## SECURING AMERICA'S ENERGY FUTURE

## REMARKS BY CLARENCE P. CAZALOT, JR PRESIDENT AND CEO MARATHON OIL CORPORATION

IOGCC ANNUAL MEETING SANTA FE, NM NOVEMBER 17, 2008 THANK YOU VICTOR (CARRILLO) FOR THAT KIND INTRODUCTION AND FOR THE FINE WORK YOU AND THE TEXAS RAILROAD COMMISSION DO IN SUPPORT OF DEVELOPING THE OIL AND GAS RESOURCES OF TEXAS.

AND SIMILARLY, THANKS TO ALL OF YOU HERE TODAY FOR THE CONTRIBUTIONS YOU MAKE AS WE WORK TOGETHER TO MEET THE ENERGY NEEDS OF OUR COUNTRY.

I'M DELIGHTED TO HAVE THIS OPPORTUNITY TO ADDRESS AN ORGANIZATION THAT IS SO CLOSELY LINKED TO AND HAS BEEN SO SUPPORTIVE OF THE OIL & GAS INDUSTRY'S MISSION OF DELIVERING RELIABLE AND AFFORDABLE ENERGY TO OUR NATION AND THE WORLD.

I KNOW THE THEME OF THIS YEAR'S MEETING IS "THE CHALLENGES OF UNCONVENTIONAL OIL AND NATURAL GAS" AND I PROMISE YOU I WILL ADDRESS LATER THE IMPORTANCE OF THESE RESOURCES, BUT I WANT TO BEGIN IN A BROADER CONTEXT WITH WHAT I CONSIDER TO BE ONE OF THE MOST SERIOUS AND DEFINING ISSUES OF OUR TIME. AND THAT'S SECURING AMERICA'S ENERGY FUTURE.

LESS THAN TWO WEEKS AGO, WE ELECTED A NEW PRESIDENT OF THE UNITED STATES, AND DURING THE RUN UP TO THE ELECTION, ENERGY WAS, AND CONTINUES TO BE, ONE OF THE MOST CRITICAL PUBLIC POLICY ISSUES FACING OUR COUNTRY. PRESIDENT-ELECT OBAMA HAS SAID IN THE PAST THAT ENERGY IS THE MOST IMPORTANT ISSUE OUR FUTURE ECONOMY IS GOING TO FACE. I AM HOPEFUL THAT DESPITE MUCH LOWER GASOLINE, DIESEL, AND NATURAL GAS PRICES AND OUR NATION'S VERY DIFFICULT ECONOMIC SITUATION, HE INDEED KEEPS ENERGY AS A MAJOR FOCUS FOR HIS ADMINISTRATION.

I'M ALSO HOPEFUL THAT THE NEW ADMINISTRATION
SEIZES UPON THE OPPORTUNITY AND MOVES WITH
URGENCY TO ADDRESS ENERGY SECURITY IN A
COMPREHENSIVE, FACT-BASED MANNER THAT TAPS THE
LEADERSHIP AND FINEST THINKING OF PEOPLE AND
ORGANIZATIONS ACROSS THE ENTIRE SPECTRUM,
REGARDLESS OF IDEALOGY OR POLITICAL PARTY
AFFILIATION.

YOU'LL NOTICE THAT I REFER TO ENERGY SECURITY, NOT ENERGY INDEPENDENCE WHICH WAS AN OFTEN HEARD TERM DURING THE RECENT CAMPAIGN.

MY VIEW IS THAT ENERGY INDEPENDENCE IN THE NEAR TERM IS NEITHER POSSIBLE NOR IS IT DESIRABLE. IN FACT, CALLING FOR ENERGY INDEPENDENCE CREATES UNCERTAINTY AMONG OUR INTERNATIONAL TRADING PARTNERS AND HINDERS INVESTMENT IN NEW CRITICALLY NEEDED INTERNATIONAL ENERGY SUPPLIES.

