



Energy and the Environment

Recommended Citation

"Energy and the Environment", ESENA, April 26, 2005, <https://nautilus.org/esena/energy-and-t-e-environment/>

Asian Energy Security

The Nautilus Institute

[Asian Energy Security Workshop 2005](#)

[Asian Energy Security Workshop 2004](#)

East Asia Energy Futures

David Von Hippel, The Nautilus Institute

[Summary Report of the East Asia Energy Futures Project Activities and Accomplishments](#) ()

David Von Hippel and Peter Hayes, The Nautilus Institute

[Two Scenarios of Nuclear Power and Nuclear Waste Production in Northeast Asia](#) ()

Dr. Hossein Razavi The World Bank

[Innovative Approaches to Financing Environmentally Sustainable Energy Development in Northeast Asia](#) ()

David Von Hippel, The Nautilus Institute

[Global Dimensions of Energy Growth Projections in Northeast Asia](#) ()

Lyuba Zarsky, The Nautilus Institute

[Energy and the Environment in Asia-Pacific: Regional Cooperation and Market Governance](#)

David Von Hippel and Peter Hayes, The Nautilus Institute

[The Prospects For Energy Efficiency Improvements in the Democratic People's Republic of Korea: Evaluating and Exploring the Options](#) ()

David Von Hippel and Peter Hayes, The Nautilus Institute

[DPRK Energy Sector: Current Status and Scenarios for 2000 and 2005](#) ()

Aling Zhang, Lin Shi, Tsinghua University, Beijing, China

[Prospects for and impacts of diversifying fuel use away from coal](#) ()

Shaoxiong Xie

[Review of Assumptions as to Changes in the Electricity Generation Sector in Nautilus Institute's Clean Coal Scenarios Report](#) (✖)

Zulin Shi and Yugao Xu, Tsinghua University, Beijing, China

[The Impacts of China's Accession to the World Trade Organization \(WTO\) on China's Energy Sector](#) (✖)

Shuhua Gu and Wenqiang Liu, Institute for Techno-Economics and Energy System Analysis (ITEESA), Beijing, China

[The Role of Renewable Energy Options in China's Present and Future Energy System](#) (✖)

Qingyi Wang, Tsinghua University, Beijing, China

[Coal Industry in China: Evolvment and Prospects](#) (✖)

Weidou Ni, Zheng Li, and Yuan Xue, Tsinghua University, Beijing, China

[National Energy Futures Analysis and Energy Security Perspectives in China](#) (✖)

Fengqi Zhou, Energy Research Institute State Development Planning Commission, China

[Discussion of Macro Assumptions in the Future Evolution of the Chinese Energy System and the Impact of Energy Security Considerations on Planning](#) (✖)

David Von Hippel, The Nautilus Institute

[Modeling of Clean-Coal Scenarios for China: Progress Report and Initial Results](#) (✖)

Woo Jin Chung, Korea Energy Economics Institute Republic of Korea

[National Energy Futures Analysis and Energy Security Perspectives in the Republic of Korea](#) (✖)

Eui-Soon Shin, Professor Department of Economics, Yonsei University Seoul, Korea

[Energy Futures and Acid Rain Problems in Northeast Asia - Perspective of the Republic of Korea](#) (✖)

Victor Kalashnikov, Khabarovsk Economic Research Institute Far Eastern Branch of Russian Academy of Sciences

[National Energy Futures Analysis and Energy Security Perspectives in the Russian Far East](#) (✖)

Presented at the Nautilus Institute Workshop on Trade and Environment in Asia-Pacific: Prospects for Regional Cooperation

[International Cooperation for the Sustainable Development of the Russian Far East](#)

Jason Hunter, Nautilus Institute

[The Tumen River Area Development Program, Transboundary Water Pollution, and Environmental Security in Northeast Asia](#)

Tatsujiro Suzuki, Senior Research Scientist, Central Research Institute of the Electric Power Industry, Japan

[Energy Security and the Role of Nuclear Power in Japan](#) (✖)

Tatsujiro Suzuki, Senior Research Scientist, Central Research Institute of the Electric Power Industry, Japan

[National Energy Futures Analysis and Energy Security Perspectives in Japan](#) (✖)

Michael Margolick, Ph.D., Nai Kun Wind Development, Inc.

