

John W. Koupal

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EXECUTIVE MANAGER: Director, VP, Chief Engineer

Energy and Environment • Government Affairs • Automotive • Research

National automotive energy and emissions expert with demonstrated accomplishment in technology research, modeling, regulatory development, and compliance. Outstanding technical analysis and creative problem solving skill. Proven ability to formulate strategic vision and bring vision to reality. Skilled manager adept at developing and motivating professional staff. Excellent communication ability demonstrated in presentations at several major conferences and in contribution to technical reports, journal articles, keynote speeches, and regulatory documents.

Automotive Emissions • Alternative Energy • Regulation Development • Environmental Impact Analysis
Cost Effectiveness Analysis • Policy Evaluation • Government Affairs • Regulatory Negotiation
Strategic Planning • Compliance Management • Government/Industry Collaboration
Stakeholder Outreach • Technology Research • Simulation Modeling • Lifecycle Analysis

PROFESSIONAL EXPERIENCE

U.S. EPA - Office of Transportation and Air Quality

Director, Air Quality and Modeling Center (2006–Present)

Direct research advancing national energy and environmental policy on issues including renewable fuels, fine particulate matter, and greenhouse gases. Coordinate emission impact analyses for major EPA regulations. Oversee EPA's mobile source emission modeling program, including landmark transition to MOVES model platform. Manage professional staff of 20 and multi-million dollar budget.

Environmental Engineer (1989–95, 1997–2006)

Advanced state-of-the-science for quantifying impacts of automotive energy and environmental policy. Engineered complete overhaul of EPA's mobile source modeling approach. Performed innovative research on vehicle emissions and emission control technology.

Deliver Solutions to Environmental Challenges:

- Orchestrated ground-breaking analyses to quantify emission impact of major EPA rules, including Tier 2 Vehicle and Gasoline Sulfur Program, Renewable Fuels Standard (RFS2), and Greenhouse Gas Advanced Notice of Proposed Rulemaking.
- Conceived, developed and implemented major update to EPA mobile source emission modeling program in response to review by the National Academy of Sciences.

Spearhead Innovative Research:

- Developed prototype emission control systems, including a vehicle catalyst failure detection system for which a U.S. patent was granted, to satisfy technical feasibility requirements for EPA rules.
- Advanced EPA's capacity to analyze lifecycle energy use and emissions of fuel cell vehicles.
- Developed pioneering methodology for estimating excess emissions due to air conditioning usage.

Forge Collaboration Between Environmental Stakeholders:

- Initiate and direct EPA collaboration with Coordinating Research Council (CRC), DOT, DOE and ARB on several research and modeling efforts.
- Coordinate outreach on EPA's mobile source emission modeling program with industry, academia, state/local government and environmental groups.
- Initiated Federal Advisory Committee Act panel to engage stakeholders in MOVES development.

Lead in Environmental Field:

- Serve as co-chair of Federal Advisory Committee Act panel on MOVES review.
- Serve as session chair and co-organizer for annual CRC On-Road Vehicle Emissions Workshop.
- Delivered presentations at several major forums, including: Society of Automotive Engineers World Congress, California Fuel Cell Partnership, Mobile Source Technical Review Subcommittee, Southern Transportation and Air Quality Summit, North American Center for Vehicle Emissions Control and Safety Conference, CRC On-Road Vehicle Emissions Workshop, International Emission Inventory Conference, and Transportation Research Board Annual Meeting.

Awards – Role Model Honor Award, EPA Gold Medal, EPA Bronze Medal (4), numerous "Outstanding" performance ratings.

Nissan Research and Development – Senior Staff Engineer (1995–97)**Represented Policy Positions:**

Represented Nissan on industry panels and to government agencies on regulatory and compliance issues including Supplemental Federal Test Procedure (SFTP), fuel economy test procedures, streamlined compliance, and fuel sulfur testing.

- Formulated consensus company positions between manufacturing, engineering and sales departments; presented these positions to industry panels and to government agencies.
- Participated in formulation of industry-wide positions.
- Presented industry-wide positions on SFTP regulation to government agencies.

Managed Compliance Program:

Managed U.S.-based coordination of emission and fuel economy compliance programs with federal and state agencies.

- Negotiated compliance policy with government agencies.
- Managed submission of emissions and fuel economy compliance data.

Awards – Director's Award

VOLUNTEER EXPERIENCE**Vision Builders**

Board member for nonprofit focused on providing education, medical care and other basic aid to underprivileged children in international locations.

Race Director, Vision Builders 5k

- Founded and developed annual charity 5k race that has netted nearly \$50,000 in two years.
- Coordinated efforts of over 50 volunteers on all aspects of race, including race day logistics, sponsor relationships and marketing.

EDUCATION**University of Michigan**

B.S.E., Industrial and Operations Engineering (Cum Laude)