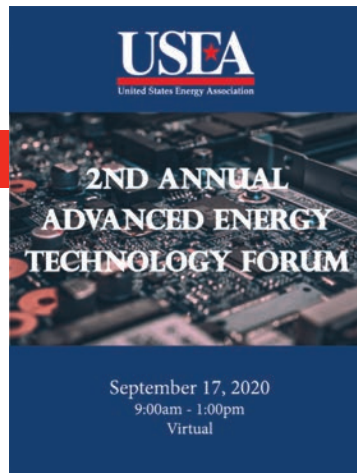


The Forum was broadcast on CSPAN. Here, USEA's Elliot Roseman is filmed asking a question.

Mike Sommers, President and CEO of American Petroleum Institute, delivers the keynote address.



Former Chair of the Board Vicky Bailey and Treasurer Robert Gee.



2ND ANNUAL ADVANCED ENERGY TECHNOLOGY FORUM

Thursday, September 17, 2020

USEA's Advanced Energy Technology Forum explores technological innovation in energy. The event focuses on research and development in the corporate, government, and non-profit sectors, including national labs and universities.

The 2nd Annual Advanced Energy Technology Forum was USEA's first major virtual event of the pandemic era. Despite the entirely new technical configuration, the virtual format was a tremendous success because it allowed for global attendance: over 400 people attended from 33 countries around the world.

The four-hour event was divided into two sessions. The first session, moderated by USEA Acting Executive Director Sheila Hollis, focused on advanced technology research and development. The second, moderated by USEA Senior Director Will Polen, featured national laboratories and universities.

Arshad Mansoor, President of the Electric Power Research Institute, delivered the opening keynote address. His presentation generated a great deal of media coverage following his discussion of the Low-Carbon Resources Initiative (LCRI), a cross-sector collaborative effort to help reduce greenhouse gas emissions to zero by 2050.

"The industry initiative is designed to bring together the U.S. Department of Energy, national labs, universities and startup companies to uncover emerging, low-carbon technologies and enable their application at scale in the energy industry through coordinated research and development," Mansoor said.

Mansoor's comments received publicity in a [Yahoo! Finance article](#), which was accessible to 41 million people and duplicated over one hundred times across energy media.

Michael Webber, Chief Science and Technology Officer, ENGIE, and a professor at the University of Texas Austin, provided the closing keynote address concerning the demographic and technological trends driving energy innovation.

Webber said: "The six demographic trends that are driving the energy system right now are population growth, economic growth, urbanization, industrialization, electrification, and motorization. At the same time, we have three technological trends...efficiency, information intensity, and energy decentralization."

"How do we increase energy access, while reducing the impact for those who have it?"

—MICHAEL WEBBER



Arshad Mansoor, President of the Electric Power Research Institute.



Michael Webber, Chief Science and Technology Officer, ENGIE.

30TH ENERGY EFFICIENCY FORUM

Wednesday, December 2, 2020

USEA's annual Energy Efficiency Forum promotes the role of energy efficiency through presentations of national and worldwide energy efficiency accomplishments and the resulting impact on the environment, energy supplies, national security, customer behavior, and economic growth.

In early December, USEA joined Johnson Controls and the Alliance to Save Energy, a bipartisan energy efficiency coalition founded in 1977, to host an all-day virtual Forum focused on energy efficiency. The day began with the Alliance's Active Efficiency Forum, followed by USEA's Energy Efficiency Forum in the afternoon.

During the Forum, a special [video tribute](#) honoring former USEA Executive Director Barry Worthington was presented. It was developed entirely by his son, Barry, and featured his daughter, Kerry, and wife Louise. The tribute encompassed highlights from Barry's 31-year tenure at USEA. It was an emotional and fitting tribute, and will be treasured by USEA for years to come.

Every five years at the Forum, new members are inducted into the Energy Efficiency Forum Hall of Fame. This year, there were eight new members, including a Governor, two Senators, two Representatives, and Barry Worthington (posthumously).

THE INDUCTEES WERE HONORED IN THE FOLLOWING ORDER:

Governor Larry Hogan, Maryland

Barry Worthington, USEA (posthumously)

Senator Lisa Murkowski, Alaska

Mark Wagner, Johnson Controls (ret.)

David Nemptow, DOE

Rep. Paul Tonko, New York

Rep. Debbie Dingell, Michigan

Senator Susan Collins, Maine

USEA Acting Executive Director Sheila Hollis issued the following statement congratulating the new inductees:

"We are honored to recognize the accomplishments of the eight new members by inducting them into the Energy Efficiency Forum Hall of Fame at the 30th edition of this special event. We pay tribute to lifetime leaders in energy efficiency who span the public, private, and non-profit sectors. This honor is only given every five years, underscoring its prestigious role in celebrating exemplary leadership in this field. These eight new members join 30 other outstanding individuals who have been previously inducted."

"This year, it is especially meaningful to posthumously honor the founder of the Energy Efficiency Forum, former USEA Executive Director Barry K. Worthington, who tirelessly dedicated his life for over three decades to improve energy access and energy efficiency globally. We are privileged to honor his memory as well as the significant contributions of the other honorees in this virtual ceremony."

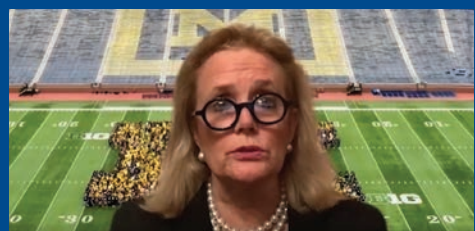


Energy Efficiency Forum Hall of Fame

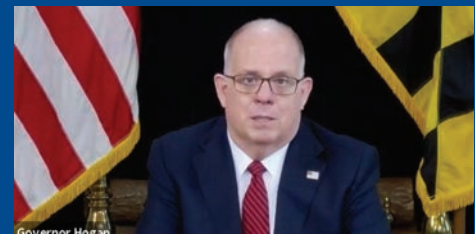
SPECIAL VIDEO TRIBUTE

Barry K. Worthington
1954-2020

USEA's late Executive Director of 31 years will be honored at our annual Energy Efficiency Forum.



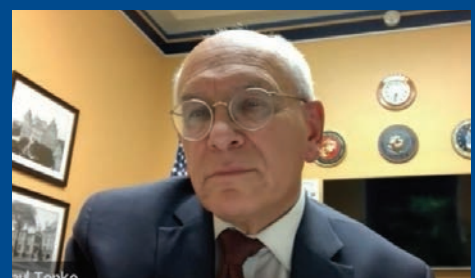
Rep. Debbie Dingell (Michigan)



Governor Larry Hogan (Maryland)



Senator Lisa Murkowski (Alaska)



Rep. Paul Tonko (New York)

PROGRESS TOWARD ENERGY SECURITY IN EUROPE & EURASIA

The USAID and USEA Energy Technology and Governance Program (ETAG) is improving energy security and integrating energy markets in the Europe and Eurasia region. Together with utility executives from the region, ETAG projects have produced significant results since the program was established in 2012.



48

UTILITIES WITH IMPROVED NETWORK PLANNING & CYBER SECURITY CAPABILITIES



10 Billion

NETWORK INVESTMENT LEVERAGED



2 Secured

HIGH VOLTAGE DIRECT CURRENT BACK TO BACK STATIONS CONNECTING ELECTRICAL SUB-REGIONS



1,745

PROGRAM PARTICIPANTS TRAINED TO BECOME FUTURE ENERGY LEADERS



22

PARTICIPANTS PROMOTED TO MANAGEMENT POSITIONS



102

WORKING GROUP MEETINGS SINCE 2012

18 Countries

COLLABORATING TO ACHIEVE REGIONAL INTEGRATION & ENERGY SECURITY



PREPARED BY USEA
www.usea.org/program/etag



ENERGY TECHNOLOGY AND Governance Program

USEA's Energy Technology and Governance Program (ETAG) enables the countries of Europe and Eurasia to achieve their shared vision of energy security and regional integration.

