

LIVING HIGH ON THE HOG

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The American continent was blessed with such great natural resources that the United States could hardly fail to become a great industrial nation. With a bountiful supply of forests, fertile land, pure water, minerals, and oil, together with an enlightened democratic government and ~~some~~ industrious citizens, ~~We~~ <sup>WERE</sup> rather insular in our feelings until pushed into World War I. This conflict rapidly increased our development, resulting, in our becoming a great power and the leading industrial nation in the world. This, in turn, led to a middle class standard of living in this country never before seen.

A basic need of an industrial nation is a plentiful supply of energy at a reasonable price. We have had this happy situation through most of our industrial development. With the opening of the Texas oil fields in the early Fifties, and the discovery of the vast pools of oil in the Mid-East shortly thereafter, oil and gas has become our principal source of energy. Indeed, the supplies seemed so vast that everyone was encouraged to convert to the clean-burning fuels. The Domestic oil companies even got Congress to limit the import of Mid-East oil, whose wells flowed so freely that it could be produced at the well head for five cents a barrel.

As a result of this abundant and cheap source of energy, our gross national product grew from five to ~~five~~ <sup>EIGHT</sup> percent a year. We might have even afforded all of our give-away programs had we avoided the Vietnam involvement.

Suddenly, this beautiful situation was shattered by the 1973 Arab oil embargo, and the accompanying jump in the price of oil. The average American was shocked to learn of the extent of our dependence on foreign oil imports. Most did not want to believe it. Few realized what a

burden the increased cost of oil would put on our economy. Government leaders immediately promised to start programs to ~~FREE~~<sup>FREE</sup> us from this dependence in eight years. But Congress has piddled and argued and debated endlessly the various proposals to improve the situation, until now we have been rocked by another drastic price increase in oil and can no longer delay action. In fact, our failure to deal with the problem has already put us in an unenviable position. In less than a decade, the nation's bill for imported oil has increased from \$1.3 billion to \$60 billion dollars, a massive annual tax on purchasing power that has greatly reduced our economic growth and spurred inflation, sent the balance of payments deficit into orbit, and subjected the United States's dollar to humiliating depreciation.

Our nation's hunger for imported oil has levied an indirect toll on other countries which have little or no oil reserves of their own. Developing countries, in particular, have suffered even more than the West each time the OPEC cartel has raised the world price. And American's unsatisfied <sup>oil</sup> appetite has enabled the higher price to stick. As a result, growth rates in most Third World Countries have been depressed. Furthermore, the build-up of debt in developing countries to pay for their oil imports has soared to dangerously high levels - sending tremors through the international bank system.

Our growing dependence on imported oil leaves us at the mercy of international events, half a world away, in a very unsettled and explosive region -- one threatened by war, revolution, and sabotage.

Obviously, these pipelines, wells and port facilities are very vulnerable to bombing and other forms of destruction.

The political situation in many of these countries is unstable -- as witnessed in the recent events in Iran. It is very hard to suddenly move ~~from~~ <sup>A PEOPLE</sup> from the Middle Ages into the Twentieth Century.

*Also,* A constant threat is Russian involvement, with several of the countries already having ties with them. Many analysts think that Russia's prime target is control of the oil of the Middle East and the access to it.

Dependence on foreign oil also leaves the United States subject to political blackmail. Nigeria threatens to cut off the million barrels of oil a day it sends to America if she removes her economic sanctions against Rhodesia. Libya's leader, Kaddafi, hints that he might terminate the sale of oil because of United States's policy toward Israel. Even "moderate" Saudi Arabian oil minister Ahmad Yamani reveals that his country might link oil sales to American pressure on Israel to negotiate with the Palestinians. It is very humbling for a nation once so independent to be threatened by such puny powers.

I am amazed when I hear some people say "Oh, there will be plenty of gas when the price reaches a dollar a gallon". What will they say now that it has reached that price, and will undoubtedly go to two or three times that figure, and possibly still be in short supply?

The supply of petroleum is finite and is being exhausted rapidly in this energy-hungry world. Tables show the proven reserves of oil of the world to be about six hundred billion barrels, enough at the present rate of consumption to last about twenty-one years. The United States has only about thirty-seven billion barrels, the Middle East four hundred billion.

