

President Jimmy Carter, "Remarks at the Solar Energy Research Institute on South Table Mountain." May 3, 1978.

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THE PRESIDENT. Senator Haskell, Senator Hart, Governor Dick Lamm, and Congressman Tim Wirth, Dr. Rappaport, ladies and gentlemen: As a matter of fact, we've not yet made a final decision about where to put the National Solar Energy Research Institute. I'm going around to visit several prospective sites to see where the Sun is actually shining. [Laughter]

BYSTANDER. The wind's blowing.

THE PRESIDENT. That's right. The wind is blowing, so that's enough; you qualify. I am glad to be here where the Sun shines 300 days a year. And as a farmer, I'm also glad to be where it rains on occasion, because we have to test all kinds of potential solar equipment under varying kinds of weather conditions—dense clouds, light clouds, cold and warm temperatures and, of course, bright and clear, sunshiny days.

Maybe the fact that Colorado does have a remarkable degree of sunshine and beautiful weather has something to do with how effective your representatives in Washington have been in promoting solar energy. I've seen in my frequent visits to Colorado an intense interest in solar power that does not exist anywhere else in the Nation that I have been.

Floyd Haskell, Gary Hart in the Senate, the Wirth and others in the House of Representatives have dedicated much of their time and effort to the development of effective and responsible solar programs. We are lucky and you are lucky to have them representing you. And all of us in this country are lucky to have their leadership in the solar energy field.

Without that sort of solar commitment, the National Research Institute would not be here, and its four regional solar centers would never have been possible.

Here on South Table Mountain, if all goes according to plan, ground will be broken in the fall of 1979 for the institute's permanent home. Ninety percent of its energy needs will be supplied by the Sun.

The principal job of this national center will be to carry out basic research and development and to demonstrate projects in advanced solar technology. The principal job of the four regional centers will be the commercial application of these technologies. Both the National Institute and the regional centers will work as partners with State and local governments.

Dr. Rappaport and his staff have my full support in their efforts to make solar energy an important contributor to the daily energy needs of the United States of America.

A little more than a year ago, I proposed to the Congress and to the people of the United States a comprehensive energy program. And now, at last, we have made a promising start towards conserving our limited resources of fossil and mineral fuel.

As the plan itself states, and I quote, "America's hope for energy to sustain economic growth beyond the year 2000 rests in large measure on the development of renewable and essentially inexhaustible sources of energy."

No matter how good a job of conservation we do, the world's supply of oil and gas will dwindle, become more expensive, and finally run out.

Foreign oil already costs us four times as much as it did 5 years ago. Our spending on imported oil has increased from \$2.7 billion in 1970 to more than \$45 billion last year. As a result, inflation robs us all, the value of the dollar has dropped on international monetary markets, and our economy becomes more and more at the mercy of a foreign cartel.

We must begin the long, slow job of winning back our economic independence. Nobody can embargo sunlight. No cartel controls the Sun. Its energy will not run out. It will not pollute the air; it will not poison our waters. It's free from stench and smog. The Sun's power needs only to be collected, stored, and used. We know that most of the technology for using the Sun's power already exists. And in my youth, as in many of yours, there were millions of windmills around the rural areas of our country. Hundreds of small damsites provided electric power. Some 10,000 years ago, in your area, Indians were using solar principles to heat dwellings at Mesa Verde and elsewhere.

The historically brief availability of low-cost energy from fossil fuels drove much of that early solar technology into temporary disuse, but now we are rebuilding on those earlier techniques.

The Anasazi Long House at Mesa Verde has fallen into ruins, but present day Coloradans have built perhaps as many as a thousand solar-heated homes, including the largest (solar heated) ¹ building in the United States, the North Campus of Denver Community College.

Larger and more efficient windmills are being designed, including one with a rotor as long as a football field. Damsites long abandoned in New England and elsewhere are being returned to use with improved equipment for generating electric power.

Government, private industry are working together and separately to develop dramatic new techniques, as well. Acres of mirrors can focus the Sun on "power towers" which will generate steam for electricity and for other use. Both gas and liquid fuel can be produced from animal wastes, wood chips, even garbage. Small, sun-powered engines are already in use for irrigation. Photovoltaic cells convert sunlight directly into electricity.

