HENRY M. JACKSON MEMORIAL LECTURE

Today's Energy Crisis: More than the Price at the Pump

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About the Lecture Series

The Jackson Memorial Lectures are presented periodically by the Henry M. Jackson Foundation to advance public discussion of important national and international concerns. The purpose of these lectures is to provide a significant forum in which major issues of public policy may be critically discussed and examined.

About the Foundation

Since its establishment in 1983, the Henry M. Jackson Foundation has committed nearly $19 million to nonprofit organizations and educational institutions in the United States and Russia. These grants provide essential support and seed funding for new initiatives that address critical issues in four areas in which the late Senator Henry M. "Scoop" Jackson played a key leadership role during his forty-three-year tenure in the United States Congress: International Affairs Education, Environment and Natural Resources Management, Public Service, and Human Rights.

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SEATTLE, WASHINGTON • NOVEMBER 1, 2006

Introduction

BY WILLIAM VAN NESS, JR.

It gives me great pleasure to introduce Phil Sharp, president of Resources for the Future and distinguished Jackson Memorial Lecturer. Phil is a former ten-term member of Congress and a colleague of Scoop's on the House side. They worked together on conference committees that dealt with extremely difficult and highly technical energy bills.

Following Scoop's death, Phil assumed his mantle in two fields: energy and environmental policy. With wisdom and common sense, Phil presided over an open and transparent congressional hearing process that respectfully heard all points of view. Like Scoop, Phil had a capacity to handle complex, emotionally charged issues and to make friends with people on all sides of the political spectrum, a quality we could use more of today.

Scoop and Phil had other things in common. They both made lifelong commitments to public service. They both enjoyed the company of young people. Students of history, they were well versed in foreign policy and national security and believed it is important to provide a bridge between academia and decision makers at all levels of the government. Both of these gentlemen practiced the politics of pragmatism. They dealt with issues on their merits and were interested in results. Both were grounded in well considered, rock solid values—lodestars that guided them through the difficult issues they encountered throughout their careers.

In the Jackson tradition, Phil Sharp continues to contribute in important ways to the national dialogue on the issues of our time. We are honored to have him here tonight to speak on "Today's Energy Crisis—More than the Price at the Pump."

PHILIP R. SHARP

Today's Energy Crisis: More than the Price at the Pump

Yesterday I got a call from a *Time* magazine reporter who asked me this question: "How does the United States get off of oil?" Before I had a chance to respond, he continued, "Now, what would happen if we take the current equation and eliminate the Congress and the oil companies?" as if that's all that stands in the way of effective energy policy in the country. Now, I realize that getting rid of both Congress and the oil giants may be a pleasant thought for some folks, but it's not likely to happen. Such a notion demonstrates an overly simplistic view of how complicated the energy issue is both intellectually and politically.

Why does America have so much difficulty coming up with a truly national energy policy that delivers real benefits to its citizens? We have many energy policies, but they are not necessarily coherent or consistent or *persistent*. In this presentation, I will compare our situation in 2006 with the conditions that existed in the 1970s when we had what was described as a major energy crisis—and focus on what we learned from that experience that may be applicable today.

The first problem we have had over the last 30 years of struggling to set some kind of energy policy is agreeing on what we think we *ought* to accomplish. What should the goal be? Energy policy is not a stand-alone objective. It's a means to other ends. So what are those ends?

Obviously, we must always be concerned about *what is best for the economy*, because energy is so central to our economy. It provides what people and industry need, want, and have come to expect. And guess what? They not only want it reliable, they want it cheap. So considerable attention has always been given to ensuring that we have the infrastructure and productive capacity available. Let's also recognize that improving energy efficiency is a potentially huge source of energy in and of itself.

Second, we should think about *what is best for the environment*. We know that there are major downsides to burning, drilling, and extracting our fuels, along with a host of factors that go into the production of energy for our economic prosperity. And we've devoted substantial effort over the last 30 years to devising policies to control damage to land, water, and air. Now we have to deal with the impact it has had on our climate, which I will turn to later.

Our third public end is *security*. Because our oil resources are so concentrated in the highly volatile Middle East, our oil dependency affects our foreign policy and our international security in significant ways.

Fourth, we must also *deal with the question of equity*. By that I mean who is losing and who is winning in the way our markets or policies work? At the moment, we are hearing lots of speeches about the considerable profits of the oil companies, and they sound exactly like the speeches of the 1970s. They didn't even have to rewrite them. We again hear concern expressed about low-income people being damaged by higher oil prices, or New Englanders hit by home heating oil, or Westerners hit by high gasoline prices and long-distance driving.