In partnership with the United States Agency for International Development (USAID), ETAG programs serve to: support the maturing energy industry across Europe and Eurasia on its journey to self-reliance; prevent malign geopolitical influence by reducing the region's dependence on Russia and China for energy supply; strengthen relationships across Europe to create a regional energy network; support the increase in renewable energy to meet environmental goals; and establish markets across the region that benefit from price transparency and stability.

ETAG programs lean on U.S. industry expertise and technology to provide capacity building for utilities and energy professionals in the regions of development. These programs offer training and professional development, teach technical modeling and engineering best practices, and provide software and tools necessary for mature utility operation.

USAID LAUNCHES NEXT GENERATION ENERGY SECTOR ASSISTANCE IN EUROPE/EURASIA

In November, the USEA ETAG Program was named as a partner in USAID's newly-launched Energy Bridge program. Energy Bridge aims to connect stakeholders in Europe and Eurasia with the financing, technologies, and operational expertise necessary to improve infrastructure and management, while positioning U.S. technology and services as a counterbalance to malign geopolitical influence in the region.

SOUTHEAST EUROPE: THE NEXT HORIZON FOR POWER MARKET INTEGRATION

The 11 power systems across Southeast Europe are seeking to benefit from the advantages of electricity market integration: improved price transparency, lower risk, accelerated private investment in clean technologies, and enhanced systems operations. Working toward a shared vision of energy security—in a region challenged by geopolitical complexities—the ETAG program convened these power systems to make progress on establishing an integrated, tailored, competitive, regional market. In June, the group issued a report offering arguments for integrating their markets.

RECOMMENDATIONS FOR EUROPEAN POLICYMAKERS TO CONSIDER TO ACCELERATE DISTRIBUTED GENERATION

Distribution systems operators across Southeast Europe want to accelerate integration of distributed generation capacity to support renewable energy goals, but these networks were not initially designed to handle a significant amount of generation. In an ETAG study released in November, energy industry experts from across Southeast Europe assessed what changes would be necessary to support the region's renewable energy targets. Together, the distribution systems operators then issued recommendations for policymakers and ministries, regulators, financial institutions, and other relevant institutions to consider as they balance the desire for increased renewable energy generation with the realities of the current distributed generation network.

INTEGRATION OF UKRAINE AND MOLDOVA WITH EUROPE

ETAG provided a second phase of technical support to the national electric transmission system operators of Ukraine and Moldova to integrate their power systems with the network of the European Transmission System Operators of Electricity (ENTSO-E). USEA works with Ukrainian and Moldovan engineers to develop simulation models to plan and construct new infrastructure consistent with ENTSO-E standards. For both countries, synchronous connection to ENTSO-E's network will enable the physical trade of electricity, reduce the wholesale cost of electricity, reduce their dependence on the Russian grid, and enable Ukraine and Moldova to integrate far greater quantities of renewable capacity than they can today.



ETAG conducting training for the national electric transmission system operators of Ukraine and Moldova.

WEBINARS AND EVENTS:

Webinars & Workshops

- Eastern Europe & Eurasia: Mitigating The Effects Of COVID-19 On Utilities In The United States And Eastern Europe (4/16/20)
- Recommendations for Maintaining Utility Cybersecurity In the Time of COVID-19 (5/5/20)
- Electricity Capacity Markets: Comparing Costs and Benefits (6/17/20)
- Black Sea Transmission Planning Project: Impact of High RES on Possible Grid Constraints in the Black Sea Region (10/28/20)
- Policy Changes Needed to Accelerate Distributed Generation in Southeast Europe (12/2/20)

USEA Senior Director Will Polen Presentations

- Presentation to GWU Elliott School of International Affairs: The Quest for Europe and Eurasia's Energy Security and Independence: Why it Matters to America (9/30/20)
- Presentation to Clean Energy Ministerial's Regional and Global Energy Interconnection Initiative (December)

PROGRAM UPDATES

BLACK SEA TRANSMISSION PLANNING PROJECT (BSTP)

Sharing best network planning and operations practices with the Black Sea Region

BSTP completed its landmark study informing policy makers, regulators, and transmission system operators of the impact of future renewable energy integration on regional electricity markets and transmission networks. The BSTP Working Group found that the amount of renewable energy capacity on the regional grid will nearly triple from the current 22 GW to more than 62 GW by 2030. Its analysis shows that the regional networks will be able to accommodate this increase. The addition of 40 GW of new renewable capacity will profoundly alter the regional generation fleet by making coal and natural gas-fueled generation less competitive, reducing carbon emissions by 6 percent, and dramatically impacting flows of regional electricity trade.



A BTSP Working Group meeting in Odessa, Ukraine in February.



SOUTHEAST EUROPE DISTRIBUTION SYSTEM OPERATOR SECURITY OF SUPPLY WORKING GROUP (DSO)

Building resilience in the regional distribution network

The DSO working group finalized a paper providing 11 recommendations to policymakers, regulators, and DSOs that, if enacted, will accelerate the region's clean energy transition by creating an enabling framework for the integration of large amounts of distributed generation capacity. A suite of communications tools was also developed to help the members to disseminate the report to relevant stakeholders in the region.



ELECTRICITY MARKET INITIATIVE (EMI)
Accelerating regional electricity market integration

In its most recent technical analysis, the EMI Working Group provided assurance to Southeast European policy makers, regulators and system operators that tripling or quadrupling the current level of wind and solar generation capacity in the region is possible without the need to make major investments to reinforce the regional grid. The study found that carbon emissions would fall as well, stimulated by the EU emissions trading system and new gas generation, making lignite and coal generation less competitive.

EMI Program Director Elliot Roseman with Margareta Lipkovska of USAID North Macedonia in the pedestrian area of Vienna, near St. Stephens Cathedral, in February.



UTILITY CYBER SECURITY INITIATIVE (UCSI)
Cyber security is energy security

UCSI Working Group members developed a Risk Assessment Methodology for Europe and Eurasia tailored to the unique operating, commercial and regulatory environment in the region. The methodology enables transmission and distribution network operators to account for the probability of, and impact on, business continuity when prioritizing cyber security investment.