THE REAL KEY FOR US IS <u>ENERGY SECURITY</u>, WHICH I
DEFINE AS HAVING AN ADEQUATE, RELIABLE AND
SUSTAINABLE SUPPLY OF CLEAN AFFORDABLE ENERGY

TO MEET THE NEEDS AND ASPIRATIONS OF PRIVATE CITIZENS, COMMERCIAL ENTERPRISES AND PUBLIC SECTOR FUNCTIONS.

AND AS I'VE DEFINED IT, ENERGY SECURITY IS MUCH MORE THAN JUST ENERGY.

TRUE ENERGY SECURITY ALSO MEANS: 1) THAT WE NEED TO ENSURE ENVIRONMENTAL PROTECTION AND SUSTAINABILITY, AND 2) THAT THE COST OF OUR ENERGY IS COMPARABLE WITH THAT OF OTHER NATIONS SO WE CAN MAINTAIN OR ENHANCE OUR ECONOMIC COMPETITIVENESS.

OUR NATION'S ENERGY FUTURE REQUIRES A NEW BALANCE......ONE THAT PROVIDES MORE ENERGY WITH MUCH REDUCED CARBON EMISSIONS AND OVERALL ENVIRONMENTAL FOOT PRINT WHILE STILL MAINTAINING ECONOMIC GROWTH AND PROSPERITY.

I BELIEVE THIS IS A GOAL OR FUTURE STATE TO WHICH WE CAN ALL ASPIRE, IRRESPECTIVE OF POLITICAL PARTY OR OTHER DIFFERENCES. BUT IN DEVELOPING THIS NEW FUTURE, AND HOW WE TRANSITION TO IT, WE WILL NEED TO DEAL WITH FACTS AND CERTAIN REALITIES, RATHER THAN BASE POLICY AND PLANS ON MISCONCEPTIONS AND MYTHS.

ONE INDISPUTABLE FACT THAT IMPACTS NOT ONLY OUR NATION BUT THE WORLD AS A WHOLE IS THAT GLOBAL, LONG-TERM DEMAND FOR ENERGY WILL CONTINUE TO INCREASE, DRIVEN IN LARGE PART BY WORLD POPULATION GROWTH FROM 6.5 BILLION PEOPLE TODAY TO 8 BILLION BY 2030, AND THE STRONG DESIRE OF DEVELOPING COUNTRIES TO ACHIEVE ECONOMIC PROSPERITY SIMILAR TO OUR OWN.

AT PRESENT, GLOBAL DEMAND IS NO DOUBT BEING IMPACTED AND REDUCED BY THE GLOBAL ECONOMIC CRISIS RESULTING IN LOWER PRICES, BUT I ASSURE YOU, THIS IS ONLY TEMPORARY BECAUSE THE LONG-TERM FUNDAMENTALS OF CONSTRAINED SUPPLY AND GROWING DEMAND HAVE NOT CHANGED.

SECURE, AFFORDABLE, ACCESSIBLE AND AMPLE
SUPPLIES OF ENERGY ARE ABSOLUTELY ESSENTIAL TO
BOTH ECONOMIC GROWTH AND A REASONABLE
STANDARD OF LIVING. SO IT'S ONLY NATURAL TO
EXPECT THAT THE DEVELOPING COUNTRIES, WITH BOTH
THEIR GROWING ECONOMIES AND POPULATIONS, ARE
GOING TO DRIVE INCREASED ENERGY DEMAND.

LET'S PUT SOME NUMBERS AROUND THIS.

JUST LAST WEEK, THE INTERNATIONAL ENERGY AGENCY RELEASED ITS LATEST WORLD ENERGY OUTLOOK, WHILE SOMEWHAT LOWER THAN THEIR PRIOR FORECAST, THEY STILL PROJECT THAT GLOBAL ENERGY DEMAND WILL INCREASE MORE THAN 45 PERCENT BETWEEN 2006 AND 2030. THE VAST MAJORITY OF THE INCREASE IS GOING TO BE IN DEVELOPING COUNTRIES, AND THOSE COUNTRIES, AS YOU WOULD EXPECT, RELY PRIMARILY ON LOWER COST FOSSIL FUELS.

