

Energy and the Environment

Recommended Citation

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