

LUKE J. DANIELSON

President, Sustainable Development Strategies Group

PROFESSIONAL INTERESTS

Luke Danielson's career has largely been in the field of mining and minerals policy.

His areas of interest have included:

- How mineral rich countries in the developing world can achieve sustainable benefits from their resource endowments, and manage adverse environmental, social and economic impacts of these industries;
- How communities in resource producing areas can achieve a degree of control over the process of mineral development that enables them to control adverse impacts and reap development benefits;
- The creation of international norms and standards for the production and trade of minerals and mineral products, to ensure sustainable supply chains; and
- o Building capacity in all part of the minerals sector to ensure more effective management of the mining and minerals value chain.

Professor Danielson's current work is focused on two principal issues:

- The imperative of decarbonization of our global energy system will require unprecedented supplies of a considerable list of critical minerals. How can these be obtained in a way that respects human rights, community structures, and the environment in producing regions?
- o Indigenous peoples have for centuries been dispossessed and suffered adverse impacts as a result of the drive to find and produce minerals. There are developments in international law that show promise of giving indigenous communities more control over their land and resources. How can we realize the promise of these developments in international law?

CAREER HIGHLIGHTS

Mr. Danielson has worked in this field as an attorney, professor, researcher and consultant on minerals policy, national development strategies, and environmental and social performance.

He is known for his work both on international and national levels on minerals policies, and has worked with nearly twenty governments, including Mozambique, Chile, Peru, Romania, Mongolia, Kazakhstan, Cuba, Ecuador, and the Peoples Republic of China. He was the 2015 inductee into the International Mining Technology Hall of Fame for his contributions to Environmental Management and Stewardship.

Mr. Danielson was a participant in the International Bar Association committee that developed the Model Mining Development Agreement, www.mmdaproject.org, a tool for governments and investors to develop more stable and equitable mineral development agreements with improved development outcomes.

He served as the Executive Director of the global Mining Minerals and Sustainable Development Project, a multi-million-dollar, multi-year project at the International Institute for Environment and Development in London, where he managed a network of international staff and consultants across several continents, involving hundreds of stakeholders, forums, conferences, and reports. See www.iied.org/mmsd The findings of the MMSD Project established the first work plan and agenda for the International Council on Mining and Metals.

He was also the founding Director of the Mining Policy Research Initiative, a project of the International Development Research Centre, which entailed supporting and conducting research on the social, economic, and environmental impacts of mining investment in the 23 countries of Latin America and the Caribbean.

In the 1990s, Mr. Danielson was one of the three members of a commission established by the President of the World Bank Group to evaluate the environmental and social performance of the International Finance Corporation in the controversial Pangue Hydroelectric Project in Chile. The work of this panel, under the leadership of Dr. Jay Hair, led to the first binding version of the IFC Performance Standards and the creation of the Office of the Compliance Advisor/Ombudsman, IFC's independent accountability mechanism.

He has been a keynote speaker at a number of mineral policy events, such as the Chilean Ministry of Energy Forum. The First Meeting of the APEC Ministers Responsible for Mining, IBRAM (the Brazilian Mining Association), Peruvian Institute of Mining Engineers (IIMP), the Mine Water Solutions Conference of the University of British Columbia.

Mr. Danielson is president and a co-founder of Sustainable Development Strategies Group (SDSG), a Colorado non-profit organization. Its mission is to promote research, teaching and application of the principles of sustainable development in the field of natural resource

development. He is also an Honorary Lecturer at the University of Dundee Centre for Energy Petroleum and Minerals Law and Policy (CEPMLP), The University of Arizona James E. Rogers School of Law, and Western Colorado University.

He lives in Gunnison, Colorado.

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RECENT PROJECTS

Mr. Danielson has played a leading role in the following recent SDSG projects:

Indigenous Rights in Latin America

He is one of the lead authors of a comparative law article examining how a series of Latin American countries have implemented the requirements of ILO Convention 169 On the Rights of Indigenous and Tribal Peoples. This article will be published by the Human Rights Institute of the University of Deusto in Spain.

Mexico

For the Intergovernmental Forum on Mining Minerals Metals and Sustainable Development, Mr. Danielson is working on a capacity building project for Mexican government mining institutions on the proper framework for consultation of indigenous peoples in decisions regarding exploration and mining that may affect indigenous lands and territories.

