

RESEARCH REPORTS

Reviews of new research by public agencies and private institutions

“Energy and the Economy.”

Council on Energy Resources, University of Texas, Austin, Tex. 78712. 109 pp.

America's best hope of subduing the stagflation touched off by OPEC's 1973 oil price hikes is to become a net energy exporter by 1990. That may sound like wishful thinking, but a team of University of Texas scholars headed by geologist W. L. Fisher and economist Walt W. Rostow believes that it can be done.

The authors outline a plan to produce the equivalent of 48 million barrels per day of oil (mbdoe)—in the form of natural gas, synthetic fuels, nuclear power, and, above all, coal. That would exceed projected U.S. energy consumption in 1990 by 2.7 mbdoe—giving the nation an exportable energy surplus for the first time since 1947. Among the potential results, the authors claim: a noninflationary annual U.S. growth rate of 3.5 percent, a drop in unemployment (to four percent), a rise in productivity (to a healthy 2.5 percent), and a U.S. trade balance running in the black.

But getting there will not be easy. Hard political decisions must be made, the authors state.

Crude oil and natural gas must be free of price controls to ensure high energy conservation—and to enable energy companies to finance research and development.

The current windfall profits tax on oil must be changed to “plow back” oil company profits into exploration and drilling.

The federal government must provide private industry with such incentives as accelerated equipment depreciation schedules, low interest

loans, and purchase agreements to encourage synthetic fuel production.

And many of the environmental laws that have hindered coal and oil production (e.g., the Clean Air Act and restrictions on offshore oil drilling) will have to be loosened.

Even if Congress enacts all of the necessary legislation, the logistical obstacles remain staggering. The authors do not provide a detailed financing blueprint. But they estimate that meeting the energy export goal by 1990 will cost \$1.433 trillion—nearly 50 percent of the gross national product in 1980.

Expanding coal production alone (from the current 8.2 to the authors' proposed 20 million mbdoe) could cost \$500 billion over the next 20 years. A massive upgrading of railroad track and interior waterways would be required to transport Western coal to the East. The United States would need to build 10 new coal shipping ports, each capable of handling 25 to 30 million tons per year.

The authors urge the construction of 120 synthetic gas and shale-oil plants, each producing 50,000 mbdoe daily and employing technologies already available, such as the Fischer-Tropsch coal gasification process currently used in South Africa. Each of these factories—built and operated by private industry in remote Western regions—would take up at least one square mile of land and consume five gallons of water to make each gallon of fuel. Building them would absorb one-half of the capacity of the U.S. en-

**HOW COAL-PRODUCING CAPACITY COULD EXPAND:
ACTUAL AND PROJECTED, 1977-2000** (million metric tons/year)

<i>Country</i>	<i>1977</i>	<i>2000</i>
Australia	76	326
Canada	23	159
People's Republic of China	373	1450
Federal Republic of Germany	120	150
India	72	285
Poland	167	313
Republic of South Africa	73	228
United Kingdom	108	162
United States	560	1883
Soviet Union	510	1100
Other countries	368	724
Total world	2450	6780

Figures from Coal—Bridge to the Future, © 1980, Massachusetts Institute of Technology. Reprinted with permission of Ballinger Publishing Company.

gineering construction industry and require the skills of most of America's trained welders. Whole towns would have to be created to house these workers. Total estimated cost: another \$500 billion, not to mention "a national mobilization on a scale never before attempted in this country or anywhere else."

To contain the inflationary explosion that a crash program would ignite will require a sustained wage-

price control effort. Persistence, they say, is the key: President Nixon's wage-price controls of 1971-72 lasted too briefly to prevent "catch-up" inflation once they were lifted.

Making the United States an energy exporter will demand "a new sense of unity . . . among business, labor, government, and the community at large," the authors note. But the alternative is a future of sluggish growth punctuated by chronic recessions.

"Western Security: What Has Changed? What Should Be Done?"

The Council on Foreign Relations, 58 East 68th St., New York, N.Y. 10021. 48 pp. Authors: Karl Kaiser et al.

When the New York-based Council on Foreign Relations—a private research organization—and its British, West German, and French counterparts talk, Western governments often listen. Now, the directors of these four institutions have proposed a solution

to a problem that has long divided the Atlantic alliance: how, collectively, to counter Soviet expansionism in the Third World, particularly in the oil-rich Middle East.

The inability of the Atlantic alliance to unite against Soviet thrusts in the

Third World—as evidenced by its mottled response to the invasion of Afghanistan—stems largely from differing experiences with détente.

Improved relations with Moscow brought concrete benefits to Western Europe. Trade with the Soviet bloc increased; families were reunited. The Soviets' achievement of nuclear parity with the United States is another justification for détente in the eyes of many Europeans.

