

AMORY B. LOVINS, 62, has been active in ~50 countries for nearly 40 years as an innovator and practitioner in energy and its links to security, development, environment, and economy. He is cofounder (1982), Chairman, and Chief Scientist of Rocky Mountain Institute—an independent, entrepreneurial, nonprofit think-and-do tank that drives the efficient and restorative use of resources (www.rmi.org). Originally a consultant experimental physicist, and author of 29 books and hundreds of papers, he has received MacArthur and Ashoka Fellowships, the “Alternative Nobel,” Blue Planet, Onassis, Volvo, Nissan, Shingo, and Mitchell Prizes, the Benjamin Franklin and Happold Medals, 11 honorary doctorates, an Hon. AIA and FRSA, Foreign Membership of the Royal Swedish Academy of Engineering Sciences, and the National Design, Heinz, Lindbergh, *Time* Hero for the Planet, Jean Meyer, and World Technology Awards. In 2009, *Time* named him one of the 100 most influential people in the world, and *Foreign Policy*, one of the 100 top global thinkers. Mr. Lovins advises industries and governments worldwide (as well as DoD and DOE), chiefly on advanced energy and resource efficiency, has led the superefficient redesign of >\$30 billion worth of facilities in 29 sectors, and has briefed 20 heads of state. For the past 19 years, he has also led the development of quintupled-efficiency, uncompromised, cost-effective automobiles¹, low-cost advanced-composite manufacturing technology to make them (www.fiberforge.com), and, optionally, a profitable hydrogen transition strategy to fuel them.² Much of his wider work is synthesized in *Natural Capitalism* (www.natcap.org). His *Small Is Profitable* was an *Economist* 02 book of the year (www.smallisprofitable.org). In Sep 04, RMI published his OSD- and ONR-cosponsored synthesis *Winning the Oil Endgame*³, a roadmap for eliminating U.S. oil use by the 2040 and revitalizing the economy, led by business for profit (the average cost is just \$15/bbl) and catalyzed by military S&T; implementation is underway (www.rmi.org/sitepages/pid469.php).

Dr. Lovins’s security background includes devising the first logically consistent approach to nuclear nonproliferation (technical papers⁴ and two books, 1979–1983); performing for DoD the definitive unclassified study of domestic energy vulnerability and resilience⁵; co-developing a “new security triad” of conflict prevention, conflict resolution, and nonprovocative defense⁶; lecturing at NDU, DAU, USMA, USNA, NWC, NPS, STRATCOM, etc. on least-cost security and on how new technologies will transform missions and force structures; leading for VADM Lopez the 95–98 overhaul of NAVFAC’s design process; leading a 00–01 analysis for SECNAV of how to save up to half the hotel-load electricity aboard *USS Princeton* CG-59⁷; addressing ASNE 10 and the USMC Commandant’s 10 expeditionary energy symposium; and serving on 99–01 and 06–08 Defense Science Board panels. These studies⁸ identified cost-effective DoD fuel-saving potential later estimated by RMI’s platform-by-platform analysis to total ~66%, excluding consequent lift savings. Dr. Lovins is currently helping DoD implement *Winning the Oil Endgame* and its platform-efficiency recommendations, supports the QDR process and DoD energy strategy⁹, and has been tasked by COMNAVSEA to help transform Naval design.

¹ A.B. Lovins & D.R. Cramer, “Hypercars[®], Hydrogen, and the Automotive Transition,” *Intl. J. Veh. Design* **35**(1/2):50–85 (2004), http://www.rmi.org/rmi/Library/T04-01_HypercarsHydrogenAutomotiveTransition.

² Summarized in “Twenty Hydrogen Myths,” www.rmi.org/images/other/Energy/E03-05_20HydrogenMyths.pdf.

³ Downloadable free from <http://rmi.org/rmi/Winning+the+Oil+Endgame>, where technical backup and reviews are also posted. The study was reviewed for OFT in D. Berkey *et al.*, “Energy Independence Assessment: Draft Final Briefing for Office of Force Transformation,” Logistics Management Institute, 12 Jan 05, which strongly recommended DoD implementation of major gains in platform fuel efficiency as essential to transformational goals.

⁴ Summary in *Foreign Affairs* **58**:1137–1177 (1980); typical unclassified support in *Nature* **283**:817–823 (1980).

⁵ A.B. & L.H. Lovins, *Brittle Power: Energy Strategy for National Security*, 1981 report to DoD, 436 pp., 1,200 refs., Brick House (Andover MA), 1982, out of print but reposted in 2002 at www.rmi.org/sitepages/pid533.php. Foreword by ex-CJCS ADM (Ret.) Tom Moorer and ex-USECNAV, later DCI, Jim Woolsey.

⁶ H. Harvey & M. Shuman, *Security Without War*, 1990–93, Westview, www.rmi.org/sitepages/pid618.php.

⁷ RMI report under ONR Grant #N00014-01-1-0252, 2001, summarized at www.rmi.org/sitepages/art7057.php.

⁸ At www.acq.osd.mil/dsb/fuel.pdf, summarized at www.rmi.org/sitepages/art7049.php, and www.acq.osd.mil/ddb/reports/ADA477619.pdf.

⁹ Lovins, “DoD’s Energy Challenge as Strategic Opportunity,” www.ndu.edu/press/jfq_pages/editions/i57/lovins.pdf.