Of course, the practical problem is that when you try to develop energy policies that will achieve four different goals, you find that even the most cautious policies are unsuccessful. And, as a society, we have not been willing to pay the price for the more aggressive policies—a carbon tax, much stricter mileage standards for vehicles, or a strictly enforced cap-and-trade system—that we really need to deal with this dilemma. We worry, with some justification, that such policies might undermine our economic prosperity.

We could resort to the carbon cap. The nice little secret about a cap-and-trade system is that it is functionally the equivalent of a tax, but it is disguised so people don't think of it as a tax. It also provides a way to make various industries less vulnerable to the economic impact of regulations. However, some of the very smart folks we have at Resources for the Future say we may end up going back to the tax after all. We may find that the "T word" is not so scary after we figure out how complicated it is to implement a grand scale cap-and-trade system.

Clearly, any option will involve some economic risk and cost. A few weeks ago, a task force on which I served for the Council on Foreign Relations issued a report on how America can enhance its oil security. Among its findings, the report stated that the common rhetoric mistakenly assumes that attaining adequate oil security will be cheap. We found the question posed by the *Time* reporter is fairly prevalent—that if the oil companies would just get out of the way, or if Congress would just get out of the way, the market would just flow in and meet our needs with alternative fuels like ethanol. In fact, virtually all alternatives to gasoline have been comparatively more expensive than oil until this last year, and that's why our economy hasn't looked for alternative fuels. So, over the last 30 years, the oil market—ugly as it is, polluting as it is—has delivered what most Americans have wanted, which is reasonably priced gasoline when and where they want it.

If you think the oil companies are a lonely group of lobbyists working on their own behalf, think again. American consumers are first and foremost their largest allies until prices rise, and then they scream about the oil companies and their windfall profits. The minute those prices come back down, they readily buy bigger SUVs and forget about conservation. So as long as we make those personal choices, we are in fact collaborating with the oil lobby. And that's what I told *Time* magazine, by the way.

A related factor that has vexed policymakers over the last 30 years is the problem of *regionalism*. Again and again, we see regional politics play into the energy debate, and with good reason. Even during the debate on the energy legislation of 2005-2006, when Republicans were in control of Congress and the White House, we saw the Pacific Northwest allied with Georgia over electricity markets. You had oil-producing states allied with ethanol-producing farm states. And you saw car-making states rise up in opposition to raising fuel economy standards, while California and states in New England were saying we should increase those standards. And I know from hard experience that regional pressures often trump traditional party loyalties.

In the end, they couldn't get agreement on a coherent energy bill. A little leadership from the White House might have helped, but I'm not sure that would have overcome those regional relationships. This is a persistent theme in American politics. We are huge. We are diverse. But inevitably, on energy we are regionally divided.

I must add that sometimes it is state and local actions that point the way on policies that Washington chooses to ignore. Powerful examples include the Regional Greenhouse Gas Initiative in the northeastern states, the Chicago Climate Exchange, the recent legislative actions in California, and the consortium of cities like Seattle that have implemented carbon-reductions goals. These are all positive developments that put pressure on Congress to create a national, uniform policy that won't depend on the scattershot policies designed by states and cities. No local area can resolve the problem in isolation. For the sake of economic efficiency and effectiveness, change must be broad-based.

One of the frustrations we all have with energy policy is difficulty in dealing with the *uncertainty* of gauging how the oil marketplace will perform. Almost no one—the oil companies, academicians, the Energy Information Agency—predicted the price levels that we have seen over the last year in natural gas or oil. Virtually everybody was caught off guard or

was just plain wrong. Moreover, few people predicted that oil prices would come crashing down in 1986 or 1999 when the price went from $25 to $10 a barrel. The same is true for price increases. Last year, oil shot from $25 to more than $70 a barrel and is now at $58. That makes it hard for car companies to factor gas price fluctuations into their new models, for pipelines and tankers to accommodate demand, for venture capitalists to place their bets on new technologies and, most important of all, for average motorists to predict what their gasoline bills will be when they drive back and forth to work.

With regard to energy prices, I'll mention something that I can say now that I'm ensconced in a Washington think tank, but which you would *never* have heard from me until I resigned from Congress in 1995: *One of the best things that's happened in this country is that gasoline and other energy prices are higher.*

Why? Because higher prices force us to create a new dynamic in the political process and provide new stimulus to the marketplace. High energy prices force us to pay attention, they motivate us to act, and they educate us about the fragile and volatile nature of our energy sources. As a result, we've seen a new enthusiasm by investors, consumers, and political leaders to be more efficient, to get alternative fuels into the marketplace, to promote innovative technologies and, indeed, to support further development of conventional fuels, including nuclear power.