New oil discoveries are being made constantly but the rate is definitely decreasing and the costs are increasing tremendously. The chances of discovering another sea of oil like the Middle East are very slim. In 1970, in the United States, the oil companies drilled a total of one hundred thirty-nine million feet, and found thirty-seven barrels of oil per foot drilled. Last year drilling had increased to two hundred twenty-six million feet, but the amount of oil discovered per foot drilled, had fallen sixty-two percent, to only fourteen barrels per foot.

Our only likelihood of finding major oil deposits are in our continental shelf. Less than five percent of our outer continental shelf has been opened for exploration.

But the fact is that the era of cheap, plentiful energy is over, and there are no simple and easy solutions. In 1977 the Chairman of the Advisory Committee to the Secretary of the Interior said, Quote:

"We are now facing disastrous consequences from our inability to meet our energy needs. Instead of taking positive action in 1973 when the situation was spotlighted by the Arab Embargo, nearly everything that the government has done has worsened the situation. Time is running out and **if** we do not move immediately the situation will become dire. But regardless of what action we take at this late date, we will experience deterioration of our standard of living

by 1985."

In spite of this warning from a blue ribbon committee, Congress has continued to quibble, bicker, and debate with no apparant urgency until this last crushing price increase in oil. We don't want to throw away money lavishly on programs that will not be productive, but all methods of producing synthetic fuels should be investigated and the ones showing promise of early results should receive immediate and full funding. As President Carter recommended, we need a crash program on energy like we had on the space program.

From present indications, it will be between ten and twenty years before we receive major contrifutions from this program. Of course, there is always the possibility that someone may discover a method of economically getting the oil from the shale and tar sands sooner than expected. This would be somewhat of a major miracle and can not be relied upon.

The oil can be gotten from the shale by crushing and heating it. But mining the shale, disposing of the crushed residue, restoring land contour and other costs have hept it from being competitive with the controlled price of oil. Occidental Petroleum and a couple of the other large oil companies have discovered a method by which a cavity is created, the shale <sup>is then</sup> ignited under pressure, causing the oil to flow into a lower basin. This procedure is still in the laboratory stage.

However, our immediate goal is to reduce United States dependance on imported oil with the least shock to the economy, the environment, and the American way of life.

Decontrol of domestic oil, natural gas, and gasoline prices, a course on which the administration has finally embarked, is imperative. By keeping a ceiling on prices and holding them below world market levels, the United States Government has sought to "protect" American consumers. What this has actually done is to insulate Americans from world reality, ~~namely~~ <sup>NAMELY</sup> the end of the era of cheap oil.

This has encouraged consumption at a time when conservation should be a top national priority. This subsidized foreign oil imports at a time when we needed to be reducing our dependency on them. And this discouraged development of alternative energy sources that become economically feasible only as the price of petroleum rises to world levels.

Every incentive should be given the oil companies to explore and produce all the petroleum they can, and removing the hobbling price and production controls on oil and gas immediately is a big step in the right direction.

The elimination of controls on natural gas promise possible large additional supplies of this fuel. The present schedule for decontrols enacted last year is confusing and is unnecessarily delaying the development of new production.

Producers correctly complain that the legislation sets separate decontrol schedules for about twenty classes of gas and makes rational development difficult. Finding large supplies of gas is quite possible. There has not been the intensive search for it that there has for oil. By some estimates, the United States has a large supply of untapped gas—perhaps, trillions of cubic feet in deep basins, coal seams, shale rock and high pressure salt-water deposits.

The cost of finding and producing that gas has been prohibitive

under price controls. Only by assuring producers that they can get an adequate return on the huge investments they must make, will the United States find out how much gas it actually has.

If we do find large supplies of natural gas, it will be much simpler to convert utilities and industry that are using oil to the use of gas than it would be to coal. Minor inexpensive adjustments to oil furnaces can convert them to burning gas -- a fuel that is just as pollution free as oil.

