

STATEMENT BY PAUL E. TSONGAS, MEMBER OF CONGRESS
KEYNOTE ADDRESS TO THE 37TH AID MODEL CONGRESS
JANUARY 14, 1977

ONE OF THE MOST PRESSING PROBLEMS CONFRONTING OUR NATION IS THE PROBLEM OF DWINDLING ENERGY SUPPLIES. THIS IS PRESSING BECAUSE, AS YOU KNOW, FOSSIL FUELS, COAL, AND NATURAL GAS ARE LIMITED; WE CAN NO LONGER BEHAVE AS THOUGH TRADITIONAL ENERGY SOURCES ARE INFINITE; WE MUST ADDRESS OURSELVES TO THE REAL POSSIBILITY THAT THERE WILL BE A TIME IN THE NOT TOO DISTANT FUTURE WHEN WE CAN NO LONGER DRAW UPON OIL, MINE COAL OR NATURAL GAS BECAUSE THERE IS A REAL POSSIBILITY THAT THERE WILL BE NONE.

A GLANCE AT EVER-INCREASING ENERGY CONSUMPTION RATES IS ALARMING. THROUGH THE 1950'S, ENERGY CONSUMPTION INCREASED ON THE AVERAGE BY JUST OVER TWO PERCENT ANNUALLY, NOT MUCH IN EXCESS OF THE 1.7 PERCENT RISE IN THE U.S. POPULATION. HOWEVER, BEGINNING IN 1959 AND CONTINUING THROUGH THE 1970'S, OUR ENERGY CONSUMPTION DOUBLED TO 4 PERCENT. AND IT IS ESTIMATED THAT IN 1985, OUR NATIONAL ENERGY CONSUMPTION WILL DEPEND UPON OUR ABILITY TO FIND AND DELIVER IN THE NEXT FIFTEEN YEARS APPROXIMATELY TWICE AS MUCH ENERGY AS WE FOUND AND CONSUMED IN THE PRECEEDING FIFTEEN YEARS.

IN A NATION OF VERY CAPABLE CONSUMERS, WE MUST REALIZE THAT THE TIME TO CONSERVE ENERGY IS NOW. AND IN THE UNITED STATES CONGRESS, IT IS OUR RESPONSIBILITY TO LEAD THE WAY FOR ENERGY CONSERVATION AND TECHNOLOGICAL INNOVATION SO THAT WE CANNOT ONLY REDUCE OUR CARELESS CONSUMPTION BUT ALSO ESTABLISH NEW ENERGY RESOURCES BEFORE OUR TRADITIONAL SUPPLIES RUN OUT. BECAUSE ENERGY

IS UNAVOIDABLY INTERTWINED WITH THE ECONOMY, IT IS A PRIORITY MATTER AND A MATTER VERY MUCH ENTANGLED WITH POLITICAL AND FINANCIAL SPECIAL INTERESTS, BOTH NATIONAL AND INTERNATIONAL.

IT IS TESTAMENT TO OUR EVER-INCREASING WORLD-WIDE ECONOMIC INTERDEPENDENCE THAT THE UNITED STATES FIRST BECAME AWARE OF ITS ENERGY CRISIS DURING THE 1973 ARAB OIL EMBARGO. ALTHOUGH OUR ENERGY PRODUCTION HAD PEAKED IN 1970 AND BY 1972 HAD BEGUN TO DECLINE, THE ARAB OIL EMBARGO BROUGHT THE REALITY OF OUR SCARCE ENERGY SUPPLIES INTO FOCUS. IN OCTOBER 1973, OUR REDUCED ENERGY PRODUCTION BECAME "THE ENERGY CRISIS" WHEN THE ARAB PETROLEUM EXPORTING COUNTRIES REDUCED CRUDE OIL PRODUCTION, IMPOSED AN EMBARGO ON THE SHIPMENT OF CRUDE OIL TO THE UNITED STATES, AND THEN RAISED THE PRICE OF CRUDE OIL IN A SERIES OF LARGE STEPS.

HAD THE UNITED STATES EVALUATED THE SIZE OF ITS ENERGY RESOURCES EVEN AFTER THE SECOND WORLD WAR AND ACTED TO ESTABLISH ENERGY CONSERVATION PARAMETERS, IT IS SAFE TO SAY WE WOULD NOT HAVE BEEN AT THE MERCY OF THE OPEC NATIONS IN 1973. INDEED, FOR MANY DECADES, THE UNITED STATES WAS A LEADING EXPORTER OF ENERGY FUELS AND STILL EXPORTS COAL. BY 1950, HOWEVER, THE NET BALANCE HAD SHIFTED. BY 1972, THE UNITED STATES IMPORTED ALMOST 30 PERCENT OF ITS OIL SUPPLY AND WOULD HAVE IMPORTED MORE HAD IT NOT BEEN FOR IMPORT QUOTAS.