[Wind Energy Technology Trends and Applications in East Asia Michael Margolick](#) (✖)

David Von Hippel, The Nautilus Institute

[The DPRK Energy Sector: Current Status And Options For The Future](#) (✖)

Jungmin Kang

[Update on Energy Sector Activities and Plans in the Republic of Korea](#) (✖)

Hoseok Kim

[The Application of the LEAP Software Tool to Energy Sector Analysis in the Republic of Korea](#) (✖)

Aling Zhang and Yanjia Wang, Tsinghua University, China

[Update on Energy Sector Activities and Plans in China](#) (✖)

Kevin (Jian Jun) Tu

[Modeling China's Energy Future with Application of CIMS](#) (✖)

Victor Kalashnikov, Economic Research Institute FEB RAS

Alexander Ognev, Vostokenergo-RAO EES Rossii, Khabarovsk, Russia

[Update on Energy Sector Activities and Plans in the Russian Far East](#) (✖)

Victor Kalashnikov, Alexander Ognev, and Ruslan Gulidov

[The Application of the LEAP Software Tool The to Energy Sector Analysis in the Far East: Progress Report](#) (✖)

Masami Nakata, Junichiro Oda, Charles Heaps and David Von Hippel For WWF-Japan

[Carbon Dioxide Emissions Reduction Potential in Japan's Power Sector - Estimating Carbon Emissions Avoided by a Fuel-Switch Scenario](#) (✖)

Kae Takase and Tatsujiro Suzuki

[Energy Update in Japan](#) (✖)

David Von Hippel, The Nautilus Institute

[Application Of Leap In Japan: The "Power Switch" Energy Path](#) (✖)

Shagdar Batryenchin

[Current Status of the Energy Sector in Mongolia \(Presentation\)](#) (✖)

Shagdar Batryenchin

[Current Status of the Energy Sector in Mongolia \(Paper\)](#) (✖)

Rebecca Ghanadan

[Questioning Inevitability of Energy Pathways: Alternative Energy Scenarios for California](#) (✖)

[Return to top](#)

East Asia Power Grid Interconnection

Karsten Neuhoff, University of Cambridge

[Economic Considerations: An overview & background on power markets and pricing principles, with focus on international trading, institutional considerations for international electricity trade](#) (✖)

David Streets, Decision and Information Sciences Division, Argonne National Laboratory

[Environmental Aspects of Electricity Grid Interconnection in Northeast Asia](#) (✖)

David Von Hippel, The Nautilus Institute

[Costs & Benefits of Power Grid Connection](#) (✖)

Hyo-Sun Kim, Korea Gas Corporation

[Application of the Kyoto Mechanisms in Power Grid Interconnection in Northeast Asia](#) (✖)

John H. Bickel, Evergreen Safety and Reliability Technologies, LLC

[Grid Stability and Safety Issues Associated with Nuclear Power Plants](#) (✖)

L. A. Koshcheev, St-Petersburg, High Voltage Direct Current Power Transmission Research Institute

[Basic principles of interstate electrical power links organization in Northeast Asia region](#) (✖)

Ri Gyong Nam, A researcher, Pyongyang Electric Power Design Institute

[National perspectives from the NEA region: Democratic People's Republic of Korea](#) (✖)

Dong -wookKorea Park, Electrotechnology Research Institute (KERI)

[National perspectives from the Northeast Asian region: Republic of Korea](#) (✖)

Jong-Keun Park, School of Electrical Eng., Seoul National University, Korea

Power Generation & Stability Issues in the Republic of Korea: Constraints & choices for interconnection of power grids (✖)

Xiaoxin Zhou, Electric Power Research Institute, China

[National perspectives from the Northeast Asian region: China](#) (✖)

Weichun Ge, Liaoning Electric Power Co., Ltd.