¹ Printed in the transcript.

The question is no longer whether solar energy works. We know it works. The only question is how to cut costs so that solar power can be used more widely and so that it will set a cap on rising oil prices.

In many places, solar heating is as economical today as power from nonrenewable sources. And solar energy will become ever more competitive as the prices of energy from traditional sources rise and the enormous Federal subsidies for oil and other energy uses drop.

The cost of generating power from the Sun is going down even as the cost of oil is rising. The price of photovoltaic cells, for example, has gone down 50-fold since they first began to be used extensively in the space program.

The Government will speed this program by increasing demand for solar hardware, so that mass production can help to bring prices down. And the plan will increase use of residential solar systems by offering more than a billion dollars in tax credits over the next 7 years.

Credits of as much as \$2,000 to each one of you, each homeowner, to install solar or wind energy systems will be available under the new comprehensive energy plan. I hope that homeowners will soon be able to take advantage of this major incentive to use solar technologies.

The plan will also make it easier to get loans for solar equipment, and we will further increase demand for solar technology by providing up to \$100 million over 3 years to install solar equipment in Federal buildings. I intend to put in a demonstration solar hot-water system at the White House.

I'm going to abbreviate my speech if you have no particular objection, but there are a few more points I want to make specifically.

The Council on Environmental Quality recently estimated that we could meet as much as one-fourth of our energy demands for solar sources by the end of this century, and perhaps more than half by the year 2020. We must continue to make progress toward these goals.

The Department of Energy believes that photovoltaic cells can be competitive with conventional energy sources, perhaps as early as 1990. The Energy Department is working on many projects throughout this country, indeed throughout the world.

In fiscal 1979, with heating and cooling demonstrations, tax credits, and research and development with photovoltaics, wind, ocean thermals, and biomass, my total Federal proposal for solar energy amounts to more than one-half billion dollars. This is an increase of 64 percent in just 2 years.

In addition, I've been saving a small surprise for this particular occasion. We've been researching our energy needs in the last few months, and I have just instructed the Department of Energy, through re-programing, to provide an additional \$100 million for expanded efforts in solar research development demonstration projects and the development of commercial uses, such as windmills, in the next fiscal year.

This is an appropriate day to concentrate Government effort on solar energy— [laughter] —but the bulk of the effort must be done still by private enterprise, by individual initiative, and by the inventive genius of the United States.

I don't want to skip over mentioning a few leaders here in Colorado. Your neighbor, George Lof, has lived in and designed solar homes since almost any American since 1945. The Christian Reform Church Center of Hope is a solar showplace. Sam Primack has built dozens of solarequipped houses in and around Denver. And they've been at a premium, with homeowners demanding the right to purchase such homes. The Federal Government is helping these kinds of projects all over our Nation.

Today I'm asking a domestic policy review of all our departments in the Federal Government, under the leadership of Jim Schlesinger, to go into more ways how every agency of Government can help solar energy become a part of the everyday life of American citizens.

Let me just say in closing that solar energy can already be a paying proposition, and American technological genius can bring the same blessings that the rural electrification program brought to me and millions of others when I lived as a small boy in Plains, Georgia.

I'm confident that American science and industry will lead the way in this new market here and in the developing nations of the world, as they earlier did in the spread of American aerospace, electronic, and computer technology.

These, then, are the challenges that we are finally beginning to meet. These are the challenges that we can meet, just as we met the challenge of the space race. And these are the challenges, with the help of all of you, that we will meet.

Sun Day may be the beginning and the dawning of the second solar age. With your help, we'll make this prediction come true.

Thank you very much.

Note: The President spoke at 4:05 p.m. following a tour of the Solar Energy Research Institute.

Dr. Paul Rappaport is director of the institute.

The President proclaimed May 3, 1978, as Sun Day by Proclamation 4558, of March 27. The text of the proclamation is printed on page 574 of this volume.

Jimmy Carter, Golden, Colorado Remarks at the Solar Energy Research Institute on South Table Mountain. Online by Gerhard Peters and John T. Woolley, The American Presidency Project <https://www.presidency.ucsb.edu/node/245605>