Honduras

Mr. Danielson was one of the Assessment Team that prepared the assessment of Honduran mining laws and institutions. https://www.iisd.org/system/files/2022-01/honduras-mining-policy-framework-es.pdf. This report identifies strengths and weaknesses in Honduras' legal and policy framework for mining and makes recommendations for the government.

Environmental and Social Assessment

Mr. Danielson was a contributor to GUIDANCE FOR GOVERNMENTS: Improving legal frameworks for environmental and social impact assessment and management (2020).

United States

Mr. Danielson was a member of the Assessment Team that performed an assessment of Illinois based Foresight Energy for the secretariat of Bettercoal, the organization that provides supply chain assurance for international coal buyers. https://bettercoal.org/

Ecuador

<u>assessment-es.pdf</u>. This report identifies strengths and weaknesses in Ecuador's legal and policy framework for mining and makes recommendations for the government.

Mongolia

Professor Danielson was a member of the Assessment Team that evaluated Mongolia's legal and policy framework for mining for the Intergovernmental Forum on Mining Minerals Metals and Sustainable Development

https://www.iisd.org/sites/default/files/publications/mongolia-mining-policy-framework-assessment-en.pdf. This report identifies strengths and weaknesses in Mongolia's legal and policy framework for mining and makes recommendations for the government. He also helped lead the subsequent capacity building workshop that focused on mine closure planning and on national means to protect tax revenues from base erosion and profit shifting strategies by mining enterprises.

Panama

Mr. Danielson presented a paper at the Rocky Mountain Mineral Law Foundation Special Institute on Human Rights and Extractive Industries in Panama City, "From Coercion to Consent, The Continuing Evolution of Stakeholder Processes in the Era of Human Rights"

Chile

Mr. Danielson was the keynote speaker at national conference ked by the Ministry of Energy on issues of conflict between large scale development projects and local communities.

Central Asia – Variety of Policy Issues for Governments of Kazakhstan, Tajikistan and Kyrgyzstan

Mr. Danielson led three national workshops sponsored by GIZ, the German cooperation agency, on a variety of mineral policy issues of concern to these three governments.

World Bank – Curriculum for Negotiation of Improved Mine Development Agreements

SDSG developed a curriculum aimed to assist governments of developing countries in understanding principal issues involved in mine development contracts, and to negotiate improved mine development agreements. The curriculum has been prepared in English and French, and the one-week program on which it is based has now been offered.

Uganda and Dominican Republic --Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development

This government-to-government organization has developed a proposed framework for mining policy and legislation; it has assessed the legal and policy frameworks of three countries against that model, Madagascar, Dominican Republic, and Uganda. Mr. Danielson participated as a principal in delivering the follow up workshops in Uganda and Dominican Republic.

Mongolia -- International Senior Lawyers Project

Mr. Danielson prepared and delivered a three-day workshop on local rights and expectations in community development agreements for local government and other stakeholders in the South Gobi region of Mongolia.

Mozambique - Capacity Building for MIREM

SDSG had a long-term relationship with MIREM, the natural resource ministry of Mozambique to provide a broad range of services to build the capacity of government to manage its natural resource wealth for sustainable development. Mr. Danielson has been a key participant in several of the specific activities in this project, including review of the proposed Mozambican mining law, and the workshop on negotiating improved minerals agreements with foreign investors.

United Nations Special Rapporteur on the Rights of Indigenous Peoples

Mr. Danielson and SDSG assisted in facilitating a discussion between James Anaya, the United Nations Special Rapporteur on the Rights of Indigenous Peoples, and representatives of the global mining industry at the University of Arizona, focused on the problems of mineral development that affects traditional indigenous lands and resources.

Model Mine Development Agreement

Sustainable Development Strategies Group has worked to support the efforts of the Mining Law Committee of the International Bar Association to develop a Model Mining Development Agreement, which can serve as a basis for more transparent and equitable negotiation of agreements between mining companies and host countries. The intention of the Mining Law Committee is to support agreements which are commercially attractive while promoting sustainable development of host countries and communities. The MMDA website is www.mmdaproject.org.

