

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

Science serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

Editorial Board

1975

H. S. GUTOWSKY	DONALD LINDSLEY
N. BRUCE HANNAY	RUTH PATRICK
DONALD KENNEDY	RAYMOND H. THOMPSON
DANIEL E. KOSHLAND, JR.	

1976

ALFRED E. BROWN	FRANK PRESS
JAMES F. CROW	FRANK W. PUTNAM
HANS LANDSBERG	MAXINE SINGER
EDWARD NEY	ARTHUR M. SQUIRES

Editorial Staff

Editor

PHILIP H. ABELSON

Publisher

WILLIAM D. CAREY

Business Manager

HANS NUSSBAUM

Managing Editor: ROBERT V. ORMES

Assistant Editors: ELLEN E. MURPHY, JOHN E. RINGLE

Assistant to the Editors: PATRICIA ROWE

News and Comment: JOHN WALSH, LUTHER J. CARTER, DEBORAH SHAPLEY, ROBERT GILLETTE, NICHOLAS WADE, CONSTANCE HOLDEN, BARBARA J. CULLITON, SCHERRAINE MACK

Research News: ALLEN L. HAMMOND, WILLIAM D. METZ, THOMAS H. MAUGH II, JEAN L. MARX, ARTHUR L. ROBINSON, GINA BARI KOLATA, FANNIE GROOM

Book Reviews: KATHERINE LIVINGSTON, LYNN MANFIELD, JANET KEGG

Cover Editor: GRAYCE FINGER

Editorial Assistants: MARGARET ALLEN, ISABELLA BOULDIN, ELEANORE BUTZ, MARY DOREMAN, SYLVIA EBERHART, JUDITH GIVELBER, CORRINE HARRIS, NANCY HARTSAGEL, OLIVER HEATWOLE, CHRISTINE KARLIK, MARGARET LLOYD, ERIC POGGENPOHL, JEAN ROCKWOOD, LEAH RYAN, LOIS SCHMITT, RICHARD SEMIKLOSE, YA LISHWIGART, ELEANOR WARNER

Guide to Scientific Instruments: RICHARD SOMMER

Membership Recruitment: GWENDOLYN HUDDLE; Subscription Records and Member Records: ANN RAGLAND

Advertising Staff

Director

EARL J. SCHERAGO

Production Manager

MARGARET STERLING

Advertising Sales Manager: RICHARD L. CHARLES

Sales: NEW YORK, N.Y. 10036: Herbert L. Burkland, 11 W. 42 St. (212-PE-6-1858); SCOTCH PLAINS, N.J. 07076: C. Richard Callis, 12 Unami Lane (201-889-4873); CHICAGO, Ill. 60611: Jack Ryan, Room 2107, 919 N. Michigan Ave. (312-DE-7-4973); BEVERLY HILLS, CALIF. 90211: Winn Nance, 11 N. La Cienega Blvd. (213-657-2772); DORSET, Vt. 05251: Fred W. Dielffenbach, Kent Hill Rd. (802-867-5581)

EDITORIAL CORRESPONDENCE: 1515 Massachusetts Ave., NW, Washington, D.C. 20005. Phones: (Area code 202) Central Office: 467-4350; Book Reviews: 467-4367; Business Office: 467-4411; Circulation: 467-4417; Guide to Scientific Instruments: 467-4480; News and Comment: 467-4430; Reprints and Permissions: 467-4483; Research News: 467-4321; Reviewing: 467-4443. Cable: Advancesci. Washington. Copies of "Instructions for Contributors" can be obtained from the editorial office. See also page xv, *Science*, 28 June 1974. ADVERTISING CORRESPONDENCE: Room 1740, 11 W. 42 St., New York, N.Y. 10036. Phone: 212-PE-6-1858.

Absence of U.S. Energy Leadership

The United States continues to drift toward some form of drastic unpleasantness. Consumption of gasoline exceeds that of a year ago. Domestic reserves and production of oil and natural gas are steadily declining. Total U.S. inventories of oil and its products are below those of a year ago. Efforts aimed at liquefaction or gasification of coal move slowly. Estimates of costs for full-scale plants climb rapidly. After 5 months, Congress is unable to act. In contrast, the Organization of Petroleum Exporting Countries (OPEC) adjusts supply to demand and prepares for a large price increase.

In their actions and statements during the past 2 years, the leaders of OPEC have proved themselves to be highly intelligent. An example is the Shah of Iran. He has demonstrated more competence to guide his country's policies with respect to energy than has any leader of the Western world. The Shah understands that the oil reserves of Iran are limited, and he is determined to obtain for them all that can be had. He defends his actions well. Thus, the Shah has stated that in 1947 the posted price of oil in the Persian Gulf was \$2.17 per barrel and that in 1959 the oil companies lowered the price to \$1.79, where it remained until 1973. During those 26 years, the prices of most other goods and commodities increased markedly. The Shah has emphasized, and rightly, that oil is too precious to be used as a fuel. He has pointed out that the world's "petroleum reserves would be depleted in 30 years if we continued to exploit this vital substance. . . . To avoid their precipitate exhaustion, other sources of energy, especially nuclear fission or coal . . . must be substituted for oil and natural gas." He also has pointed to the desirability of harnessing other sources of energy such as solar radiation.

The Shah takes the realistic position that the price of oil should be set at a level equivalent to the costs of producing oil substitutes, such as liquids from coal. (The numbers now being bandied about in the United States run from \$15 to \$25 per barrel.) Thus the Shah has established a rationale for doubling the price of petroleum. Moreover, he has staked out a position as a farsighted international leader, and history may so regard him.

In moves with respect to prices for oil, OPEC has been astute. Following the quadrupling of prices in 1973-1974, the level was held relatively unchanged while it became clear that worldwide economic disaster was not going to occur. Trial balloons have now been launched to test reactions to a 30 to 40 percent increase in October at the beginning of the period of maximum demand. Reaction has been muted. It seems clear the OPEC could easily get by with a price boost of 35 percent and with further steps later.

But unpleasant as a sharp increase in oil prices might be, it is not the worst hazard. With its depleted resources of hydrocarbons the United States is considerably more vulnerable to an oil embargo today than it was in 1973. At that time Arab production of oil was cut only 25 percent. The Arabs have now accumulated large monetary reserves, and some could easily forego all revenues for an extended period. In the face of a weakening position there has been no U.S. program to provide reserves.

Perhaps the most discouraging feature of the present scene is a failure of U.S. leadership. President Ford's program is limited and not imaginative, but at least he tries. The performance of Congress has been awful. Congress found itself unable to stomach the prospect of even a small increase in gasoline taxes designed to cut consumption. Such revenues would stay in the United States and be returned to the public. Instead, we are destined to pay much higher taxes, but they will be collected by the Shah and his colleagues.

The excuse for Congress is that the public is not educated—not ready for meaningful measures. Perhaps that is correct. However, the public is not rushing to buy gas guzzlers. Somebody knows something.

But failure of leadership is not confined to the politicians. What have intellectuals done? What have the universities contributed? Perhaps the worst failure has been that of the mass media. Supposedly one of their major functions is to inform accurately. The behavior of Congress testifies to their performance.

—PHILIP H. ABELSON

Science

Absence of U.S. Energy Leadership

Philip H. Abelson

Science **189** (4196), 11.

DOI: 10.1126/science.189.4196.11

ARTICLE TOOLS

<http://science.sciencemag.org/content/189/4196/11.citation>

PERMISSIONS

<http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science (print ISSN 0036-8075; online ISSN 1095-9203) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science* is a registered trademark of AAAS.