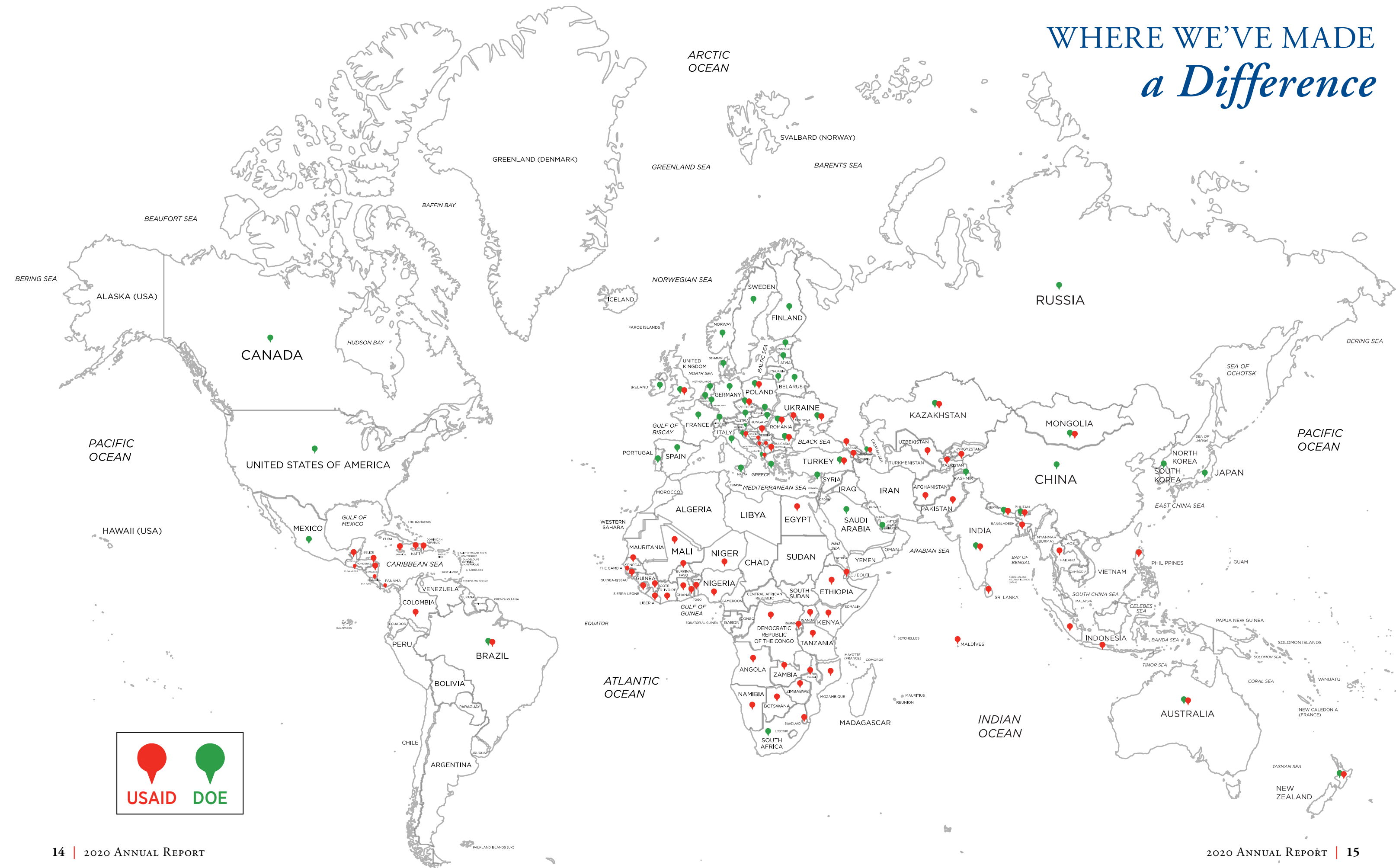
An EE-NGP workshop in Tirana, Albania in March.

EASTERN EUROPE NATURAL GAS PARTNERSHIP (EE-NGP)
Diversifying natural gas supply in Southeast Europe

In 2020, the EE-NGP working group initiated a 15-nation study to analyze the potential for natural gas diversification in the north-south corridor stretching from the Baltic to the Black, Adriatic and Aegean Seas. Utilizing the EE-NGP Max 2040 regional gas network planning model developed by the partnership, the analyses is looking to identify an optimized set of pipeline investments that will diversify gas sources in the corridor at the lowest possible cost to consumers in the region.



WHERE WE'VE MADE
a Difference



ENERGY UTILITY Partnership Program

The Energy Utility Partnership Program (EUPP) is a cooperative initiative between the United States Energy Association and the United States Agency for International Development (USAID) the Bureau for Development, Democracy, and Innovation (DDI). EUPP works around the world to promote energy security and clean energy access by providing capacity building to local utilities.

By bringing countries together and encouraging knowledge sharing of global best practices, EUPP enables emerging markets to have access to U.S. public and private sector expertise and technical assistance. These partnerships between the U.S. and energy sector companies, and agencies and organizations within USAID-assisted countries, expedite the transfer of private sector, market-based approaches in utility operation and management, regulation, and environmental improvement.

This transfer of information enables country partners to improve management and utility efficiency, achieve economic pricing, enhance grid operations, support employee development and productivity, and operate within a regulatory environment. These partnerships are conducted through a variety of capacity building activities that expose overseas partners to best utilized practices and procedures and exposure to well-known industry experts.



USEA discusses capacity-building assistance with Kazakhstan stakeholders, Nur-Sultan, Kazakhstan, February 2020.

CENTRAL ASIA

USEA launched a new Central Asia Partnership that will provide capacity-building support to all five Central Asian states to assist them in meeting their energy security priorities and renewable energy targets. The new partnership will focus on grid integration of renewable generation, hydroelectric power development, power system modeling and planning for renewable energy, improvement of national transmission networks, establishment of national electricity markets, and energy sector digitization and cyber-security. The first-year results included providing regional stakeholders with enhanced network planning and modeling capabilities. In the long term, this will result in improved efficiency, overall stability and reliability of Uzbekistan and Tajikistan's national grids, and strengthened energy security due to expanded renewable generation.

COLOMBIA

USEA continued to support Colombian governmental efforts to plan for the addition of 2.5 Gigawatts of renewable energy to its grid, which has upped its capacity for renewables from 1% in 2017 to 12% in 2020.

USAID, with support from USEA and other organizations, launched a [planned course](#) for young professionals in order to help build Colombia's base knowledge of good practices for integrating variable renewable energy online. Participants, of which almost 70% were women, watched presentations that were prepared by more than 50 experts. They also participated in collaborative sessions with the experts to discuss questions raised by the presentations, as well as other topics of relevance such as indigenous community consultations and green hydrogen.

The students are now developing action plans that, if implemented, will positively impact Colombia's readiness to integrate renewables. The seven-module course, which began in May, will be followed up by a one-week in-person seminar for qualifying participants, who will also receive an Institute of Electrical and Electronics Engineers (IEEE) certification.

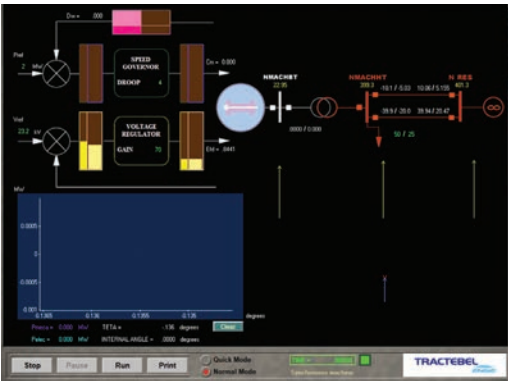
Previous USEA capacity-building activities in Colombia continue to be impactful. Building upon a 2019 effort, the Colombian government created a draft Request for Proposal (RFP) for a battery storage pilot program to relieve transmission congestion.

KENYA

EUPP assists Kenya's power sector efforts to improve their planning and grid operations by creating a fully functional network simulation model that utilities can use to plan transmission system expansion. The training was launched in 2019 by Tractebel affiliate Engie Impact as part of a seven-module program. In 2020, the Kenyans transferred the theoretical and practical PSS/E knowledge to perform short-circuit calculations and analysis, dynamic modeling and validation of the power system, and transient, small-signal stability analysis.

After studying the theoretical concepts, the Kenyan trainees did practical simulations to further develop their knowledge about governor and excitation systems dynamic performance.

An exercise conducted during a workshop for the Kenyan power sector illustrating governor and excitation systems.