For all of these reasons, leaders in Bonn, Paris, and even London are reluctant to echo U.S. threats to scuttle détente over such "peripheral" issues as a civil war in El Salvador.

For its part, the United States has gradually moved away from the Europe-centered foreign policy of the 1940s and '50s. U.S.–Soviet trade has been meager, and détente has benefited few Americans directly.

Further, the Vietnam War's disastrous conclusion contributed to a resurgence of pugnacious American nationalism—prompting many in Washington to forget that Western European nations have raised their share of the cost of maintaining NATO from 22.7 percent in 1969 to 41.6 percent in 1979, even as total U.S. military outlays fell in constant dollars.

The authors believe the time has come to restore a sense of common purpose. That purpose transcends the Atlantic basin: "Western security can no longer be limited to events and

threats occurring in the NATO region alone." Their chief concern is that an extensive and prolonged interruption of oil supplies could unleash an unprecedented world economic crisis.

What is to be done? Since neither the United States nor its allies can check Soviet ambitions in the Middle East single-handedly, the Western democracies must pitch in and help protect the Persian Gulf—with money and manpower. The United States should be given chief responsibility for assembling a joint Western force. Western European—and Japanese—participation must be significant (to reflect their stake in energy security) and highly visible (to persuade a touchy American public that burdens are being shared).

The authors urge the West to support Afghan resistance to the Soviet invasion with money and weapons. They agree that if Soviet thrusts outside the Persian Gulf (e.g., in Central America or in Africa) are often less dangerous than Washington alleges, they are sometimes more ominous than the Western Europeans acknowledge. Intra-NATO consultations should determine which crises require a joint response and which the West can safely disagree over.

Such measures, the authors believe, would transform NATO from an organization "characterized by U.S. dominance and European passivity" into a "real alliance" of equals.

"High School and Beyond."

National Center for Education Statistics, U.S. Department of Education, 400 Maryland Ave. S.W., Washington, D.C. 20560. 69 pp.

Have young Americans today discarded the "counterculture" values of the late 1960s and early '70s? A survey of 58,000 high school sophomores and

seniors conducted by the U.S. Department of Education suggests that a conservative swing has indeed occurred.

Nine years ago, in a U.S. govern-

ment poll, 27 percent of high school seniors surveyed cited "correcting social and economic inequalities" as a "very important" goal in their life and work. Only 13 percent of seniors queried in 1980 felt the same way. Meanwhile, the proportion of students intent on "having lots of money" rose from 19 to 31 percent.

Shifts in career aims tell the same story. In 1972, "social science" ranked as the most popular choice of major among students headed for college (attracting 17 percent). Eight years later, its popularity had fallen by more than half; 22 percent of the college-bound by then were planning business majors (up from 13 percent).

Gender still seems to affect student career choices. Seventeen percent of the girls expected to hold clerical jobs, compared to only one percent of the boys. At the same time, 16 percent of the boys and only one percent of the girls were leaning toward careers as "craftsmen." But girls were almost as likely as boys to anticipate careers that required advanced degrees—12 versus 13 percent.

Some Class of '80 responses were fairly predictable. Asian Americans continued to show an unusually high

interest in math and science: Their proportion taking calculus (22 percent) equaled the percentages of whites, blacks, Hispanics, and American Indians combined. Male students continued to take more math and science than did females.

But some surprises emerged. Blacks ranked slightly higher than whites in the percentage of students taking three years or more of math and in the numbers of students expecting four years or more of advanced education (48 compared to 46 percent).

Almost two-thirds of 1980 seniors held part-time jobs, averaging 21 hours per week at \$3.18 per hour. White students were most likely to be working while in school (66 percent), and blacks were least likely (50 percent). Female students earned an average of 88 percent of their male peers' hourly wages.

Is schoolwork as hard as it used to be? The survey indicated that "grade inflation" is no myth. Three-fourths of the 1980 seniors spent *less* than five hours per week on homework, up from 65 percent in 1972. But the proportion of seniors reporting grades of "about half A and half B" or higher rose—from 29 percent to 33 percent.

"United States National Interests in Africa."

Prepared for the Wilson Center, Smithsonian Institution, Washington, D.C. 20560. 18 pp.

Author: William J. Foltz

Africa, with its widespread poverty, racial strife, and chronic political turmoil, "presents a somber setting for the pursuit of American national interest," writes Foltz, a Yale political scientist, in a forthcoming Wilson Center report on "United States National Interests in the 1980s." The continent offers few opportunities for major U.S. political gains. Yet mis-

guided policies could undermine the stability that Washington seeks to promote and endanger long-run access to important markets and minerals.