THE NEW ENERGY SUPREMACY OF THE EMERGING ARAB NATIONS IN 1973 NOT ONLY DRAMATICALLY CHANGED THE GLOBAL ENERGY FUTURE BUT ALSO DRAMATICALLY SHIFTED THE WORLD BALANCE OF POWER. THE UNITED STATES WAS NOT THE ONLY COUNTRY HELD CAPTIVE BY THE OPEC NATIONS.

WESTERN EUROPE AND JAPAN ALSO DEPENDED UPON OIL FROM THE MIDDLE EAST.

AS A RESULT, THE OIL PRODUCING NATIONS -- ONCE THIRD WORLD NATIONS -- IRAN, SAUDI ARABIA, KUWAIT, IRAQ, AND ABU DHABI -- BEGAN TO WIELD REAL POLITICAL AND ECONOMIC POWER WORLD-WIDE.

THEREFORE, THERE IS MORE THAN A SUPPLY AND DEMAND MOTIVATION FOR THE UNITED STATES TO ADDRESS THE ENERGY QUESTION. ROBERT BOWIE OF THE HARVARD UNIVERSITY CENTER FOR INTERNATIONAL AFFAIRS STATED RECENTLY THAT OF ALL THE PROBLEMS WHICH WILL CONFRONT PRESIDENT-ELECT CARTER WHEN HE TAKES OFFICE, "NONE OF THEM WILL BE MORE FATEFUL FOR THE FUTURE THAN THAT OF ENERGY." INDEED, THE UNITED STATES CANNOT AFFORD TO MAINTAIN ITS HIGH PROFILE OF MORAL LEADERSHIP WORLD-WIDE IF OUR ECONOMY IS BURDENED BY OUR HEAVY DEPENDENCE UPON IMPORTED OIL. THE MIDDLE EAST ALONE POSSESSES TWO-THIRDS OF TOTAL WORLD OIL RESERVES AND PRODUCES ONE-HALF OF ALL NON-COMMUNIST OUTPUT.

THE STATISTICS ON AMERICAN OIL CONSUMPTION SINCE THE ARAB OIL EMBARGO WAS ANNOUNCED THREE YEARS AGO, HOWEVER, DO NOT INDICATE THAT WE HAVE ADVANCED VERY FAR. ALTHOUGH AT THAT TIME RICHARD NIXON AS PRESIDENT LAUNCHED A NATIONAL ENERGY PROGRAM CALLED "PROJECT INDEPENDENCE" THE RESULTS TODAY SHOW THAT OUR FOREIGN OIL PURCHASES ARE UP. IN THE FACE OF THE MOST SEVERE ECONOMIC SETBACK SINCE THE 1929 STOCK MARKET CRASH, THE UNITED STATES STILL MANAGED TO INCREASE OIL CONSUMPTION BY 7 PERCENT. IN ADDITION OIL IMPORTS HAVE RISEN FROM 35 PERCENT TO 44 PERCENT;

AND THE SHARE OF SUCH IMPORTS FROM ARAB SUPPLIERS HAS MORE THAN DOUBLED. IN SHORT, THE U.S. HAS BECOME MORE DEPENDENT ON OIL IMPORTS AND ON ARAB SOURCES.

THE POLITICAL DYNAMICS OF THE MIDDLE EAST OIL BONANZE, NEVERTHELESS, ARE NOT ALL WEIGHED IN THE FAVOR OF THE ARAB NATIONS. TODAY, MANY ENERGY EXPERTS BELIEVE THAT WHILE THE UNITED STATES IS CERTAINLY MORE VULNERABLE IN 1977, THE SAME IS TRUE OF ARAB NATIONS.