RWANDA

The objectives of the EUPP-Rwanda Partnership are to enhance the capacity of the Rwanda Energy Group (REG) for the integration of renewable power plants and to assist REG with improving performance in the area of reliable and efficient operation of Rwanda's electric grid and delivery of uninterrupted power supply. In 2020, USEA provided short-term technical assistance on comprehensive reviews of REG's Black Start Plan, current transmission and distribution relay protection coordination, and the effectiveness of integrated power system stabilizers in enhancing the stability of the national grid. The reviews identified several major deficiencies and potential issues and proposed technical solutions and recommendations for improvement. REG is now equipped to implement sufficient black start measures to restore the Rwandan electric grid from a total or partial shutdown in the shortest time possible and set up its protection systems to operate with the necessary reliability and security.



USEA consultants discuss Black Start Plan review methodology with Rwandan engineers, Kigali, Rwanda, January 2020.

SENEGAL

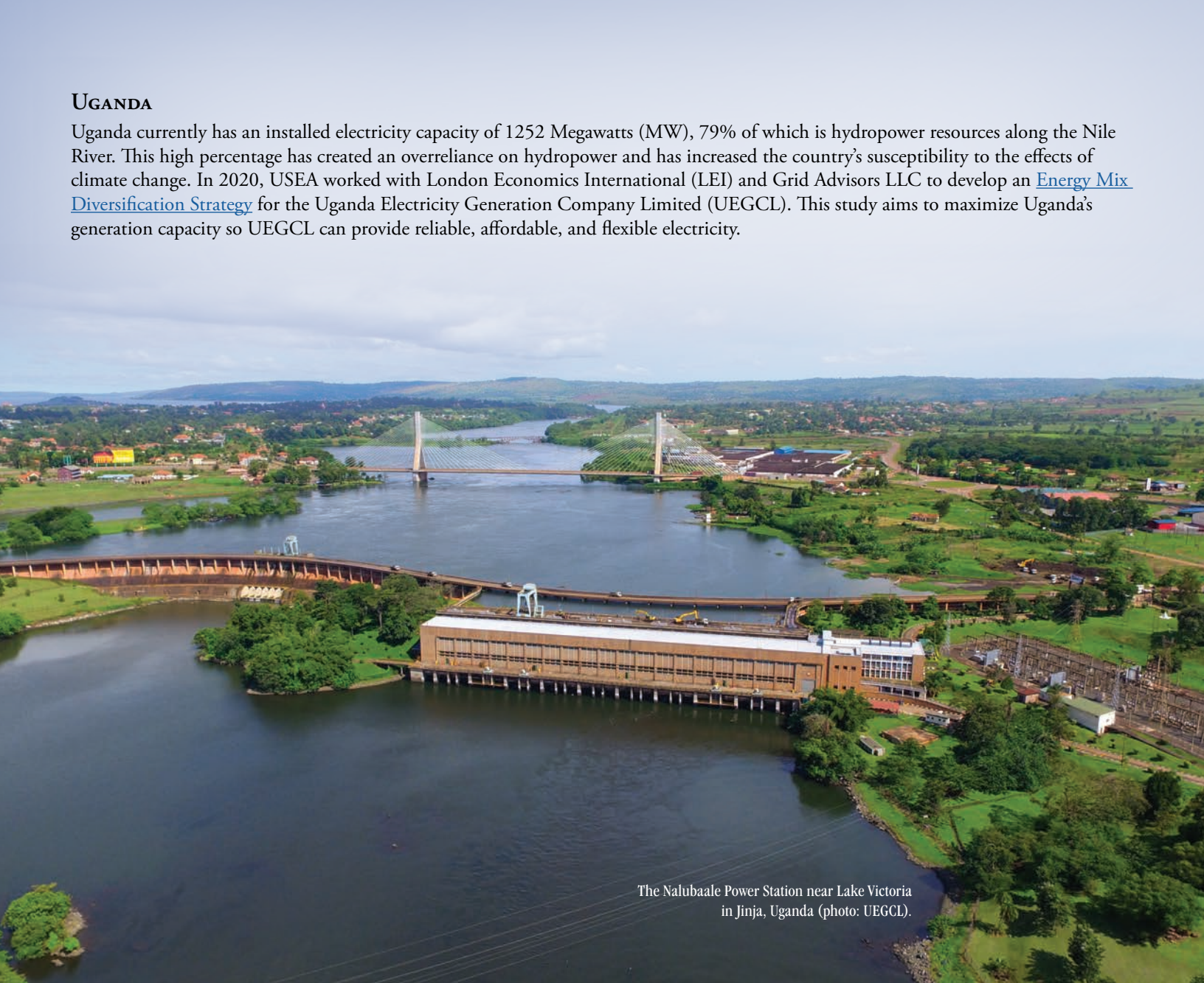
Senegal is one of the fastest growing economies in Sub-Saharan Africa. Senelec, the national electricity company of Senegal, aims to meet this growing demand by fast-tracking generation, transmission, and distribution projects. In 2020, USEA, USAID, and Tractebel ENGIE Impact Belgium launched the Senegal Power System Modeling and Network Training for Senelec to train 12 engineers in dynamic load modeling and network stability. The purpose of this program is two-fold: to enhance the capacity of Senelec to operate the national grid system safely, reliably, and efficiently; and to increase Senelec's capacity for advanced network modeling and long-term planning in the West African Power Pool (WAPP). This work will continue in 2021.

TANZANIA

EUPP will continue to provide capacity building in Tanzania by improving the energy sector knowledge of high-level government officials and providing senior utility staff with best practices and lessons learned by encouraging private sector participation in the energy sector.

UGANDA

Uganda currently has an installed electricity capacity of 1252 Megawatts (MW), 79% of which is hydropower resources along the Nile River. This high percentage has created an overreliance on hydropower and has increased the country’s susceptibility to the effects of climate change. In 2020, USEA worked with London Economics International (LEI) and Grid Advisors LLC to develop an [Energy Mix Diversification Strategy](#) for the Uganda Electricity Generation Company Limited (UEGCL). This study aims to maximize Uganda’s generation capacity so UEGCL can provide reliable, affordable, and flexible electricity.



The Nalubaale Power Station near Lake Victoria in Jinja, Uganda (photo: UEGCL).

BUSINESS INNOVATION PARTNERSHIP

The Business Innovation Partnership (BIP) launched a 15-part [Cybersecurity and Digitalization webinar series](#) in June 2020 to educate utilities on cyber standards, trends, and best business-process practices. The series reached more than 4,200 participants from 70 utilities in 68 different countries. Following the success of the webinar series, USEA and USAID hosted industry panels with leading cybersecurity experts to discuss the latest cybersecurity trends, tools, and technologies.

The webinar series and panels were the foundation for the BIP Working Group that will convene a global network of utility thought leaders to assist USAID-partner utilities in navigating some of the most pressing challenges within a rapidly changing industry. The working group will select electricity utilities in USAID-partner countries to develop change management and business process management techniques, and create an action plan to apply these techniques to a planned or recently implemented project.

EAST AFRICA GEOTHERMAL PARTNERSHIP

EAGP launched two webinar series on topics important to the East African geothermal energy community. The first series covered the basics of geothermal industrial parks, including legal and regulatory frameworks, direct-use geothermal applications, and project finance. The series culminated in a presentation from the Oserian Two Lakes company on their progress toward building a geothermal-based industrial park in Naivasha, Kenya.

The second webinar series was produced in collaboration with the United Nations Environment Program’s African Rift Geothermal Development Facility (UNEP/ARGeo). This series focused on technological innovations to accelerate East African geothermal resource development. The presentations also highlighted the broad potential applications of geothermal energy beyond power generation and the importance of database management when planning the development of geothermal resources.