[Local Perspectives on Power Grid Interconnection in Northeast Asia: Background and Perspectives from Liaoning Province, China](#) (✖)

Fumio Arakawa, Global Engineering Institute, Inc., Japan

[Power Grid Interconnection in Northeast Asia: Background and Perspectives from the Electric Power Companies in Japan](#) (✖)

Yasumasa Fujii, The University of Tokyo, Japan

[National perspectives from the NEA region: Japan](#) (✖)

Sergei Podkovalnikov, Energy Systems Institute, Russian Academy of Sciences, Siberian Branch, Russia

[National perspectives from the Northeast Asian region: Far East Russia](#) (✖)

Sergei Podkovalnikov, Energy Systems Institute, Russian Academy of Sciences, Siberian Branch, Russia

[Study for Russia, Democratic People Republic of Korea, Republic of Korea and China Power Interconnection: Analysis of Current Status](#) (✖)

DPRK Delegation

[The Potential Impact of the Inter State Electric Ties in North East Asia on Environment](#) (✖)

David von Hippel and Jim Williams, The Nautilus Institute

[Environmental Issues for Regional Power Systems in Northeast Asia](#) (✖)

Jim Williams, The Nautilus Institute

[International Best Practices for Assessing and Reducing the Environmental Impacts of High-Voltage Transmission Lines](#) (✖)

Lev Koshcheev

[Environmental Characteristics of HVDC Overhead Transmission Lines](#) (✖)

David Streets, Argonne National University, USA

[Environmental Benefits of Electricity Grid Interconnections in Northeast Asia](#) (✖)

DPRK Delegation

[The Prospect of Electrical Energy Development in DPRK and Regional Co-operation in North-East Asia](#) (✖)

N. D. Gamolya

[Environmental Problems of Power Transmission Between Russia and the Korean People's Democratic Republic](#) (✖)

Cheol Suhmoon and Jong-Young Hwang, Korea Electric Power Corporation

[Codes, Practices, and Regulations for Major Power Line Construction and Operation in the Republic of Korea, with a Focus on Environmental Protection](#) (✖)

Jungmin Kang, Nuclear Engineering, Korea

[Environmental Impacts and Benefits of Regional Power Grid Interconnections for the Republic of Korea: Potential Impacts on Nuclear Power Generation and Nuclear Waste Production](#) (✖)

Jae-young Yoon, Korea Electrotechnology Research Institute (KERI)

[Environmental Impacts and Benefits of Regional Power Grid Interconnections for the Republic of Korea](#) (✖)

V. Karakin, WWF Russian Far East Branch

[Tumen River Downstream Ecological Problems](#) (✖)

Andrew Gerasimov and Lev Koshcheev, St-Petersburg, High Voltage Direct Current Power Transmission Research Institute, Russia

[Environmental, Technical, and Safety Codes, Laws, and Practices Related to Power Line Construction in the Russian Federation](#) (✖)

Sergei Podkovalnikov, Energy Systems Institute, Russian Academy of Sciences, Siberian Branch, Russia

[Environmental Impacts and Benefits of Regional Power Grid Interconnections for the Russian Far East I: Generation and Fuel-Supply-related Impacts](#) (✖)

Alexander Sheingauz

[The Environment of, and Environmental Regulations in, the Russian Far East \(RFE\)](#) (✖)

Fahua Zhu, State Power Environmental Protection Research Institute of China

[Environmental Impacts and Benefits of Regional Power Grid Interconnections for China](#) (✖)

Xin He, State Grid Corporation of China

[The Development and Status of the Power Grid in China, and International Cooperation for Grid Integration in Northeast Asia](#) (✖)

Yong Zhao, Tsinghua University, China

[Environmental, Technical, and Safety Codes, Laws, and Practices Related to Power Line Construction in China](#) (✖)

View the Presentations:

David Von Hippel, The nautilus institute

[Illustrative Alternative Energy Paths for the DPRK](#) (Powerpoint file)

David Von Hippel, The nautilus institute

[The DPRK Energy Sector: Estimates of Recent Trends](#) (Powerpoint file)

Liqin Shao, The Department of High and New Technology, China

[Research Programs for Electric Power Science and Technology in China](#) (Powerpoint file)