IT HAS BEEN ACKNOWLEDGED IN THE PAST YEAR BY THE FORD ADMINISTRATION OFFICIALS THAT THE CONSTELLATION OF INTERNATIONAL ISSUES HAS CHANGED SINCE 1973. IT IS WIDELY ACKNOWLEDGED AS A POSITIVE GAIN THAT THE UNITED STATES HAS CULTIVATED GOOD ECONOMIC RELATIONS WITH COUNTRIES LIKE EGYPT AND SYRIA, WHILE, BEFORE THE EMBARGO, WE HAD VIRTUALLY NO ECONOMIC RELATIONS WITH THESE SAME COUNTRIES. THE CONTINUED FRICTION IN THE MIDDLE EAST BETWEEN ISRAEL AND THE ARAB NATIONS, ON THE OTHER HAND, HAS SOMEWHAT WEAKENED THE POSTURE OF ARAB NATIONS AND MADE THEM IN TURN RELIANT UPON THE UNITED STATES FOR ARMS BALANCE. INDEED, IT WAS NOT LONG AFTER THE 1973 YOM KIPPUR WAR AND SUBSEQUENT OIL EMBARGO THAT THE UNITED STATES LAUNCHED A MASSIVE AMERICAN AIRLIFT OF SUPPLIES AND AMMUNITION FOR THE ISRAELIS. THE STOCKPILE WHICH ISRAEL HAS MANAGED TO ACCRUE IS GENERALLY THOUGHT TO ACT AS A DETERRENT TO FUTURE ARAB OIL EMBARGOS.

IN ADDITION TO MILITARY PRECAUTIONS, THE UNITED STATES HAS ALSO AGGRESSIVELY PURSUED IMPROVED RELATIONS WITH THE

GOVERNMENT OF SAUDI ARABIA. THIS GROWING FRIENDSHIP WITH THE NATION WHICH HARBORS THE WORLD'S LARGEST OIL RESERVES AND BIGGEST UNUSED PRODUCTIVE CAPACITY, ACTS AS A VERY EFFECTIVE DETERRENT TO FURTHER EMBARGOES. IT SHOULD ALSO BE NOTED THAT THE ARAB NATIONS ARE ALSO VERY ENTHUSIASTIC CLIENTS OF UNITED STATES ARMS MERCHANTS.

THE 95TH CONGRESS AND THE CARTER ADMINISTRATION MUST CLEARLY LEAD THE WAY FOR ENERGY POLICIES OF BOTH CONSERVATION AND INNOVATION. WE MUST DEVELOP POLICIES WHICH WILL DEAL NOT ONLY WITH THE PRESENT, BUT MORE IMPORTANTLY WITH THE FUTURE.

MONTE CANFIELD, DIRECTOR OF THE GENERAL ACCOUNTING OFFICE ENERGY AND MINERALS DIVISION, ADDRESSED THE COMPELLING QUESTION OF ENERGY CONSERVATION IN A CONSUMER-ORIENTED SOCIETY THIS WAY: "OUR ACTIONS ARE TOO OFTEN REFLEXIVE, AND COMFORT IS THE HARDEST HABIT TO BREAK. THE SIMPLE FACT OF THE MATTER IS THAT ONCE SOMEONE HAS SOMETHING, IT IS DIFFICULT TO GET HIM TO GIVE IT UP, EVEN FOR SUCH NOBLE REASONS AS 'IT'S RIGHT TO DO IT,' OR 'THE THIRD WORLD NEEDS RESOURCES TOO,' OR 'DO IT FOR YOUR GRANDCHILDREN.'"

THERE IS A CLEAR NEED FOR PUBLIC POLICY IN THE MATTER OF ENERGY AND IT REQUIRES DECISIVE GOVERNMENT ACTION.

IF OIL CONSUMPTION CONTINUES ITS RECENT RAPID RISE, NO FEWER THAN 250 BILLION BARRELS WILL BE NEEDED IN THIS COUNTRY IN THE NEXT 30 YEARS. IF GROWTH IN DEMAND CONTINUES UNCHECKED, WE MAY REQUIRE 600 BILLION BARRELS MORE IN THE

30 YEARS THAT FOLLOW. SUCH GROWTH IN OIL CONSUMPTION COULD COMPLETELY DRAIN THE CONVENTIONAL OIL SUPPLY IN THE UNITED STATES WITHIN THE NEXT 50 YEARS. OTHER MORE CONSERVATIVE ESTIMATES SAY THE SUPPLY WILL BE GOOD FOR ONLY 30 MORE YEARS. EVEN AT REDUCED RATES OF GROWTH, THE NATION COULD RUN OUT OF OIL IN 100 YEARS.

THE NEED TO DEVELOP ALTERNATE ENERGY RESOURCES IS CRITICAL. THE COST OF SUCH A PROGRAM, IF VIGOROUSLY PURSUED BY THE CARTER ADMINISTRATION, COULD APPROACH \$70 BILLION ANNUALLY OVER A 10-YEAR PERIOD.