KENYA GEOTHERMAL PARTNERSHIP

The Kenya Geothermal Partnership provided technical assistance to the Oserian Two Lakes Geothermal Industrial Park, an innovative project in Naivasha, Kenya. Oserian operates a 20,000-acre flower farm that currently operates three geothermal wells, which produce both thermal energy and electric power. Oserian received a license to sell electricity generated on their land from Kenya’s Energy and Petroleum Regulatory Authority (EPRA), making them the only Kenyan company with a license to generate, transmit, and sell electricity. Using this license and the site’s abundant geothermal resources, Oserian plans to develop the first geothermal industrial park in sub-Saharan Africa. EAGP sponsored technical experts from POWER Engineers to develop a technical and economic assessment of Oserian’s proposed plan for an industrial park powered by geothermal and solar energy. The report provided a roadmap for Oserian to meet its future clients’ energy demand with 100% renewable energy.



The Oserian Two Lakes Geothermal Industrial Park in Naivasha, Kenya.

NILE EQUATORIAL LAKES SUBSIDIARY ACTION PROGRAM



Participants of a regional workshop on Power Trading in Ancillary Services and Energy Storage in Eastern Africa, Kigali, Rwanda, January 2020.

GREENING THE GRID - INDIA

India plans to deploy an unprecedented 175 gigawatts of renewable energy onto its power grid by 2022 to greatly reduce the economy’s carbon intensity and strengthen the country’s energy security. Through the Greening the Grid (GTG) partnership, Indian utilities are identifying a number of operational modifications they can make at no added cost and are building a case for market changes that can incentivize flexible operation to traditional baseload suppliers.

In 2020, through GTG, USEA focused on educating Indian system operators on how innovative ancillary services can address the viability and uncertainty of variable renewable energy sources by increasing system flexibility. In April, USEA hosted a [webinar on Innovative Ancillary Services](#) where speakers from the International Renewable Energy Agency (IRENA) presented a report they authored on this subject.

USEA supports the efforts of the Nile Equatorial Lakes Subsidiary Action Program (NELSAP) to encourage the establishment of an integrated NELSAP/East Africa power market to increase access, improve reliability, and reduce costs of power supply in each member state. In 2020, USEA hosted a regional workshop on Power Trading in Ancillary Services and Energy Storage in East Africa for NELSAP, the Eastern Africa Power Pool (EAPP), and representatives of power ministries, regulating agencies, and electric utilities from Ethiopia, Kenya, Rwanda, Tanzania, and Uganda. The workshop produced an initial strategic roadmap for developing local and regional ancillary and energy storage markets as well as a broader development of power trading across East African borders. In the long run, this activity will help East African countries improve efficiency of generating utilities’ operations, increase the share of renewable energy generation, and prevent increasing costs of electricity.



Workshop on Regional Cooperation for Modernization of Power Distribution in South Asia - New Delhi, India.



discuss the challenges, needs, and priorities of the region’s power distribution. This event was the inaugural event under the SAREH platform and served as a launch for a new “South Asia Distribution Utility Network” for the modernization of the South Asian power distribution sector.

SOUTH ASIA REGIONAL ENERGY HUB

In 2020 USEA launched the South Asia Regional Energy Hub (SAREH). SAREH supports USAID in centrally coordinating, communicating and integrating Asia EDGE (Enhancing Development and Growth through Energy) activities in South Asia.

CLA Workshop for USAID Missions in Asia and Implementing Partners

SAREH and USAID’s Southeast Asia EDGE hub organized a virtual Collaborating, Learning, and Adapting (CLA) event on December 1 and 2, 2020. The event discussed the status and progress of Asia EDGE programming, learnings from COVID-19 experiences, emerging energy issues in the region, collaboration and coordination opportunities, and available support from USAID and Asia EDGE regional hubs. Attendees tuned in from USAID in Washington, USAID missions across South and Southeast Asia, other Asia EDGE USG agencies, implementing partners, and international organizations.

Workshop on Regional Cooperation for Modernization of Power Distribution in South Asia

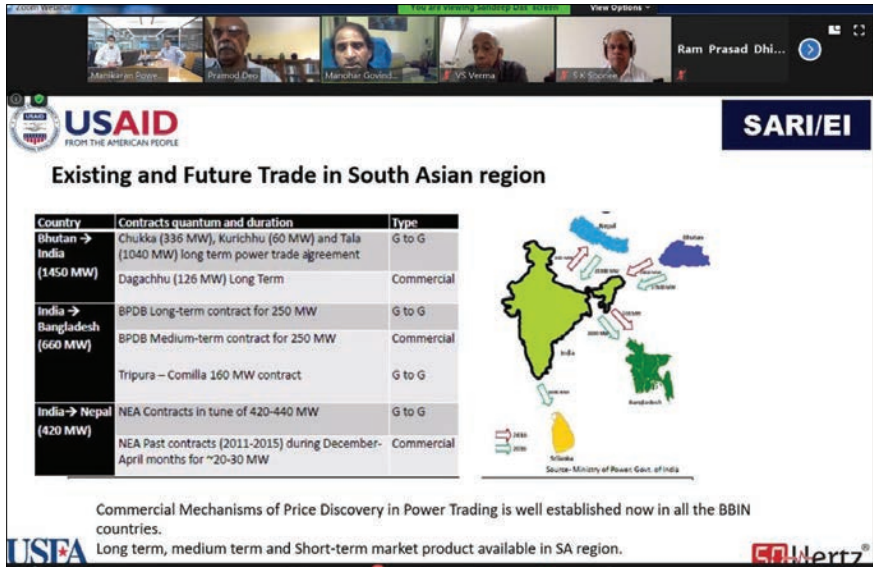
In January 2020, SAREH supported the USAID/India Smart Power for Advancing Reliability and Connectivity (SPARC) program by implementing a “Regional Workshop on Cooperation Platform for Power Distribution Utilities in South Asia.” The event had two components: (i) World Utility Summit 2020 and (ii) Regional workshop on Modernization of Power Utilities in South Asia. The workshop brought together senior policy makers and utility leadership from the South Asia region to

SOUTH ASIA REGIONAL INITIATIVE FOR ENERGY INTEGRATION

USEA has been an implementing partner of the USAID South Asia Regional Initiative For Energy Integration (SARI/EI) program since 2000. SARI/EI, which covers Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan, and Sri Lanka, promotes energy security in South Asia through three focus areas: cross-border energy trade, energy market formation, and regional clean energy development.

In 2020, USEA conducted the first of two modules of the “Training on the Design, Management and Operation of a Power Trading Entity” series, tailored for Nepal in response to requests for capacity building to support the Nepal Power Trading Company Limited. Executives from Bangladesh and Bhutan – two other key regional trade countries – participated in the virtual training, conducted by Manikaran Power Ltd. and 50 Hertz.

The training focused on the evolution of power trading, market participants and their roles, legal frameworks and procedures, power purchase and sale, energy accounting, tariff modeling, and risk mitigation. This training provided Nepal with the much-needed expertise to begin trading with India on equal footing.



Module 1 of the “Training on the Design, Management and Operation of a Power Trading Entity” series, conducted via video conference in September 2020. Leaders from various South Asian companies, including India’s Power Exchange India Limited, the Central Electricity Regulatory Commission, and Central Electricity Authority, presented at the conference.

U.S.-ASIA GAS PARTNERSHIP

The U.S.-Asia Gas Partnership (AGP) is a public-private collaboration between government and industry to foster secure, reliable, and economic sources of natural gas. The Indo-Pacific region accounts for more than half of global energy consumption, with 85% derived from fossil fuels. But Indo-Pacific countries are looking to liquefied natural gas and highly efficient natural gas-fired generation to balance grid variability.



In October, USEA’s AGP program conducted a webinar with the American Petroleum Institute (API) and the U.S. Trade Representative’s office. The webinar discussed how standards play an integral role in attracting project investment, protecting workers and the environment, and reducing regulatory complexity for governments.