Guangyao wei, State Power Corporation of China

[To Achieve Sustainable Development of Chinese Power Industry Through Power Transmission from West to East, Nationwide Interconnection, Restructuring and Introducing Competition](#) (Powerpoint file)

Dong-wook Park

[Activities and Future Plan of R. O. Korea For North-east Asia System Interconnection](#) (Powerpoint file)

Alexander Ognev

[Export of the Electric Power from Far East of Russia](#) (Powerpoint file)

Xiaoxin Zhou, China Electric Power Research Institute

[Power Grid Interconnections in China 2001-2002](#) (Powerpoint file)

Sergei Podkovalnikov, Energy Systems Institute, Russia

["RFE-DPRK-RK" Power Grid Interconnection](#) (Powerpoint file)

Boris Dynkin, Far Eastern State Transport University

[Comments on the Regional Railroad Network and Power Grid Interconnection](#) (✖)

John H. Bickel, Evergreen Safety & Reliability Technologies, LLC

[Grid Stability and Safety Issues Associated With Nuclear Power Plants](#) (Powerpoint file)

Felix Wu, Hong Kong University

[Software Analysis Tools](#) (Powerpoint file)

Yan Zheng, Center for Electrical Energy Systems, The University of Hong Kong

[Demonstration of PSAPAC: A Case Study on Its Application to Three-Gorges Power System](#) (Powerpoint file)

Acid Rain in NE Asia

Gregory R. Carmichael and Richard Arndt

[Baseline Assessment of Acid Rain in Northeast Asia](#) (✖)

David G. Streets, Argonne National Laboratory

[Energy and Acid Rain Projections for Northeast Asia](#)

David Von Hippel, The Nautilus Institute

[Technological Alternatives to Reduce Emissions from Energy Production in Northeast Asia](#)

Peter Hayes and Lyuba Zarsky, The Nautilus Institute

[Acid Rain in a Regional Context](#)

Eui-Soon Shin, Yonsei University, Korea

[Energy Futures and Acid Rain Problems in Northeast Asia – Perspective of the Republic of Korea](#) (✖)

Energy Security

Frans Berkhout, University of Sussex

[International Regulations of Nuclear Fuel Cycles: Issues for East Asia](#) (✖)

Thomas L. Neff, MIT

[Improving Energy Security in Pacific Asia: Diversification and Risk Reduction for Fossil and Nuclear Fuels](#) (✖)

Hossein Razavi, World Bank

[Economic, Security and Environmental Aspects of Energy Supply: A Conceptual Framework for Strategic Analysis of Fossil Fuels](#) (✖)

Lawrence M. Lidsky, MIT

Nuclear Power in a World with Options (✖)

Agreement on the Establishment of KEDO (*Text file*)

Agreed Framework Between the US and the DPRK (*Text file*)

Supply Agreement Signed by KEDO and the DPRK (*Text file*)

David von Hippel; Peter Hayes; Timothy Savage; and Masami Nakata, Nautilus Institute

[Modernizing the Agreed Framework](#) (✖)

Victor Gilinsky and William Manning

[A United States-Type Light Water Reactor for North Korea? The Legal Realities](#) (*Text file*)

Peter Hayes, Nautilus Institute

[Should the US Supply Light Water Reactors to Pyongyang? \(Text file\)](#)

Salomon Levy

[Supply of Light Water Reactor\(s\) to Pyongyang: Technological Issues and Their Possible Resolution \(Text file\)](#)

Lawrence M. Lidsky, and Marvin M. Miller, MIT

[Nuclear Power and Energy Security: A Revised Strategy for Japan](#) (✖)

Haruki Tsuchiya, Research Institute for Systems Technology

[Energy-Efficient Technologies and Renewables in Relation to Japan's Energy Security](#) (✖)

David Von Hippel, The Nautilus Institute

[A Framework for Energy Security Analysis and Application to a Case Study of Japan](#) (✖)

Victor D Kalashnikov, Khabarovsk Economic Research Institute

Electric Power Industry of the Russian Far East: Status and Prerequisites for Cooperation in Northeast Asia (✖)

