



The US National Association of Regulatory Commissioners

NARUC is committed to improving the quality and effectiveness of energy regulation in the United States and around the world. Working internationally, NARUC seeks to empower the global community of regulators to drive meaningful change in their energy sectors.



Who We Are

- NARUC is a non-profit organization representing public service commissions in the US.
- Commissions regulate the utilities that provide essential services such as energy, telecommunications, power, water and transportation.
- NARUC's members include all 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands.
- Our members are required by law to ensure that utility services are provided at rates and conditions that are fair, reasonable and nondiscriminatory for all consumers.



NARUC International

Our Vision

A world where effective regulation enriches livelihoods, grows economies, ensures sustainable and secure energy and provides universal access to high quality public services.

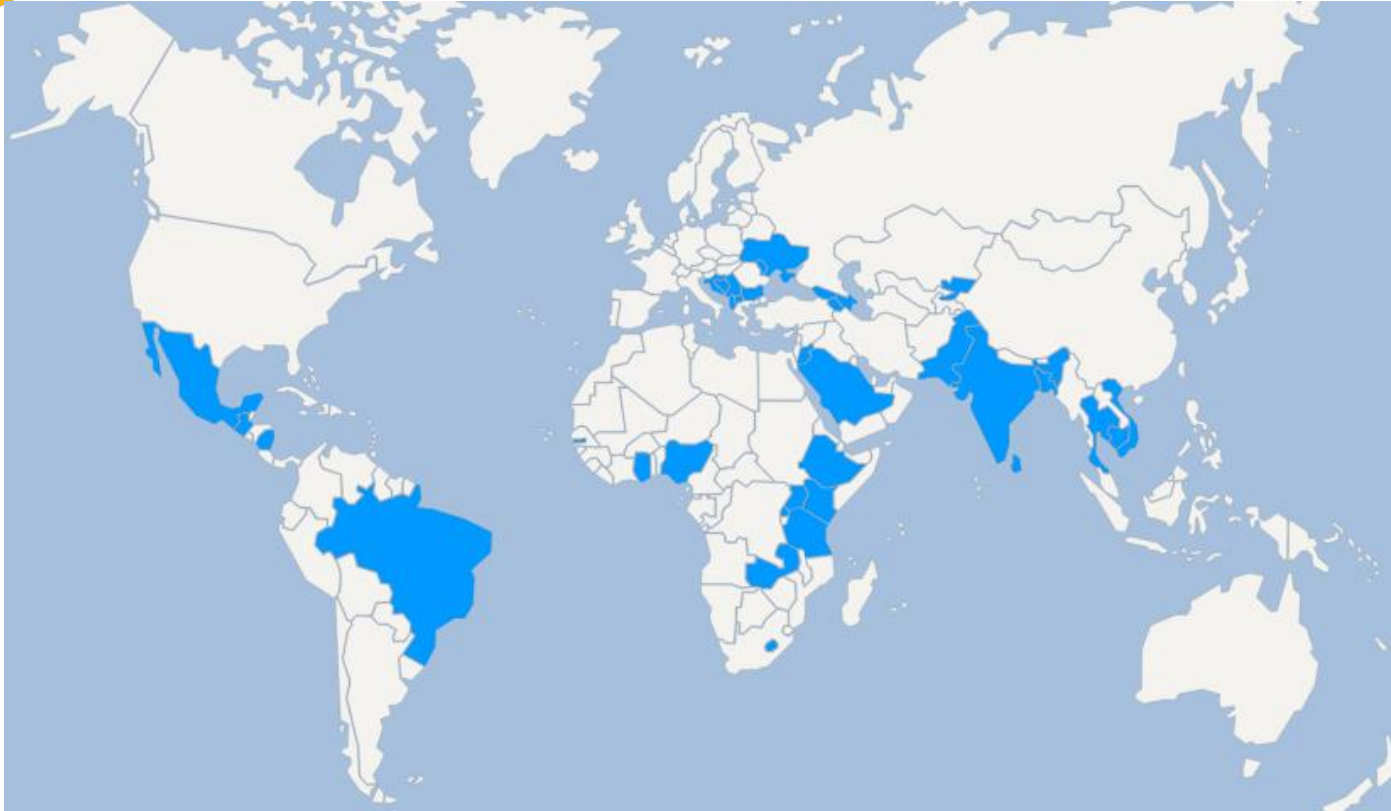
Our Mission

Empower the global community of regulatory decision makers to drive meaningful change through dialogue, collaboration and engagement with U.S. and international partners.