In 2020, USEA launched AGP through a series of eight webinars focused on sharing best practices and strategic advice to help ministries and regulators make more informed decisions. With a long-term vision to enable the creation of a regional gas market, AGP facilitates a shared understanding between government officials and the private sector about the technical, commercial, and economic factors that spur investment.

EUPP WEBINARS

EUPP webinars in 2020 covered a variety of topics, from cybersecurity to oil demand and utility resilience. Here are some top numbers from the events.

39 **TOTAL WEBINARS**

EUPP hosted or co-hosted between 1/14 and 12/3.

2,722 **TOTAL ATTENDEES**

Cybersecurity seminars were the most popular events, with “No 4: Distributed Energy Sources” topping the list at 141 attendees. EUPP hosted 17 seminars on cybersecurity last year.

6,465 **TOTAL EVENT VIEWS**

Many events were recorded for later viewing. “Philippines: Tapping into the World’s LNG Market” attracted the most total views at 423.



BUILDING INTERNATIONAL CONSENSUS ON

Oil and Natural Gas



To further understanding of energy issues domestically and internationally, USEA continued “Building International Consensus on Oil and Natural Gas.” As the U.S. continues to develop its oil and natural gas resources, it has become the world’s leading exporter of energy. With the advances in liquefied natural gas (LNG) technologies and commercial operations, this presents a unique opportunity to support global energy development. USEA continued to work in partnership with the U.S. Department of Energy’s Office of Fossil Energy to strengthen international energy relationships and promote the growth of U.S. LNG exports to enable a cleaner energy future. In 2020, India and the Central and Eastern Europe regions were focal points as critical U.S. energy partners and potential growth markets for U.S. exports.

U.S.-INDIA GAS TASK FORCE (GTF)

USEA continued to serve as Secretariat for the U.S.-India Gas Task Force (GTF) under the U.S.-India Strategic Energy Partnership.



Throughout 2020, USEA worked with DOE officials, U.S. industry, the Government of India and India’s state-owned energy companies to expand the use of natural gas on the subcontinent and increase U.S. liquefied natural gas (LNG) exports to India.

The GTF supports the Government of India in three strategic areas where the U.S. industry has expertise:

1. Natural Gas Markets and Regulation
2. Natural Gas Grid Strengthening
3. Stimulating Natural Gas Demand Growth

The Government of India meets six percent of its total energy consumption with natural gas; it seeks to increase that to 15 percent by 2030. Increasing natural gas use in power generation will help diversify fuel sources, improve air quality, and improve electricity system performance. As India moves to meet its renewable energy generation targets, flexible natural gas-fired power plants can provide critical balancing services to enhance grid stability. Making natural gas available in other sectors of the economy – industry, agriculture, transportation, and residential – can reduce hazardous emissions, with positive health benefits, and potentially lower energy costs for users.

GTF subcommittees prepared two white papers on best practices in regulating natural gas markets, facilitated the signing of two Memoranda of Understanding (MOUs), and provided capacity building to Indian stakeholders on natural gas as a tool for a cleaner energy future.

STUDY ON KEY ENABLERS AND POTENTIAL FOR SMALL-SCALE AND CONTAINERIZED LNG IN CENTRAL AND EASTERN EUROPE

USEA, with funding from the U.S. Department of Energy’s Office of Fossil Energy, commissioned a study prepared by the Gas Technology Institute and ADI Analytics examining the potential for small-scale and containerized LNG in Central and Eastern Europe. The study looked at market potential in 15 countries in the region, assessing potential demand, available infrastructure, and policy environment.

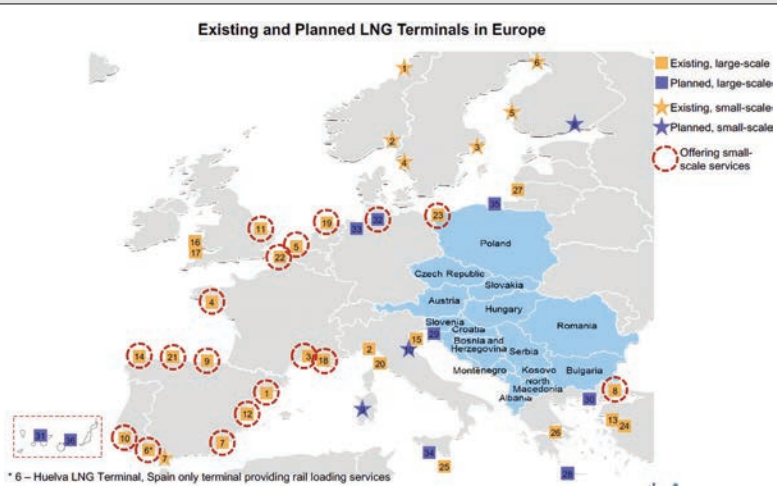
Common enablers for the growth of small-scale and containerized LNG include regulations, price differentials between LNG and incumbent fuels, energy supply constraints, growing availability of cheap LNG, decarbonization policies, and innovation in technology and business models.

The report found potential for small-scale and containerized LNG use throughout the region, with a few countries identified as having a high likelihood of near-term potential. These countries included Albania, Hungary, North Macedonia, Poland, Serbia, and Slovakia. The most likely end-use applications for small-scale and containerized LNG included heavy transportation, industrial applications, and marine use. The full report with methodology and findings is available on USEA’s website.



(from left) Marko Hodalic of IVECO demonstrates a liquefied natural gas-fueled truck to Albanian Minister of Infrastructure and Energy Belinda Balluku, U.S. Ambassador to Albania Yuri Kim, and Assistant Secretary for Fossil Energy Steven Winberg after a stakeholder workshop in Tirana, Albania

Current and planned large-scale and small-scale LNG terminals in Europe. Source: GTI, ADI Analytics



WEBINARS/EVENTS:

February 5, 2020: Stakeholder Workshop on the Market Potential for Small-Scale and Containerized LNG in Central and Eastern Europe (Tirana, Albania)

Organizations: USEA, U.S. Department of Energy, Albania Ministry of Infrastructure and Energy

February 7, 2020: Stakeholder Workshop on the Market Potential for Small-Scale and Containerized LNG in Central and Eastern Europe (Podgorica, Montenegro)

Organizations: USEA, U.S. Department of Energy, Montenegro Ministry of Economy

December 16, 2020: Webinar on Study of the Key Enablers and Market Potential for Small-Scale and Containerized LNG in Central and Eastern Europe (virtual)

Organizations: USEA, U.S. Department of Energy, Gas Technology Institute, ADI Analytics

PROMOTING CONSENSUS ON CARBON CAPTURE, UTILIZATION AND STORAGE (CCUS) AND Clean Coal Technologies

The U.S. Department of Energy (DOE) and USEA Promoting Domestic and International Consensus on Fossil Energy Technologies Program (CONSENSUS) conducts workshops, training programs, informational briefings and performs analyses to communicate the technical, environmental and societal benefits of CCUS and clean coal technologies.

