

## US ENERGY

# Saving without changing

*An aggressive energy conservation programme would enable the United States to meet all its energy requirements for the next 25 years without recourse to environmentally destructive new sources of supply, according to a provocative study published this week. Colin Norman reports from Washington.*

FULLY half of the energy now used in the United States is wasted, and massive savings are possible without major changes in the American way of life, according to a study written by Denis Hayes, a former energy adviser to the Governor of Illinois. The study was published by the Worldwatch Institute, a relatively new Washington-based research organisation whose previous analyses of global problems, such as food supply, have attracted considerable public attention.

The conclusions reached by Hayes run counter to the conventional wisdom that energy consumption is so closely correlated with standard of living that major reductions in energy use would precipitate severe economic dislocations and cause living standards to drop drastically. Hayes says, however, that his conclusions rest on the assumption "that lifestyles will change only cosmetically—that Americans will continue to travel as many miles, keep their homes just as warm, operate as many appliances, and eat what they now eat". Moreover, he argues that a strong energy conservation program would actually increase employment and "save consumers billions of dollars a year".

Hayes told a group of reporters last week that he reached his conclusions about energy conservation after becoming convinced of the potential difficulties in opening up new sources of supply. Noting that economic and technical problems have caused some of the leading industrial contenders to drop out of the effort to develop oil shale, that increased use of coal would create unacceptable environmental pollution, and that nuclear energy is beset with troubles, he said that "source after source is becoming increasingly less optimistic". Moreover, since oil and gas reserves in the United States are dwindling fast, Hayes suggested that "we are consuming energy like a childless society", rapidly depleting energy reserves "with little regard for the future energy needs of our children".

The American way of life is "rife with opportunities to conserve energy", Hayes says in his report.

- The major opportunities lie in transportation. Hayes estimates that some 42% of total energy consumption in the United States is accounted for, directly and indirectly, by transportation; he reckons that half of that amount could ultimately be saved. His suggestions include gradually tripling the mileage performance of vehicles, mostly by reducing the weight of automobiles; greater use of public transportation and car pooling; and shifting freight from trucks to more efficient means of transport such as railroads and waterways.

- Stricter insulation standards for new buildings and increased insulation of existing structures, coupled with greater use of solar energy for heating and air conditioning, could save as much as 16% of present consumption, he calculates.

- Technical improvements in agricultural production and changes in the way food is packaged and sold could save another 5%.

- Improvements in the efficiency of electricity generation, through more use of waste heat and better generating technology, could save 3% of present energy consumption.

- Finally, greater use of recycling and elimination of unnecessary packaging could save 4% of current energy needs.

Few of those suggestions are new. In fact, most of them were aired in a massive study of energy policy options for the United States, published in 1974 by the Ford Foundation's Energy

Policy Project. The catch, of course, is that the road between devising an energy conservation programme and implementing it is paved with political problems. Though Hayes notes in his study that such problems exist, he offers few suggestions for overcoming them.

To achieve the level of energy saving which his study suggests would require considerably increased government regulation of various industries, use of tax incentives for increasing efficiency and other similar devices. Most of those measures would be opposed by a powerful coalition of industrialists, energy interests and financiers.

But perhaps the chief political problem is that the greatest single incentive for energy conservation would come from greatly increased energy prices, which are still comparatively low in the United States. Though he does not discuss prices at length in his study, Hayes said last week that he would personally favour much higher prices than even a free market would produce (natural gas and oil prices are now controlled to some extent by the federal government). But he added that if prices are allowed to rise, an income distribution scheme would be required to prevent the burden falling on the poor. That, of course is a politically explosive issue. Last year, Congress balked at decontrolling oil and gas prices, partly because of the suspicion that oil companies would be able to reap greater profits if controls were removed, but mostly because of the fears of a voter backlash provoked by rising energy costs.

## Boost for biomedical research

CONGRESS last week handed President Ford a stunning political defeat when it voted, by a surprisingly large margin, to ram a budget bill for the Department of Health, Education and Welfare (HEW) into law over his objections. By its action, Congress has lifted the sagging budgetary fortunes of the National Institutes of Health, for the bill contains a large helping of money for biomedical research—considerably more than Mr Ford wants to spend. There are still a few political battles to be fought before NIH can spend the money, however, and the exact amount and the timing of its release by the Treasury are not yet certain.

The HEW budget bill—which applies to the fiscal year which began more than 7 months ago—has been tangled in a struggle between Congress and the Ford Administration over spending priorities. The supporters of the overriding action have

argued that since Congress had already cut the defence budget, an increase in the HEW budget would not add to total government spending, but merely shift priorities from defence to domestic programmes.

As far as NIH is concerned, Mr Ford had proposed that it should receive slightly less money this year than it received in the 1975 fiscal year. The bill passed by Congress, however, will increase NIH's budget by some \$200 million.

Mr Ford might still be able to delay the expenditures and perhaps, reduce them a little. In the next few days he will formally propose to Congress that some of the money should not be spent this fiscal year; Congress will have 45 days in which to act on that proposal. That means NIH will not get its budget sorted out until three quarters of the fiscal year has gone by. Another battle will then begin over HEW'S Fiscal year 1977 budget.