Of course, in a political season you will hear some creative political rhetoric that is not particularly useful. Some people I know would like to repeal the gasoline tax, for example, and clearly that would be the wrong way to go. The fact is we really need to implement a fair and honest carbon tax, for both economic and environmental reasons.

Let me briefly digress to give a quick example. Right now, the United States is at a significant juncture in electric power development. We are about to launch a new wave of power plants because of projected demand for more electric generation. We are talking about more than 100

different generating plants that are going to be online during the next 40 to 50 years. These are going to be fueled mostly by carbon-emitting energy sources, particularly coal and coal gasification.

We are at a key juncture in oil markets as well. Oil from tar sands gives off 25 percent more carbon emissions than regular oil. Oil shale provides 65 percent more carbon emissions than regular oil. Using our great coal reserves to make fuel liquids, such as gasoline, produces as much 75 percent greater carbon emissions than refining oil. That is not the right direction if you're worried about CO_2 emissions into the atmosphere.

So it really is imperative, in my view, that we get at least a carbon price into the economy. It's going to be modest at first. You build it over time so that investors and others begin to recognize the benefits it can provide. The National Commission on Energy Policy, on which I serve, is recommending that we sell credits through what's called the "safety valve" on carbon emissions trades, at a price of $7 per trade. Some advocates will say that is peanuts, that it won't make a difference in carbon emissions. But our point is that you have to start small and gradually ratchet the level up. Most important of all, we must get started!

The question is this—can we maintain the current price level for oil? Is this 1970s *déjà vu* all over again? Over the past 30 years we have seen repeating cycles. Prices rise; markets and politics are energized to do something about it. Prices fall; interest lags. A few things are different this time.

First, it was a surprise to many people that these very high prices had less impact on the economy than what had happened in the past and what was expected to happen. It surprised the White House, the Council of Economic Advisors, the market, and the business community. A few sectors were hurt, for sure. We practically wiped out domestic fertilizer manufacturers that make nitrogen from natural gas, and much of that industry had to move offshore. The trucking industry was badly hurt, as were airlines. But the general economy does not appear to have taken much

of a hit. One of the key reasons why is that the *oil intensity* of the U.S. economy (the ratio of oil consumption to GDP) has declined, compared to 30 years ago. This is because we really did get more efficient in our transportation and industrial sectors in the use of these resources. The other part is that our economy has changed: because we have evolved into more of a service economy, we no longer have the kind of industrial base that utilizes energy the way it did in the 1970s.

Second, the phenomenal rise of Asian countries, particularly China and India, and their effect on the global energy market, marked a big and unexpected change. Thirty years ago, we wouldn't have dreamed this would happen, unbelievable as that sounds today. In the past 20 years, China's per-capita total primary energy consumption more than doubled, climbing from 19.6 million BTUs in 1984 to 45.9 million BTUs in 2004. China consumes nearly 7 million barrels of oil per day, second only to the United States. That kind of growth was not anticipated 30 years ago, and it has placed enormous competitive pressures on world energy markets, not to mention the impact that additional greenhouse gas emissions from Asia will have on the global climate. I'm told, for example, that EPA has little confidence in forecasting what will happen some years out in the western air shed because the amount of pollution from coal burning in China that will be carried across the Pacific into the United States is a critically important, but unknown factor. Clearly, we are all in this together, scrambling for supplies and dealing with the environmental consequences.

Third, the very real question of whether we are running out of oil—the so-called peak oil issue—is being debated, just as it was in the 1970s. Thoughtful people say that we have reached the point of no return—that we're on the downward slope of oil production worldwide. Not so, say the oil company geologists, who contend we're going to find more oil and different kinds of oil. And that is the difference. No longer will we have conventional, cheap oil—poking the ground in Saudi Arabia and the oil squirts out, just as it used to in Pennsylvania, Texas, and even

Alaska. Clearly we will need to harness our technological skills to produce different kinds of fuel—ethanol or gasoline from coal or something else.

Fourth, when we thought about national security in the 1970s, we thought about the risk that the Soviet Union could either pressure the Middle Eastern oil countries to not cooperate with the Western economies, or perhaps even take them over. A major part of our foreign policy was designed to try to protect that part of the world from Soviet influence because those supplies were so critically important. This is something Senator Jackson was highly focused on. Today the security threat is terrorism or even political turmoil if the Saudi kingdom gets turned upside down. It wouldn't take a lot of terrorist activity to take out some critical facilities that could be down for months in the Middle East, which would make the current oil price look mighty pleasant.