FOR THE PRESENT AND THE FUTURE, ENERGY CONSERVATION MAKES THE MOST SENSE IN TERMS OF ENERGY, THE ENVIRONMENT AND THE ECONOMY. THE BENEFITS OF CONSERVATION WERE BEST ILLUSTRATED RECENTLY BY THE U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION. ERDA ESTIMATES THAT IT WILL REQUIRE LESS INVESTMENT TO SAVE A BARREL OF OIL THROUGH EFFICIENCY THAN TO ADD A NEW BARREL OF OIL THROUGH PRODUCTION, ESPECIALLY OVER THE NEXT 12 YEARS.

EFFORTS TO LEGISLATE ENERGY DISCIPLINE IN THE 94TH CONGRESS MET WITH LITTLE SUCCESS. LEGISLATION WAS INTRODUCED LAST YEAR TO AMEND THE TAX BILL BY PROVIDING TAX CREDITS FOR PERSONS WHO ATTEMPT TO CONSERVE ENERGY BY INSTALLING INSULATION IN THEIR HOMES. AN ATTEMPT WAS MADE BY WAYS AND MEANS COMMITTEE CHAIRMAN AL ULLMAN TO DISCIPLINE GASOLINE CONSUMPTION BY INCREASING THE GASOLINE TAX. AS A SUPPORTER OF THIS PLAN, I CAN TELL YOU THAT IT MET WITH EXTREME OPPOSITION AND WAS ULTIMATELY AN ABYSMAL FAILURE.

IN THE 94TH CONGRESS, I INTRODUCED LEGISLATION TO ESTABLISH MINIMUM MILEAGE REQUIREMENTS FOR AUTOMOBILES UNDER THE PROVISIONS OF THE ENERGY POLICY AND CONSERVATION ACT; HOWEVER, THE BILL WAS NOT ACCEPTED ON A POINT OF ORDER.

IT IS EVIDENT THAT DISCIPLINE IN OUR ENERGY CONSUMPTION IS GOING TO BE DIFFICULT TO LEGISLATE AND DIFFICULT TO ENFORCE. IF THE UNITED STATES IS ABLE TO EFFECTIVELY CONSERVE, HOWEVER, IT IS ESTIMATED BY THE OAK RIDGE NATIONAL LABORATORY THAT WE CAN REDUCE ENERGY-USE GROWTH TO ALMOST ZERO THROUGH THE YEAR 2000. AMITAI ETZIONI, DIRECTOR OF THE CENTER FOR POLICY RESEARCH, POINTS OUT THAT WEST GERMANY AND SWEDEN HAVE MANAGED WITHOUT DISCOMFORT TO USE ONLY HALF THE ENERGY PER PERSON THAT THE UNITED STATES USES. THE SWISS USE ONE THIRD AS MUCH.

A CHANGE IN OUR ENERGY CONSUMPTION HABITS, OF COURSE, WOULD IN SOME WAYS MEAN A CHANGE IN THE STRUCTURE OF OUR SOCIETY. THE ELIMINATION OF FAT FROM OUR ENERGY CONSUMPTION WOULD INVOLVE SUCH MEASURES AS:

- BETTER INSULATION, MORE EFFICIENT HEATING SYSTEMS, AND LOWER THERMOSTAT SETTINGS IN OUR HOMES
- USE OF MORE EFFICIENT APPLIANCES, SUCH AS STOVES WHICH DO NOT REQUIRE PILOT LIGHTS
- SMALLER, MORE EFFICIENT CARS, CAR POOLING, AND INCREASED USE OF MASS TRANSIT

AS CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSIONER RICHARD MAULIN POINTS OUT, SUCH

CHANGES WOULD MEAN THAT A SOCIETY COMMITTED TO ENERGY CONSERVATION GOALS MIGHT REQUIRE:

- GRADUAL REDISTRIBUTION OF POPULATION WITH AN INTEGRATED DESIGN OF TRANSPORTATION, LAND USE, ENERGY SYSTEMS, AND WASTE DISPOSAL
- SELF-SUSTAINING COMMUNITIES FOR BOTH LIVING AND WORKING, AS WELL AS RECREATIONAL ACTIVITIES FOCUSED UPON LOW-ENERGY ALTERNATIVES

COMMISSIONER MAULIN SUGGESTS THAT THE COMMERCIAL AND INDUSTRIAL SECTORS MIGHT MAKE SUCH CONTRIBUTIONS AS INCREASED USE OF RECYCLED AND SCRAP MATERIALS AND THE ELIMINATION OF PLANNED OBSOLESCENCE WITH PRODUCTS DESIGNED INSTEAD FOR RECYCLING.