Who We Are



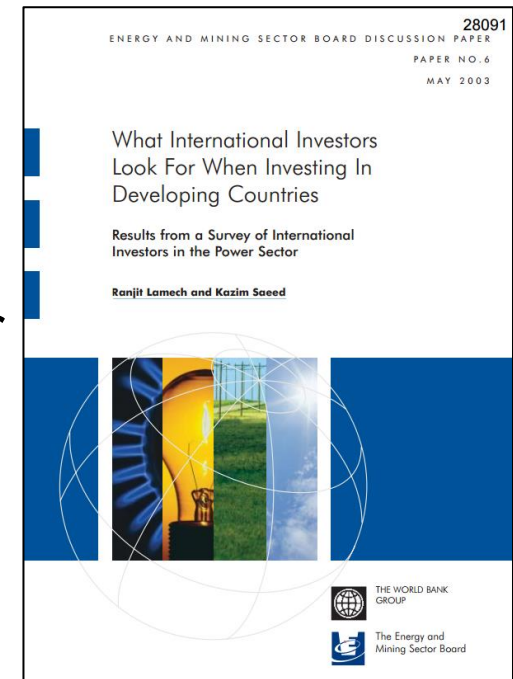
Our mission is to serve in the public interest by improving the quality and effectiveness of public utility regulation.



Importance of Regulation

“A clear and enforceable legal framework is among the top priorities for investors. They want the “rules of the game” to remain credible and enforceable—not altered at the government’s convenience once they have made investment decisions based on those rules. A government’s willingness and ability to honor its commitments are key.”

“When investors consider investing in a country, they give much weight to the independence of the regulator.”



Ranjit Lamech and Kazim Saeed. “What international investors look for when investing in developing countries: results from a survey of international investors in the power sector.” World Bank: Energy and Mining Sector Board Discussion Paper No. 6, May 2003
<http://documents.worldbank.org/curated/en/272751468762026583/pdf/280910InvestorsPaper0EMS0No6.pdf>



PRINCIPLES OF EFFECTIVE REGULATION



Principles of Effective Regulation

1. Autonomy

- Appointment of Commissioners
- Exemption from Civil Service/Government Salary Rules
- Stable Financing of the Commission

2. Authority

- Full Tariff/Rate Authority
- Clear Ability to Issue Licenses
- Oversight over Electricity Market
- Information Collection, Monitoring and Enforcement Abilities



Principles of Effective Regulation

3. Accountability

- Transparency
- Annual Report and Audit
- Appeal of Decisions to Courts
- Budget Review
- Code of Ethics
- Removal from Office (Only For Cause)

4. Ability (Capacity)

- Capable, Trained Staff
- Procedures and Management
- Sound Tariff Methodologies and Prices
- Monitoring and Enforcement Procedures



CORE COMPETENCIES

- **Clean Energy**
- **Tariffs**
- **Public Engagement**
- **Regulatory Development**
- **Regional Cooperation**



Our Work with Regulators

CLEAN ENERGY

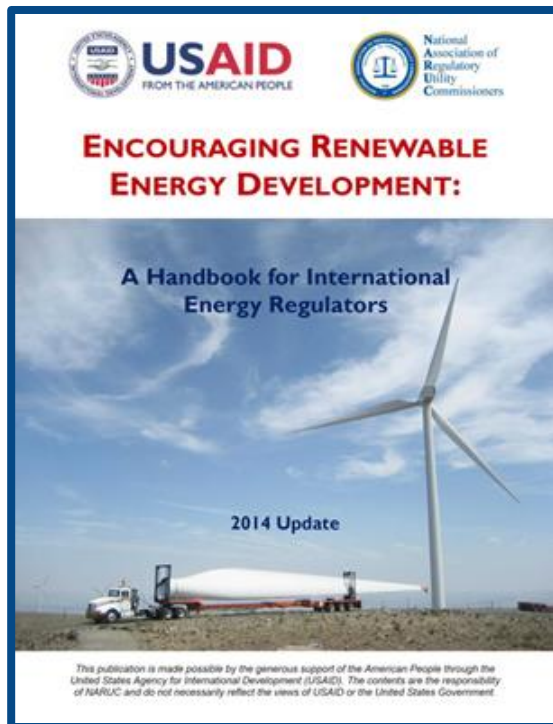
Drafting and Improving Policies that enable the development of renewable resources. NARUC helps regulators use existing resources more effectively through energy efficiency and demand-side management.