Kazakhstan – Transparency in Management of Resource Revenues

Mr. Danielson made a lead presentation on the links between the Model Mining Development Agreement, EITI and the movement for greater transparency in the management of resource revenues in a conference sponsored by Soros Foundation – Kazakhstan and Revenue Watch.

Guinea – Capacity Building for Communities Impacted by Mining

In collaboration with a Guinean NGO, CECIDE, and Global Rights, Mr. Danielson and SDSG conducted a three-day capacity building workshop where community advocates and NGO leaders from seven West African countries shared experience and increased their understanding of international best practice in mineral development.

Ecuador – Ministry of Non-Renewable Natural Resources

Ecuadorian mining legislation requires that the Ministry of Non-renewable Natural Resources develop a model contract as the basis for mining agreements with foreign investors. SDSG has supported the Ministry's work to develop the model contract by supplying perspectives from foreign law and experience.

Sierra Leone – Mining Contracts

Mr. Danielson, at the request of the World Bank Group, prepared an analysis of certain mining agreements in Sierra Leone to compare these agreements both to current legislation and international best practice.

Chile – Future Issues in the Mining Sector

SDSG prepared an analysis of future issues affecting the mining sector in Chile for submission to GTZ, the German aid agency.

International Standards

He also recently published a chapter on international standards in Podowski and Poirier, eds., A PRACTICAL GUIDE TO THE LIFE CYCLE OF A MINING PROJECT.

PRIOR EMPLOYMENT

International Institute for Environment and Development

London, England

www.iied.org

Director, Mining Minerals and Sustainable Development Project, April 2000 – September 2002.

Developed, organized, and managed the largest research project ever undertaken on the social, environmental, and economic influence of mining worldwide. MMSD was a two-year global program of research and public consultation designed to examine the role of the world minerals industries in sustainable development in advance of the Johannesburg summit. Responsibilities included establishment of project office and recruitment and hiring of all London staff; development of regional centers in Australia, South America, Southern Africa, North America and national programs in a number of countries; establishment of 24 member global Project Assurance Group which supervises the activities of the work team; development of research program and research contracting system; establishing global communications program; management of budget now approaching \$10 million; preparation and publication of final project report and many subsidiary publications See www.iied.org/mmsd

International Development Research Centre

Montevideo, Uruguay

www.idrc.ca

Director, Mining Policy Research Initiative, 1998-2000

Established and organized a program of interdisciplinary research, research funding, and public dialogue on environmental, social, and economic development impacts of mining investment in the 23 nations of Latin America and the Caribbean, centered in Montevideo at the IDRC regional office for Latin America and the Caribbean. The program emphasizes development of partnerships with research institutions within the region. Responsibilities included defining principal policy areas of concern, development of program objectives and policies, developing network of partnerships with various regional organizations, establishing, and recruiting advisory council, fund raising, staff recruitment, and management of budget.

University of Chile, Faculty of Law

Santiago, Chile <u>www.derecho.uchile.cl</u> Visiting Professor – 1996-1998

Mr. Danielson moved to Chile as a Fulbright Fellow to assist in establishing the program in environmental law at one of Chile's leading law schools. Responsibilities included curriculum development, development of course materials, teaching courses at undergraduate, masters, and Ph.D. levels, acting as thesis advisor to masters and doctoral candidates, research, and publication. Organized the First International Congress of Environmental Law at the University of Chile in January 1998, and supervised the

publication of proceedings as Derecho del Medio Ambiente, Congreso Internacional, (I.S.B.N. 956-238-175-7). Classes included survey of Chilean domestic, comparative, and international environmental law, The Law of Environmental Impact Assessment, and the doctoral level course on Environmental Law and the Mining Industry. Also conducted several independent consulting and study processes as described below.

Pendleton, Friedberg, Wilson, & Hennessey, P.C.

Denver, Colorado www.penberg.com Of Counsel – 1996-1998

While teaching at the University of Chile continued some practice of law as Of Counsel to this U.S. law firm.

Gersh & Danielson, Attorneys at Law

Boulder and Denver, Colorado Partner – 1985-1996

Co-founder and one of two principal partners of this Colorado law firm. Practice concentrated in energy, environmental and natural resources law and litigation. Successfully handled litigation in areas as diverse as National Forest policy, protection of national parks, wetland management, radiation control, toxic torts, wildlife, and land use law.