Africa's arms race is one of the world's best-kept and most dangerous secrets, says Foltz. Since 1963, military outlays by the African states have doubled every five years (after inflation). While the French and Americans

have recently trimmed weapons sales, the Soviets are filling the gap.

African states are rapidly dividing into two camps: emerging regional powers—e.g., Nigeria and Tanzania—and “basket cases” such as Uganda and Chad, which have been turned by political chaos into stages on which their more powerful neighbors’ rivalries are fought out (e.g., Tanzania versus Kenya in Uganda).

Africa’s instability is exacerbated in part by such conflicts and in part by continuing racial strife in South Africa and Namibia. White-ruled South Africa will remain the region’s dominant power, Foltz believes, but the economic role of that country’s black majority “is now too central and too complex to permit a return to the successful repression of the 1960s.”

On the surface, America’s economic stake in sub-Sahara Africa seems small. Since World War II’s end, trade with the region has averaged about four percent of total U.S. foreign commerce, with South Africa accounting for one-fourth of that total. Yet Nigeria is America’s second-largest supplier of oil (behind Saudi Arabia) and together with Libya and Algeria sold the United States more crude in the first half of 1980 than the Saudis and the United Arab Emirates did. Southern

Africa, meanwhile, contains a motherlode of chromium (in South Africa and Zimbabwe), cobalt (in Zaire and Zambia), and manganese (in South Africa and Gabon).

To maintain long-term access to these materials, the United States must establish at least “tolerable” relations with the governments in control. This means distinguishing between black nations with avowedly Marxist-Leninist governments (such as Angola, which the United States has refused to recognize, and Mozambique) and countries truly controlled by the Soviet Union (such as Ethiopia). The former, Foltz writes, “have never refused to sell any Western country any major commodity when offered market prices.”

The United States must also seek “engagement and rapport” with all South African forces, groups, and shades of opinion, while pressing rhetorically for racial progress.

Finally, America must recognize that focusing its attention on the superpower competition and automatically opposing African “Marxism” is likely to enhance Moscow’s influence—by pushing the United States into a quasi-alliance with South Africa and by inviting black states to turn to the Soviets for protection.

“An Overview of the Growth of the Federal Spending Power.”

Prepared for a conference sponsored by the Notre Dame Law School and held at the Wilson Center, Smithsonian Institution, Washington, D.C. 20560. 25 pp.

Author: Edward McGlynn Gaffney

Many Americans reared on the notion of “rugged individualism” resent it when Washington wields its power to grant (or not to grant) federal funds in order to, say, promote school desegregation or encourage the installation of public facilities for the handicapped.

Yet the federal government has been holding out economic “carrots” to secure the “general welfare” since the early 1800s. The practice is not without its dangers, writes Gaffney, a Notre Dame law professor.

Early federal aid had few strings

attached. During the ante-bellum decades, Congress funded such public works projects as the Erie Canal in western New York. Federal subsidies to private business began in earnest in 1850, when Congress awarded 3.75 million acres of land to railroads for the construction of a North-South railway from Chicago to Mobile, Ala. Legislators justified their largess by arguing that railroads were "affected with a public interest."

In 1913, the states set the stage for a vastly strengthened federal "spending power" when they ratified the Sixteenth Amendment, permitting the government to levy a tax on personal income. The Great Depression and the New Deal fostered overwhelming public support for spending to relieve social and economic ills. But politicians remained reluctant to attach social quid pro quos to federal grants, notably in the matter of race relations.

The first legislation blocking federal funds to racially segregated school districts was introduced in Congress in 1961. The Kennedy administration opposed it as a "precipitous action" and a potential precedent for abuses by future Presidents.

Only after local policemen viciously attacked peaceful civil-rights demonstrators in Birmingham, Ala., in May 1963 did the President change his

mind—cautiously, writes Gaffney. Rather than claim sweeping discretionary powers to withhold funds from localities, he asked Congress for an omnibus civil-rights law making it clear "that the Federal Government is not required . . . to furnish any kind of financial assistance to any program or activity in which racial discrimination occurs."

Once this breakthrough legislation was signed (by Lyndon Johnson as part of the Civil Rights Act of 1964), similar measures barring "federally funded discrimination" against women (1972) and the handicapped (1973) followed.

Conditional grants that advance social or economic aims are now the norm, writes Gaffney. American sugar interests, for example, profit by qualifiers on U.S. foreign aid that prohibit competition with American producers. And Senator Paul Laxalt (R.-Nev.) has proposed shutting off all federal funds to "any State which prohibits voluntary prayer on the premises of any public building."

The courts have generally deferred to Congress and the President when the propriety of a specific funding condition has been challenged. Thus, notes Gaffney, it remains to the politicians to see that "foolish, fatuous . . . and futile" restrictions do not survive.