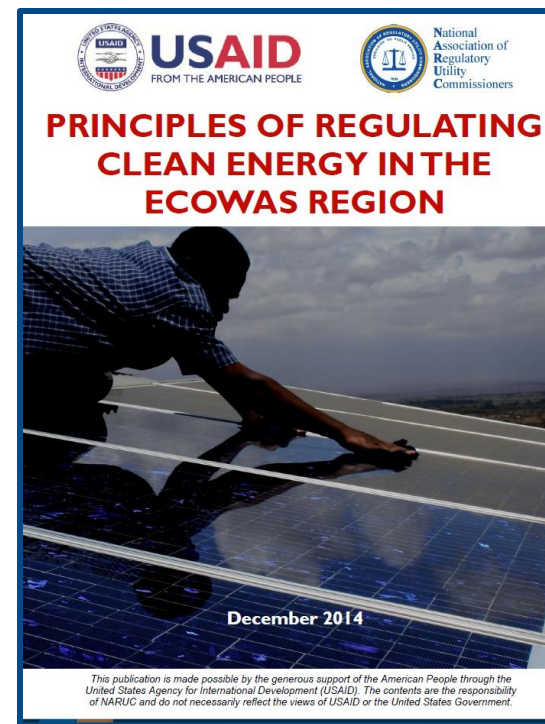
Clean Energy

Clean Energy Handbook

Examines best practices in renewable energy deployment to assist international regulators as they navigate an evolving energy landscape.



Principles of Regulating Clean Energy in the ECOWAS Region





Our Work with Regulators

TARIFFS

Implementing advanced financial accounting practices and revising tariffs. This helps ensure rates are cost-reflective and provide investors with the proper signals.



Cost-Reflective Tariff Training

- Designed to build the capacity of regulators to review and approve electricity rates.
- Gamified training on designing and applying cost-reflective tariffs
- Participants explore regulatory decision-making to promote sustainable energy sector development
- Provides a platform to bring together diverse stakeholders to build common ground on contentious issues

USAID FROM THE AMERICAN PEOPLE
National Association of Regulatory Utility Commissioners

WATT'S IN YOUR RATE?

HYDRO POWER INCREMENT – 75MW

Nameplate Capacity (MW)	75
Capacity Factor (%)	50
Required Transmission Miles	400
Required Distribution Miles	20
CO2 Emissions (US tons/MWh)	0



Our Work with Regulators

PUBLIC ENGAGEMENT

Identifying ways to educate consumers more effectively and better engage with utilities to ensure that all are treated fairly.



Public Engagement

Bosnian Price Comparison Platform

Enables an easy comparison of electricity options in the emerging retail market and provides a venue for the Bosnia regulator to educate consumers on electricity choice and perform oversight of market participants.

The screenshot displays the website interface for comparing electricity suppliers. The header includes the logo and navigation links: 'Switching Suppliers', 'Understanding Your Bill', 'Customer's Rights', 'Saving Energy', 'FAQ', and 'About'. The main heading is 'Search Results Residential'. The search filters on the left include: 'Distribution company' (EPHZHB), 'Monthly Usage' (700 kWh), 'Demand charge' (5 kW), 'Sort' (Lowest price), 'Price (KM)' (slider from 118,97 to 150,11), 'User Type' (Residential), and 'Double rate meter' (checked). The results summary shows 2 suppliers with a 23% price difference and a cheapest price of 118.97 KM. Two supplier offers are listed:

Supplier A	Energy (KM)	Network Fee (KM)	Estimated Monthly Bill (KM)
+387 33 123 456 Lorem ipsum 34, 71000 Sarajevo	42.23	86.47	128.7 (No season)
Supplier A	63.64	86.47	150.11 (High season)



Public Engagement

Cambodia Customer Complaint Handling

Following NARUC engagement, Cambodian regulator required suppliers to include monthly consumption information from the previous twelve months on customer bills. This way, consumers could evaluate whether their electricity consumption was on par with what it was a year ago, rather than simply higher than it was during the cooler months.

This change has resulted in a reduction in consumer complaints about billing, EAC officials said.





Our Work with Regulators

REGULATORY DEVELOPMENT

Improving regulatory processes and aligning rules and standards with regional or international standards. This helps facilitate cross-border trade and create an enabling environment for investment.

REGIONAL COOPERATION

Facilitating regional platforms for collaboration and dialogue and support efforts to drive regional alignment on policy priorities and regulatory structures. This enables countries to expand access to energy for their consumers and foster broader, more robust markets for their power resources.



Regional Cooperation

East Africa Regional Uniform System of Accounts

- NARUC helped regulators from Ethiopia, Rwanda, Uganda, Tanzania and Kenya develop a regionally harmonized Uniform System of Accounts and a financial data collection template.
- These tools will help the countries unlock the energy potential of the region, streamline transactions and connections and enable further private investment.