THE UNITED STATES IS THE LARGEST SINGLE ENERGY CONSUMER, ACCOUNTING PRESENTLY FOR ABOUT ONE-THIRD OF TOTAL WORLD CONSUMPTION. OUR PER CAPITA CONSUMPTION IS TWICE THAT OF THE SOVIET UNION, TRIPLE THAT OF WESTERN EUROPE, AND 25 TIMES AS GREAT AS CHINA. OUR SOCIETY IS GEARED TOWARD HIGH ENERGY FAST ENOUGH TO MEET THE NEEDS WHICH WE CAN CURRENTLY ANTICIPATE.

A MAJOR GOAL, THEREFORE, OF THE CARTER ADMINISTRATION SHOULD -- AND IN ALL PROBABILITY WILL BE -- THE ACCELERATED DEVELOPMENT OF ALTERNATIVE ENERGY RESOURCES. AS THE MOST ADVANCED HIGH TECHNOLOGY, WE CAN EXPECT NUCLEAR POWER TO PLAY A MAJOR ROLE IN ENERGY BY THE END OF THE CENTURY. THE U. S. INTERIOR DEPARTMENT EXPECTS NUCLEAR POWER CONSUMPTION TO RISE RAPIDLY FROM 1.6 PERCENT OF TOTAL GROSS ENERGY CONSUMPTION TO 28 PERCENT BY THE YEAR 2000.

IN THE 94TH CONGRESS, I INTRODUCED LEGISLATION TO INCREASE THE ERDA BUDGET FOR SOLAR ENERGY RESEARCH AND DEVELOPMENT BY \$50 MILLION. THIS LEGISLATION PASSED IN THE AUTHORIZATION PACKAGE BUT FAILED IN THE FINAL APPROPRIATIONS BILL. HOWEVER, FURTHER EFFORTS TO INCREASE SOLAR RESEARCH AND DEVELOPMENT ACTIVITIES WILL BE MADE IN THE 95TH CONGRESS.

SOLAR AND ALTERNATIVE ENERGY ARE NOT JUST IDEALISTIC GOALS THAT OUGHT TO BE PURSUED. THEY ARE CRITICAL INGREDIENTS IN THIS COUNTRY'S FUTURE. WHILE ASSISTING THE NATION IN SOLVING ITS ENERGY PROBLEMS, NEW ENGLAND CAN BENEFIT ECONOMICALLY FROM OUR REGION'S COMMAND OF HIGH TECHNOLOGY.

AT MY REQUEST AND SENATOR KENNEDY'S, THE NEW ENGLAND DELEGATION APPROVED A PLAN AIMED AT LOCATING THE SOLAR ENERGY RESEARCH INSTITUTE IN OUR AREA. WE ARE PRESENTLY AMONG A LIMITED NUMBER OF FINALISTS IN COMPETITION FOR THIS IMPORTANT FACILITY. SERI WOULD GIVE OUR REGION AN IMPORTANT Foothold IN THE EMERGING SOLAR INDUSTRY. FURTHER, I HAVE ASKED THE ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION TO CONSIDER ESTABLISHING A CONSERVATION INSTITUTE IN MASSACHUSETTS. ENERGY CONSERVATION IS AN IDEA WHICH MUST BE EXPLOITED BY NEW ENGLAND AND EXPORTED TO THE REST OF THE COUNTRY.

OUR ENERGY POLICIES FOR THE COMING YEARS MUST BE FORTHRIGHT, VIGOROUS, AND FORMULATED WITH A SENSE OF HISTORY. C. P. SNOW SAID, "THE WORLD'S GREATEST NEED IS AN APPETITE FOR THE FUTURE . . . ALL HEALTHY SOCIETIES ARE READY TO

SACRIFICE THE EXISTENTIAL MOMENT FOR THEIR CHILDREN'S FUTURE
AND FOR CHILDREN AFTER THEM. THE SENSE OF THE FUTURE IS
BEHIND ALL GOOD POLICIES. UNLESS WE HAVE IT, WE CAN GIVE
NOTHING EITHER WISE OR DECENT TO THE WORLD."