WORKSHOPS:

USEA hosted 11 workshops under DOE CONSENSUS:

- Carbon Capture Utilization And Sequestration Roadshow, Washington, D.C. Workshop
- Appalachian Access To Capital Forum
- Office Of Clean Coal And Carbon Management's Strategic Vision Public Listening Sessions 1-4 (virtual)
- Developing CCS Projects in Texas (hosted virtually by Global Carbon Capture and Storage Institute)
- Developing CCS Projects in: Louisiana and the Gulf Coast (hosted virtually by Global Carbon Capture and Storage Institute)
- Western Regional Workshop on Critical Minerals Sustainability (virtual)
- Developing CCS Projects in Colorado and Wyoming (hosted virtually by Global Carbon Capture and Storage Institute)
- Appalachia and Eastern Regional Workshop on Critical Minerals Sustainability (virtual)



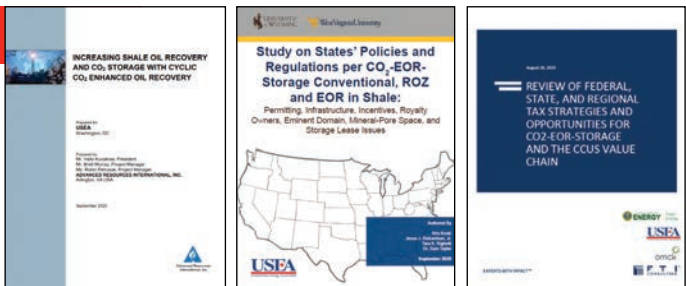
The inaugural CCUS Roadshow in the rotunda of the Ronald Reagan Building in Washington, D.C. in January.



Kris Warner, State Director of USDA Rural Development for West Virginia, speaks at the Appalachian Access to Capital forum in Wheeling, West Virginia in March.

WEBINARS

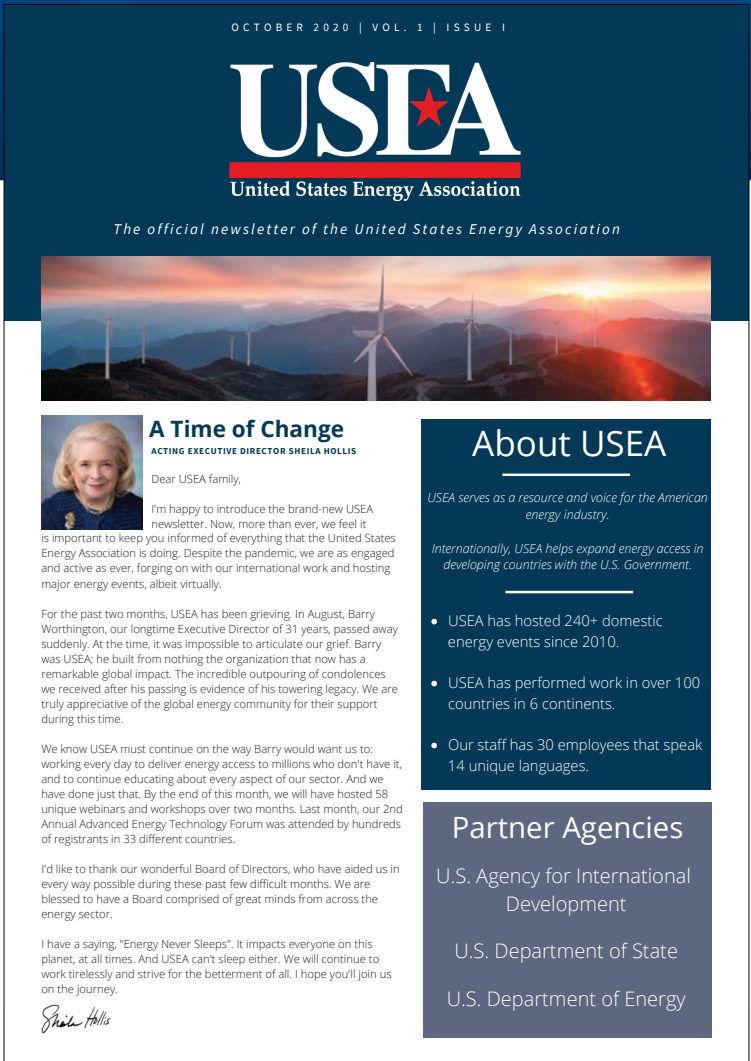
- Social And Economic Impacts Of San Juan CCUS Project, Featuring Nathan Duckett, Mayor Of Farmington, New Mexico (at USEA office pre-COVID)
- Update On Wyoming CCUS Policies
- Update On DOE Office Of Fossil Energy's New Advanced Energy Storage Program
- CCUS Dialogues Before The Roadshow 1 and 2
- Supporting The Next Generation Of CCUS Projects: Highlights Of The USDA-DOE Collaboration
- USDOE Office Of Fossil Energy R&D Enabling A Sustainable Hydrogen Economy
- Indian Energy Minerals Forum 1 and 2
- The Virtual CCUS Roadshow, South and SW Regional Issues and Opportunities
- Update On U.S. DOE's Office Of Fossil Energy: Critical Minerals And Rare Earth Elements R&D
- DOE-FE's Office Of Clean Coal And Carbon Management's Strategic Vision Through 2024



Just a few of the many reports the CONSENSUS program published in 2020.

- The Next Phase Of The Shale Oil Revolution: Storing CO2 With Shale EOR
- CCUS Tax Strategies, Opportunities, Roadblocks, Hurdles, And Solutions
- Study On State's Policies & Regulations Per CO2-EOR Storage Conventional, ROZ And EOR In Shale: Permitting, Infrastructure, Incentives, Royalty Owners, Eminent Domain, Mineral-Pore Space, And Storage

The new USEA newsletter was launched in October.



We have a strong set of women on USEA staff too, and they are not to be trifled with. Our staff is diverse and from every corner of plant Earth.

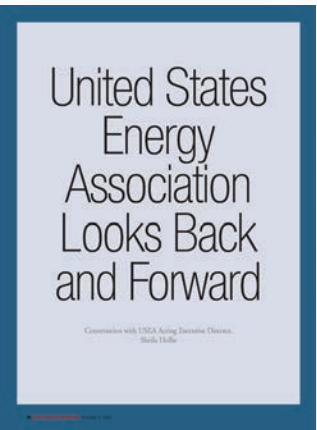
USEA Communications

Throughout 2020, USEA overcame the challenges presented by a virtual world by elevating its visibility through press releases, articles, interviews, presentations, webinars, virtual press briefings, and newsletters.

Acting Executive Director Sheila Hollis began her duties in late August 2020, transitioning from USEA's Board Chair to its chief executive role and became its most prominent spokesperson. Speaking at dozens of virtual conferences and using her extensive energy experience to contribute to many leading energy issues, Sheila addressed the energy impact of the pandemic, the future of renewable energy, and the global geopolitical landscape.

In October, Sheila was invited to present at the Energy & Environment Expo for the American Port Authority Association (AAPA), and the National Association of Manufacturers' (NAM) Annual Outlook Series. In early December, she addressed Infocast's Mid-Atlantic Renewable Energy conference. On each occasion, Sheila participated in live Q&A with numerous eager questions from the audience.

Public Utilities Fortnightly published a [lengthy interview](#) with Sheila titled *United States Energy Association Looks Back and Forward* in its November issue. Sheila addressed the dramatic impact of Barry Worthington's death; the dedication of the Board and Staff to fulfill USEA's mission going forward; and the technological adaptation required to work in a virtual world. The interview was re-published on USEA's website and distributed widely to the media, the membership, and the general energy community.



In November, Public Utilities Fortnightly (PUF) published a long interview with Sheila about the state of USEA.

Continued on next page

The Virtual Press Briefing series generated significant media attention.



The Virtual Press Briefing series received extensive media coverage. Ken Silverstein of Forbes, a panelist for several of the briefings, wrote an in-depth [article](#) covering the November briefing on financed emissions. Fierce Wireless, a media group covering the wireless industry, wrote an [article](#) on the briefing on 5G networks.