Black Sea Wholesale Market Guidelines

- The document introduces a vision for the future of wholesale market development in the Black Sea Region through the promotion of cross-border trade and the associated liberalization of internal national markets.
- Involved participation from Armenia, Azerbaijan, Georgia, Moldova, Turkey and Ukraine
- The document identifies best practices for wholesale market development that are based on European Union (EU) electricity market requirements.



Our Work with Regulators

Tanzania Natural Gas Law

NARUC reviewed draft legislation that would provide the Tanzanian regulator with regulatory authority over midstream and downstream activities in the country's burgeoning gas industry.

Along with the work of a number of stakeholders, this work helped to pave the way for the enactment of that legislation — the Petroleum Act — and the commissioning in October 2015 of the new 532 km (330 miles) pipeline. That pipeline is serving 70 MW of generation and sending gas to previously idle generation facilities in Dar es Salaam.

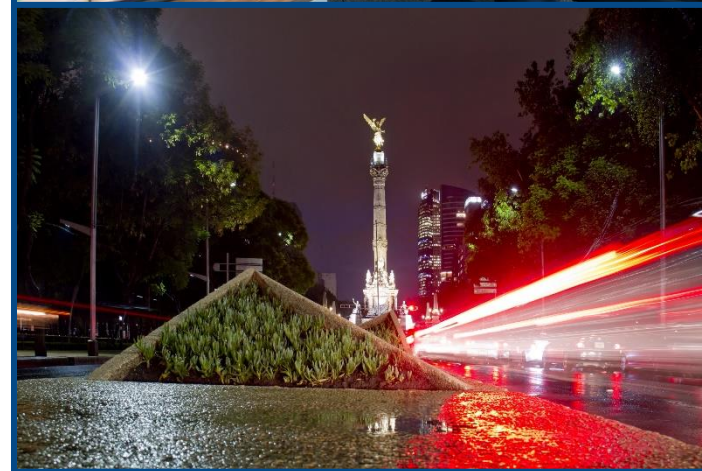




Latin America Engagement

Mexico

- NARUC supported the Mexican regulator (CRE) through the development of the landmark Grid Code. CRE implemented numerous provisions into the Grid Code based on NARUC recommendations.
- NARUC worked closely with CRE to ensure the country's Clean Energy Certificates program was built right. CRE included many lessons learned through NARUC assistance into the CEC program, including the structure of criteria for imposing noncompliance penalties and the personnel needs to successfully implement the program.





Latin America Engagement

Argentina

- With State Department support, NARUC launched partnership with Argentina Ministry of Energy and Mining (MINEM) to focus on Distributed RE, RE auctions, power purchase agreements, RE integration and system planning
- MINEM has been using the U.S. State Lessons Learned on DG implementation in the development of the DG Law with the Congress of Argentina.





Ongoing Work

Practical Guide on Mini-Grids

Provides regulators in emerging economies with concrete guidance and practical tools for developing a clear enabling regulatory framework for mini-grid development.

Cyber Security Primer

Offers an introductory explanation of the issues, identifies the jurisdictional landscape, and highlights some of the characteristics of good cybersecurity to address new cyber- vulnerabilities that must be managed by regulators and the infrastructure operators.



Gender Initiatives

Practical Guide on Gender

Will encourage institutional and regulatory reforms that provide incentives for public and private energy providers to address critical gender issues. By addressing the gendered impacts of the energy value chain, governments and local stakeholders are able to enhance economic growth and work towards the achievement of their greater development outcomes.

Gender Internship Program

Designed to be a paid postgraduate internship to place qualified young women in law, engineering, economics or relevant policy areas in temporary positions within their respective country's energy regulatory commissions.



International Confederation for Energy Regulators (ICER)

- ICER is a voluntary framework for cooperation between energy regulators from around the globe. Our aim is to improve public and policy-maker awareness and understanding of energy regulation and its role in addressing a wide spectrum of socio-economic, environmental and market issues.
- **ICER Members:** AFUR, ARIAE, CAMPUT, EAPIRF, ERRRA, MedReg, NARUC, OCCUR, SAFIR, Swiss Federal Electricity Commission ElCom, AEMC, CEER
- 3 Virtual working groups: (1) Electricity (2) Gas and other Fuels (3) Technology and Innovation
- 3 Primary Initiatives: (1) Women in Energy (2) ICER Chronicle (3) Distinguished Scholar



THANKS!

For More Information:

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