Danielson & Euser, Attorneys at Law

(Predecessor to Gersh & Danielson), Denver, Colorado Partner – 1982-1985

National Wildlife Federation

University of Colorado School of Law, Boulder Counsel/Assistant Professor – 1979-1981

Solar Energy Research Institute, Golden, Colorado

Editor in Chief, Solar Law Reporter – 1978-1979

Holland & Hart, Attorneys at Law, Denver Colorado

Associate - 1975-1978

Colorado Rural Legal Services/Colorado Migrant Council

Investigator – 1972

TEACHING

University of Arizona James E. Rogers School of Law

Mr. Danielson developed an online class entitled *The Emerging International Framework* for Development of Natural Resources.

Centre for Energy Petroleum and Mineral Law and Policy – University of Dundee

Professor Danielson teaches an annual short course on natural resource development and the tensions it generates with local communities.

Sustainable Development of Natural Resources – Course Series

SDSG has developed and taught a three-course series at the University of Denver Sturm College of Law entitled Sustainable Development of Natural Resources. See http://www.law.du.edu/index.php/SNRDS

These three courses deal respectively with:

- (a) Community Expectations in Sustainable Development
- (b) National Legislation and Policies; and
- (c) The Emerging International Framework.

Each of these three courses was taught each year over a seven year period. Mr. Danielson was co-professor in each of them, together with SDSG Co-Founder Cecilia Dalupan and various distinguished co-teachers.

Simon Fraser University, Executive MBA Program

Sustainable Development in the Mining Industry (2006 ---)

Western State Colorado University

Masters of Environmental Management Program

(2014-present)

Community Conflicts and Natural Resource Development

Global Governance and Sustainable Development

Mining Land Management

(2009-2015)

Globalization and Global Institutions

(Spring 2006)

University of Chile, Faculty of Law

Environmental Law

Environmental Impact Assessment and Other Instruments of Environmental Management

Environmental Issues in the Mining Industry - 1996 to 1998

University of Colorado, School of Law

International Mineral Development - 1994

Public Land Law - 1984

Natural Resource Litigation & Energy Law - 1979 to 1982

University of Denver, University College

University of Denver, College of Law

Pretrial procedure - 1987 Energy Law - 1985 Civil Procedure - 1978

EDUCATION

University of California School of Law (Boalt Hall), J.D. 1975

Managing Editor, Ecology Law Quarterly

Antioch College (Economics), B.A. 1971

Member, College Budget Council

Universidad Autonoma del Estado de Mexico, Certificate 1965

Toluca, Mexico

Boulder High School, 1966

Boulder, Colorado

SPECIAL PROJECTS

Bettercoal

Member of Technical Advisory Group.

Global Public Policy Institute

Berlin, 2006

Paper and workshop on public dialogue in the mining sector'; history of the MMSD project, http://www.globalpublicpolicy.net/

National Agency for Mineral Resources

Romania, 2006

Monitoring and management of abandoned mine sites for the government of Romania

Ministry of Energy and Mining

Lima Peru, 2005

Consulted with Ministry on development of rules and administrative framework for mine closure planning and abandoned mines programs

First Red Lady Forum: Mining and Water: Past, Present and Future

Crested Butte, Colorado 2005

Organizer and moderator of mining policy forum

APEC (Asia Pacific Economic Cooperation)

Antofagasta, Chile, 2005

Keynote speaker at first meeting of APEC Mines Ministers

MEMS (Mineral Economics and Management Society)

Washington, DC, 2004

Keynote speaker at MEMS annual meeting

TNK BP

Moscow, 2004

Presentation to senior management on issues of sustainable development and functioning and application of the Equator Principles

Duke Energy

Charlotte, NC 2003

Corporate briefings on sustainable development issues

World Bank Group

Jakarta, Indonesia 2002-3

Consultant to Dr. Emil Salim, in charge of World Bank Extractive Industries Review

CITMA, Ministry of Science Technology and Environment

Havana. Cuba 1998-99

Led workshops that developed Cuban environmental legislation including coastal zone management law and environmental impact assessment regulations.