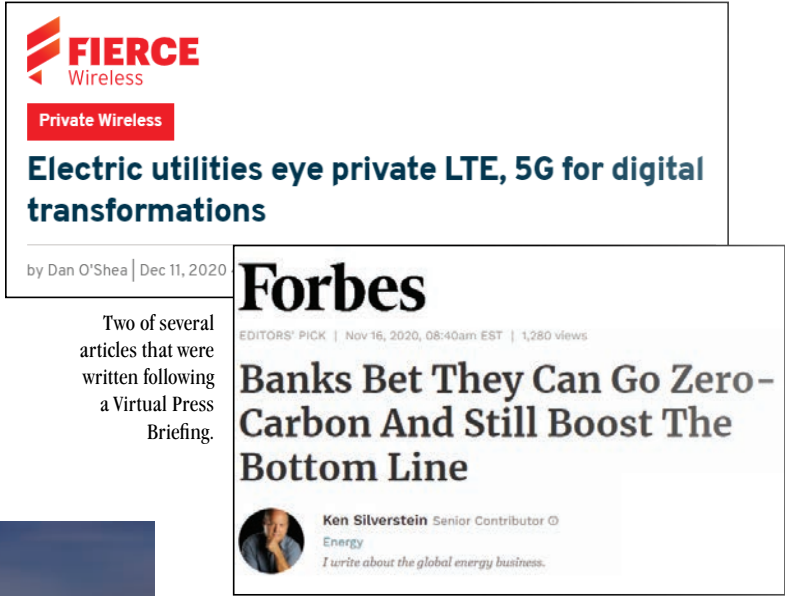
A key component of 2020 featured enhanced internal and external communications. In September, a weekly internal newsletter was launched for the staff and Board of Directors. *USEA Weekly* features a message from Sheila, administrative announcements, and a summary of upcoming events. A brand-new external newsletter began in October to apprise members, contract partners, and all other interested parties of USEA’s ongoing work.



USEA Weekly was launched in September for USEA staff and Board Members

The Press Briefing series was reinvigorated with Llewellyn King, a longtime friend of both Barry and Sheila, and the host and producer of the PBS White House Chronicle. Each Virtual Press Briefing highlighted a cutting-edge energy-related topic, moderated by Llewellyn, and opened with an introduction by Sheila. The Briefing series featured a panel comprised of topic experts and professional journalists with energy backgrounds.

USEA hosted its [first](#) Virtual Press Briefing in October, focused on the potential impact of the 2020 election on the energy industry. The [second](#) briefing, held in November, covered a new financial industry effort to quantify the carbon impact on loans and investments. The [final](#) briefing of 2020, held in December, targeted the impact of 5G networks on utilities.



WITH 2020 BEHIND US, *The Future is Bright*



Dear USEA Members and Friends,

As evident throughout this report, USEA had an incredibly active year in 2020, despite overwhelming challenges, including the unexpected passing of longtime Executive Director Barry Worthington. It was a year of change, of progress, and of accomplishments. Despite the loss of Barry, it was a year that confirmed that no matter the circumstances, USEA will always fulfill his legacy and its mission.

2021 confirms that vision. We began the year with our 17th Annual State of the Energy Industry Forum, which featured 22 leaders from energy associations that span the spectrum of our industry. Over a thousand people registered for the event, and several thousand more have watched the recorded presentations on YouTube, generating a great deal of media coverage.

2021 has reinforced that USEA’s international footprint is arguably the largest it has ever been, due in no small part to the global reach of virtual communications. In March alone, we engaged with organizations such as the Turkish Heritage Organization (THO) and the African Energy Chamber (AEC). We hosted webinars featuring the Honorable Tarun Kapoor, Secretary of India’s Ministry of Petroleum & Natural Gas, and energy experts from India and Rwanda on International Women’s Day. We kicked off training in Moldova for its national transmission system operator, and we completed an Energy Mix Diversification Strategy for a Ugandan generation group.

In the US, a new Administration is now in place, and we look forward to working with them across our three major partnership agencies: USAID, DOE, and the Department of State. As a nonpartisan, nonpolitical institution, USEA values its ongoing 30-year collaboration with the Federal Government to promote safe and environmentally acceptable energy access as a human right. Our mission is made possible through this continuing relationship across changing political landscapes.

Energy is the foundation for economic growth. The new Administration’s commitment to effectively use all energy resources and carbon management technologies serves as the fundamental foundation for our future joint endeavors. We look forward to working together to enable new scientific and technical developments in energy and achieve mutual progress.

USEA will continue to amplify its communications through newsletters, press releases, social media, Virtual Press Briefings, workshops, Forums, and so much more. We have several exciting projects planned that will come to fruition later in the year. As the country and world begins to recover from the pandemic, USEA will fill a vital role in convening stakeholders worldwide to share ideas that will advance energy, and better the lives of people around the globe.

Sheila Hollis
Acting Executive Director
United States Energy Association



IN MEMORIAM: *Barry Worthington*

The 2019 USEA Annual Report, published in June 2020, featured two pages commemorating Barry Worthington's 30 years at the helm of USEA. It included photos of Barry ringing the opening bell at the New York Stock Exchange, testifying on Capitol Hill, and leading a meeting at the USEA offices. The article highlighted quotes from Barry about the enormous changes in the energy industry he had witnessed over his three decades at USEA.

SADLY, JUST TWO MONTHS LATER, BARRY PASSED AWAY.

THE MAN WHO HAD BUILT USEA HAD SUDDENLY LEFT US FAR TOO SOON.

Barry K. Worthington was born and raised in Dushore, Pennsylvania. After graduating from Sullivan County High School, he attended his beloved Penn State University, and graduated with a degree in Man & Environmental Relations. He subsequently obtained a Masters in Studies of the Future from the University of Houston.



After stints at Houston Lighting and Power and the Thomas Alva Edison Foundation, Barry became Executive Director of USEA in 1988. Over his 31-year tenure, he expanded USEA from two staff members and revenues of \$200,000, to 30 employees and revenues of \$11 million. Under his watch, USEA worked in 104 countries around the globe.



Barry with former Secretary of Energy Rick Perry.



Barry in his office.

Barry Worthington once told Public Utilities Fortnightly about the first trip to Europe in 1992 with USAID, in conjunction with the North American Electric Reliability Corporation (NERC).

"There were no cell phones, much less smart phones, and we were all at the train station in Bratislava, Slovakia, where no one spoke English. It was interesting," Barry said.

After his passing, condolences poured in from the world energy community. In hundreds of emails, social media posts, and phone calls, all paid homage to Barry. Dozens of organizations, including the World Energy Council and the United Nations Economic Commission for Europe, sent official condolence letters. Several media outlets reported the news, including E&E News, Politico, CEO Update, and the Washington Examiner.

Llewellyn King wrote the following: "Barry, for all the travel and international importance, was quintessentially a family man.

He, Louise, Barry Jr. and Kerry, his now adult children, loved doing things together, quite simple, very American things, like summering at the beach, going to Hard Rock Cafés, and visiting Disney theme parks."

In December 2020, at USEA's 30th Annual Energy Efficiency Forum, Barry's contributions were recognized in a special video tribute, created by his son, Barry, and featuring Louise and Kerry. To honor his memory, he was inducted posthumously into the Forum's Hall of Fame.

"The energy community is vast and intricate, and it can be dauntingly complex. Barry embraced that complexity," USEA Acting Executive Director Sheila Hollis said. "He was a diplomatic yet unapologetic pragmatist. Barry circumvented political polarity. He sought common ground among stakeholders, and he valued partnership."

"His contribution to the domestic and international energy sector is unparalleled, and his vision and success for USEA - improving lives around the world - is the cornerstone of that legacy."

—SHEILA HOLLIS




Barry testifying before the House Foreign Affairs Committee in April 2019.



Barry and his wife Louise at the New York Stock Exchange in January 2019. Barry rang the opening bell.



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