Of course, we ultimately will have to convert to coal for our primary heating fuel. We have an abundant supply of it for many years. Oil and gas have a definitely limited lifetime and gasoline is going to become too precious to use for non-mobile purposes. We know that oil and gas can be made from coal at the present time but the process has been too expensive to compete with petroleum. No doubt many improvements to present methods of changing coal to oil and gas will be made and we may eventually get a considerable amount of these fuels from coal.

Under the pressure of necessity, I feel certain that we will find satisfactory ways to burn coal for industrial purposes without creating too much pollution. A September 30 Courier Journal report reveals that Kentucky has a dozen projects for several types of coal conversion plants, in various stages of construction and planning. They are estimated to cost about twelve billion dollars. Best known is the H-Coal Pilot Plant at Catlettsburg, costing about two hundred ninety-six million dollars and scheduled to go into operation next April.

It plans to turn six hundred tons of coal per day into medium weight oil-like liquids, as well as naphthas and gases. This is considered a small Pilot plant to test H - Coal technology. A larger plant of this type is proposed for Western Kentucky, probably in Webster County. A large SRC plant (which means "solvent refined coal") ~~is~~ *to* be located on the Ohio River in Daviess County, has received approval. It has an estimated cost of from one to one and one-half billion dollars, and plans are for it to turn high-sulphur coal into a clean-burning solid fuel for use in power plant boilers.

Removing the controls on oil and gas will naturally result in some large so-called "windfall" profits for the oil companies. A high percentage of the American public, influenced <sup>BY</sup> ~~to~~ some sensational and biased reports in the press and on television, think the oil companies are already making enormous profits and that this windfall should be subjected to a confiscatory tax. In a poll taken immediately after the President delivered his latest energy message, fifty-seven percent of those responding said they did not believe there is an oil and gas shortage. The same poll found that fifty-six percent of the respondents didn't think that higher prices would lead oil companies to discover more oil, and seventy-eight percent thought that oil companies would "just make more money."

Financial data on twenty-seven of the largest oil companies compiled by the Chase Manhattan Bank shows that in 1977 the total revenue of the twenty-seven companies was about three hundred forty-nine billion dollars. Of this, about three hundred seventeen and one-half billion was for the sale of products and services and other revenues. The other thirty-one billion consisted of sales and excise taxes on products, which are collected from customers and

accounted for to governmental agencies in the United States and abroad. Out of revenues, these companies had to cover the cost of producing and purchasing crude oil, the cost of manufacturing refined products, transportation, distribution, and <sup>etc</sup> other costs. These costs amounted to two hundred sixty-five billion dollars. Income, sales, and excise taxes, on refined products totaled sixty-nine and six-tenths billion. The twenty-seven companies had net earnings of fourteen and four-tenths billion dollars. Based on the three hundred seventeen and one-half billion ~~revenues~~ <sup>expenses</sup>, these earnings amounted to only four and one-half cents per dollar, ~~revenue~~.

The total of non cash outlay and funds from sales of assets and other sources amounted to nineteen and nine-tenths billion dollars. This amount, together with the fourteen and four-tenths billion in net income, provided a total of thirty-four and three-tenths billion of internally generated funds.

These funds were not enough to meet the companies' financial needs, such as capital expenditures for finding and developing new oil and gas reserves, construction of needed facilities, payment of dividends to stock holders for the use of their money, and debt repayments. Consequently the companies had to raise eight and eight-tenths billion dollars through new borrowings and the sale of stock. By the end of 1977, the ratio of long term debt to total capital was twenty-six percent, double the thirteen percent of the early 1960's.

A study of thirty large oil companies shows that in every year since 1973, the companies' domestic capital expenditures in energy considerably exceeded their income. For example, at Standard Oil of California,

capital and exploratory expenditures, for petroleum operations, in the United States in 1978, were eight hundred fifteen million, against domestic net income of four hundred sixty-seven million from these operations.

From these figures it seems that the oil companies are making an all out effort to find new sources of oil and gas. They need to be encouraged in this effort to find and develop all of the oil we have.

I think the oil companies should be permitted to keep the major part of the so-called windfall profits. In the first place, regular federal and state taxes will take over half of it. If the balance is taxed excessively, exploration will be cut back and marginal wells will not be worked. Most of the promising readily accessible areas of the United States have been drilled.