Instituto Bartolomé de las Casas

Cusco, Peru – 1999

Course on Natural Resource Development

Ministry of Mining of the Republic of Chile

Santiago, Chile – 1996-1998

- Advising Ministry on development of national system of mine closure and reclamation legislation
- Among principal authors of comparative study undertaken for the Ministry of mine closure and reclamation legislation in approximately ten jurisdictions in Latin America and other countries
- Consulting on legal and environmental policy aspects of water scarcity in desert regions of northern Chile

CONAMA, Chilean national environment agency

Santiago, Chile – 1996-1998

 Advised agency on development of regulations for implementation of system of environmental impact assessment.

Interamerican Development Bank

Sao Paulo, Brazil; Santa Cruz de la Sierra, Bolivia Gasbol Project -- 1997

One of three Independent Monitors appointed by the Interamerican Development Bank to oversee environmental impact studies and environmental management system for Gasbol, the Bolivia-Brazil gas pipeline project.

Member of Independent Audit Team, World Bank

Pangue Project -- 1996-1997

Served as one of three members of external review team established by President Wolfensohn of the World Bank to perform the first independent audit ever undertaken of the environmental and social performance of the International Finance Corporation, the private lending arm of the World Bank. The case audited was the Pangue hydroelectric project in Chile.

Bureau of Legislative Affairs, State Council, Peoples' Republic of China Beijing -- 1994-1996

Worked in both China and the United States with team of Chinese government experts to develop comprehensive legislation for control of environmental problems in coal mining regions

Colorado Department of Natural Resources

Denver – 1992 - 1993

For Colorado Department of Natural Resources, conducted independent investigation of causes of failure of environmental control at the Summitville Mine. See Danielson and McNamara, *The Summitville Mine: What Went Wrong?* (Colorado Department of Natural Resources 1993). Also Danielson et al., *The Summitville Story: A Superfund Site is Born*, 24 ELR 10388 (July 1994). This work led to a stakeholder dialogue which developed remedial legislation supported by all of the principal minerals industry organizations and all of the principal mining-related environmental organizations in Colorado.

BOARDS, COMMITTEES AND POSITIONS

2015 Inductee to the International Mining Technology Hall of Fame

for Environmental Management and Stewardship http://www.im-halloffame.com/

Rocky Mountain Mineral Law Foundation, Trustee, 2013-2015

Mining and Metallurgical Society of America Member, 2009 –

Lowell Institute for Mineral Resources, University of Arizona

Member, Board of Directors, 2009-2014

Industry Advisory Committee

Department of Mining Engineering Colorado School of Mines 2011-2013

Caterpillar, Inc.

Member Sustainability Advisory Committee 2007-2016

INMET

Member Independent Stakeholder Advisory Committee 2009 - 2014

International Mining Professionals Society

Chair, Codes Committee, 1996-1999

American Bar Association, Section of Natural Resources, Energy & Environmental

International Resources Committee Vice Chair – 1994-1997

Colorado Mine Water Quality Task Force

Co-Chair - 1995-1996

Rocky Mountain Low-Level Radioactive Waste Board

Multistate compact for radioactive waste disposal.

Prosecutor – 1993-1996

Mined Land Reclamation Board, Department of Natural Resources, State of Colorado, government agency in charge of mine reclamation and environmental protection of mined lands.

Member – 1987-1996

Chair – 1989, 1991 & 1994

American Solar Energy Society; scientific, professional and trade association

Counsel – 1983-1996

National Wildlife Federation Action, Inc.

Non-profit conservation political education foundation. Vice-Chair of the Board of Directors –1992-1996

Colorado Bar Association

Member, Board of Governors – 1992-1994

University Corporation for Atmospheric Research Foundation

Non-profit foundation engaged in commercialisation of technical and scientific concepts developed at the National Center for Atmospheric Research.

Counsel - 1987-1989

EcoCycle, Inc.

Non-profit community recycling program. Member, Board of Directors – 1983-1986 Chair, Board of Directors – 1985-1986 1986 Recycling Volunteer of the Year

Colorado Conservation Foundation

Director – 1985-1994

Wyoming Wildlife Federation

Life member

PROFESSIONAL AFFILIATIONS

Member Colorado Bar

Member of the Bars of the United States Supreme Court, United States Court of Appeals for the Tenth Circuit

LANGUAGES

Fluent written and spoken English and Spanish Reading knowledge and limited spoken Portuguese

PUBLICATIONS

Publications list available on request.