In my judgment, the final and major difference and the one that we have to really take seriously is global warming. It simply was not a consideration in the 1970s. Although we began to have hearings on it in the mid-1980s, it was never viewed as a looming problem we had to address in the near term. Most Americans today understand that this is a serious question. Obviously, confronting the challenge of global warming is a daunting task, and it's going to mean a transformation of our energy system. I have spoken with a number of scientists who say that not only is there solid scientific consensus around human-induced causes of global warming, but that it's happening much more rapidly than anticipated. Climate change is very difficult for us to deal with politically, in part because of its multinational dimension. We've never had the kind of challenge that required international cooperation without the clarity of an enemy.

Recently on C-SPAN I watched the British Conservative leader, David Cameron, speak to his party and make a stronger commitment to do something about climate change than any political leader I've heard in America. And you know what his message was? Don't think this is cheap.

This is going to cost us. We simply are a carbon-intense civilization, and we have to make some unprecedented changes over perhaps a 50-year time horizon to ensure a healthy future for the planet. We won't solve it entirely during the lifetime of anybody in this room. It is going to require so-called cathedral thinking, and we won't live to see the end result, but perhaps our great-grandchildren will.

We have no silver bullets for these realities. No matter what advocacy group you talk to, everyone who has looked at these issues seriously and honestly agrees it's going to require significant changes in how efficiently we use energy, whether it's in buildings or cars. It's going to require the development of low-carbon and non-carbon fuels. It's going to mean developing effective carbon sequestration, whether it's in forests, or geologic disposal, or even controlled use of algae. It's probably going to require a greater use of nuclear power because it's carbon-free in terms of the generation of electricity by nuclear fission. And, it's going to entail a genuine conservation ethic in our patterns of living, such as making our workplaces carbon neutral in their use of energy, and really insisting on more energy-efficient vehicles and appliances.

Most of all, it is time for U.S. government leadership on this issue. It isn't enough to say Americans are "addicted to oil" without putting into action some real policies to deal with that addiction. If we want to play an appropriate role internationally and be recognized as a leader, as our government was in the time of Senator Jackson on a host of issues, this government has to step forward. Fortunately, I think the United States is politically poised for action on this. I think energy is going to be taken very seriously in future presidential elections. I'd be stunned if the major candidates in both political parties don't tell you in detail how they're going to grapple with this.

Well, I don't want to end on a pessimistic note. The fact is that we are making progress and we can make significant additional progress. We can continue to reduce energy intensity in our economy, which also helps

reduce carbon emissions. We need to develop a carbon constraint policy, probably through tax measures, that will augment research and development budgets that have been shattered by political pork barreling in Washington. There are good policy choices we can make that will maximize the use of our marketplace. That's what we at Resources of the Future spend a lot of time trying to figure out: How do you use the effective tools of the market to serve these vital public ends? How serious are we about our obligation to future generations? Do we intend to live up to what we have preached and what really built this country, what economists call "future preference" —that if my family and I work hard now we will have a better future later? That's the oldest family value in America, and it's a fundamental ethic that should be a part of our culture today. I'm encouraged that everyone from Greenpeace activists to evangelical Christians are moving closer toward common ground on the proper stewardship of our planet. And I'm very hopeful and optimistic that we are smart enough to make the right choices for future generations.

PHILIP R. SHARP

Philip Sharp is president of Resources for the Future, an independent, nonpartisan research institution founded in 1952 in Washington, D.C. RFF is devoted exclusively to energy, environmental, and natural resources policy analysis.

Sharp's 35-year public service career includes 10 terms in the U.S. House of Representa-tives as a congressman from Indiana. During his tenure there, he served as the driving force behind the Energy Policy Act of 1992, landmark energy legislation that led to the restructuring of the wholesale electricity market, promoted renewable energy, established more rigorous energy-efficiency standards, and encouraged expanded use of alternative fuels. He served on House Energy and Commerce Committee, where he chaired the Fossil and Synthetic Fuels Subcommittee and the Energy and Power Subcommittee. He also helped develop a critical part of the 1990 Clean Air Act Amendments.

In 1995, after deciding not to seek an eleventh congressional term, Sharp joined the faculty of Harvard University's Kennedy School as a lecturer in public policy. Over five of the next ten years he also served as director of Harvard's Institute of Politics and spent two years as a senior research fellow in the Environmental and Natural Resources Program. Prior to his service in the U.S. Congress, Sharp taught political science at Ball State University.

In 2004 he chaired the National Commission on Energy Policy, a bipartisan panel established to make energy policy recommendations to the federal government. Currently he is co-chair of the Energy Board of the Keystone Center and a member of the National Research Council's Board of Energy and Environmental Systems. He headed an advisory committee for an MIT study on the future of nuclear power and is now leading a second study on the future of coal.

Sharp is a graduate of Georgetown University where he also earned a doctorate in government.

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