Richard Speier, Independent Consultant

[Plutonium Decision-Making in the U.S. Government](#) (✖)

Financing Clean Coal

Shaoxiong Xie

[Review of Assumptions as to Changes in the Electricity Generation Sector in Nautilus Institute's Clean Coal Scenarios Report](#) (✖)

Aling Zhang and Lin Shi, Tsinghua University, Beijing, China

[Prospects for and Impacts of Diversifying Chinese Fuel Use away from Coal](#) (✖)

The Nautilus Institute

[Proposal for a Global Environment Facility \(GEF\) Technology Risk Guarantee Mechanism](#) (✖)

David Von Hippel, The Nautilus Institute

[Modeling of Clean Coal Scenarios for China: Progress Report and Initial Results](#) (✖)

Qingyi Wang, Tsinghua University, Beijing, China

[The Coal Industry in China: Recent Evolution and Prospects](#) (✖)

The Nautilus Institute

[Integrated Gasification Combined Cycle \(IGCC\) in China](#) (✖)

The Nautilus Institute

[Financing Clean Coal in China](#) (✖)

NE Asian Marine Issues

Peter M. Haas, University of Massachusetts-Amherst

[Prospects for Effective Marine Governance in the Northwest Pacific Region](#) (✖)

Yasuhide Yamanouchi, Center for Global Communications (GLOCOM)

[GLOCOM Framework Paper: Towards International Cooperation on the Northeast Asian Ocean Environment](#) (✖)

Tomohiro Shishime, Environment Agency of Japan

[Marine Environmental Cooperation in Northeast Asia](#) (✖)

Linda Paul, Ocean Law & Policy Institute

[A Vessel Traffic System Analysis for the Korea/Tsushima Strait](#) (✖)

Mark Valencia, East-West Center

[Ocean Management Regimes in the Sea of Japan: Present and Future](#) (✖)

ISOBE, Masahiko Isobe, University of Tokyo

[Toward Integrated Coastal Zone Management in Japan](#) (✖)

Hideaki Nakata, University of Tokyo

[Environmental Problems and Environmental Management of Japanese Coastal Waters: An Ecosystem Perspective](#) (✖)

Ken Wilkening & Jason Hunter, Nautilus Institute

[Nautilus Framework Paper: U.S.-Japan Policy Initiatives on Energy-Related Marine Issues in the Sea of Japan Perspective](#) (✖)

DPRK Renewable Energy

David F. Von Hippel, Peter Hayes, James H. Williams, Chris Greacen, Mick Sagrillo and Timothy Savage, The Nautilus Institute

[Rural Energy Survey](#) (✖)

Jim William, The Nautilus Institute

[Wind Farm in the Cabbage Patch](#)

David Von Hippel, Peter Hayes, Masami Nakata, Timothy Savage, and Chris Greacen¹, The Nautilus Institute

[Modernizing the Agreed Framework](#) (✖)

The Nautilus Institute

[Nautilus Institute Completes First American Windpower Village Project in North Korea I](#)

The Nautilus Institute

[Nautilus Institute Completes First American Windpower Village Project in North Korea II](#)

The Nautilus Institute

[Nautilus Concludes Third Renewable Energy Mission to the Democratic People's Republic of Korea](#)

KEDO LWR Project

Peter Hayes, The Nautilus Institute

[Should the US Supply Light Water Reactors to Pyongyang?](#) *(Text File)*

Victor Gilinsky and William Manning

[A United States-Type Light Water Reactor for North Korea? The Legal Realities](#) *(Text File)*

Salomon Levy

[Supply of Light Water Reactor\(s\) to Pyongyang: Technological Issues and Their Possible Resolution](#)
(Text File)

Pacific Asia Regional Energy Security

Nautilus Institute and Center for Global Communications (GLOCOM)

[Regional Collaboration for Energy Futures and Energy Security in China and Northeast Asia](#) ()

View this online at: <https://nautilus.org/esena/energy-and-the-environment/>

Nautilus Institute

608 San Miguel Ave., Berkeley, CA 94707-1535 | Phone: (510) 423-0372 | Email:

nautilus@nautilus.org