From now on drilling will be ever more expensive. Most new exploration is now being shared by several companies. One doesn't care to risk losing millions of dollars alone. Likewise, it is more expensive to do secondary recovery on a well. Many marginal ones will be abandoned and funds will be reduced for refinery modernization and construction. We particularly need refineries to handle the heavy oils common to a good percentage of the petroleum now being found in this country, and likewise, ones capable of producing unleaded gasoline. We have the choice of letting the oil companies keep their profits and continue their expensive exploration and construction program, or tax away the profits and have them drop the more expensive and risky drilling that can produce the bigger discoveries of oil.

Also, we need to launch an all-out effort to improve relations and make cooperative energy agreements with Canada and Mexico. We need to work out a satisfactory arrangement with Mexico to purchase a large part

of its gas and oil. And we need to collaborate with Canada on a Trans-Canada pipeline to bring Alaskan and Canadian gas to the energy-hungry Midwest. It would please the Canadian government, which is in favor of the pipeline, and it would be an assurance to American industry in the Midwest that it can safely switch from oil to gas as a fuel for at least several more years.

The cheapest source of energy we have is conservation. A barrel of oil saved is just the same as a new one produced. It reduces our imports by the same amount. The government has been urging conservation upon us for the past few years with somewhat mixed success. We are being given tax breaks for installing insulation, and we have been urged to lower our thermostats in winter and raise them in summer, and reduce our electricity usage as much as possible.

We have been given some mandatory restraints such as the fifty-five miles per hour speed limit which did indeed conserve fuel and more importantly saved many deaths and injuries. The demand that our motor cars be made more fuel efficient has saved a lot of gasoline and will save much more in the future.

Removing price controls on gasoline will result in very large savings of fuel even though it will work a hardship on some people. Some adjustments can be made in true hardship cases, such as gas stamps, tax rebates, etc. No doubt high-priced gasoline will result in much less casual usage of our cars. If the trip is really important to us, we will go regardless of cost. But we will be inclined to cut back usage of our cars in ~~proportion~~ proportion to the cost of gasoline. However, we may enjoy our pleasure trips more when they become a little less frequent.

It is ~~estimated~~ <sup>estimated</sup> that transportation takes fifty-five percent of all the petroleum used in the United States -- roughly ten million barrels of oil.

a day.--- an amount greater than the total oil we import. Despite this, we have no clear government policy on mass transportation, probably, because too many cooks ruin the broth. Thirty Congressional committees and sixty-four federal agencies have a hand in transportation, and there are hundreds of separate policies and programs governing it -- many of them at odds with one another. According to a report by the National Transportation Policy Study Commission, United States Public transportation is worse than that of any other developed country. The others have a railroad passenger service ranging from usable to excellent, most of them rating in the good to excellent class. You can travel all over Europe swiftly, economically and comfortably by rail.

Buses also are used much more extensively in Europe than in the United States, except, of course, in carrying children to and from school. The buses, like the trains, are clean and well operated. They are heavily patronized. We must build up both our rail and bus lines. This is one form of conservation that can save millions of barrels of oil per day in a relatively short time, and help get our neck out of OPEC's noose before we are strangled to death. While developing substitute fuels, another ten to twenty years of sixty billion dollars per year for foreign oil can create such a balance of trade deficit that our economy can not stand it. Coal and Oil shale, the most promising source of synthetic fuel in the near future, will hopefully produce about two million barrels of oil a day by 1990. This would be a tremendous help, but still only one-fourth the amount of foreign oil imported into this country every day.

Obviously, there are only two users consuming enough petroleum to balance our foreign oil imports. First, are the utilities and the industrial

plants. Industry is going to have to shift to some fuel other than oil. The second is the American driver. Most <sup>PEOPLE</sup> know that some type of rationing is inevitable. They are waiting for their leaders to decide which kind is best. Meanwhile they are having one last fling before the curtain falls.

We have been living high on the hog. We are now going to have to eat meals of pig feet occasionally.

Is it fair to blythly use up the oil of future generations, before we have proven the feasibility of nuclear fusion and solar energy?