THIS PROJECTED 45 PERCENT GROWTH ISN'T UNCONSTRAINED. IT ACTUALLY ASSUMES SIGNIFICANT EFFICIENCY IMPROVEMENTS AND A REDUCTION IN ENERGY INTENSITY. WITHOUT THESE ASSUMED EFFICIENCY GAINS, DEMAND WOULD ALMOST DOUBLE BY 2030.

SO TO MEET THIS GLOBAL DEMAND GROWTH RELIABLY IS GOING TO REQUIRE SUBSTANTIAL INCREASES IN THE SUPPLIES OF <u>ALL</u> FORMS OF ENERGY.

LET'S TAKE A LOOK AT CURRENT AND FUTURE DEMAND BY THE VARIOUS ENERGY SOURCES. TODAY FOSSIL FUELS COMPRISE ABOUT 81 PERCENT OF GLOBAL ENERGY USAGE: OIL AND GAS ARE AT 55 PERCENT; COAL IS 26 PERCENT; AND ALL OTHER FORMS OF ENERGY COMPRISE THE REMAINING 19 PERCENT.

GOING FORWARD, THE FASTEST GROWING MAJOR ENERGY SOURCES GLOBALLY ARE GOING TO BE COAL AND NATURAL GAS DRIVEN BY RISING DEMAND FOR ELECTRICITY. DEMAND FOR COAL, WHICH HAS RISEN 33 PERCENT BETWEEN 2000 AND 2006, IS BEING LARGELY DRIVEN BY GROWTH IN THE DEVELOPING COUNTRIES, PARTICULARLY IN ASIA-PACIFIC.

AS YOU WOULD EXPECT AND HOPE, THERE WILL NEED TO BE MORE DRAMATIC GROWTH IN NON-FOSSIL FUEL ENERGY SOURCES THAN THERE HAS BEEN HISTORICALLY. SOURCES SUCH AS NUCLEAR POWER, BIOFUELS, HYDRO, GEOTHERMAL, HYDROGEN, WIND AND SOLAR ENERGY ... THESE ARE ALL INCREASINGLY IMPORTANT COMPONENTS OF ANY ENERGY SECURITY PLAN.

BUT HAVING SAID THAT, THE BOTTOM LINE IS BY 2030,
DESPITE ALL THE RHETORIC TO THE CONTRARY, THE
INTERNATIONAL ENERGY AGENCY PROJECTS THAT
FOSSIL FUELS (OIL, NATURAL GAS, AND COAL) WILL STILL
COMPRISE ABOUT 80 PERCENT OF THE WORLD'S ENERGY
USAGE.

SO BESIDES THE FACT THAT OIL, NATURAL GAS, AND COAL WILL BE INVALUABLE TO OUR NATION'S ENERGY FUTURE, ANOTHER REALITY THAT IS POORLY UNDERSTOOD IS SIMPLY THE MASSIVE SCALE AND SCOPE OF THE INFRASTRUCTURE THAT PRODUCES, PROCESSES, TRANSPORTS, AND SUPPLIES OUR NATION'S AND THE WORLD'S ENERGY EACH DAY. GLOBAL CONSUMPTION FROM ALL ENERGY SOURCES AMOUNTS TO THE EQUIVALENT OF ABOUT 240 MILLION BARRELS EACH DAY. AND AS WE'VE SAID, DEMAND WILL GROW INTO THE FUTURE.

SO THE NOTION THAT THERE'S A QUICK FIX / THAT WE CAN TRANSITION QUICKLY AWAY FROM FOSSIL FUELS AND STILL RELIABLY AND ADEQUATELY PROVIDE OUR NATION'S ENERGY NEEDS IS SIMPLY NOT REALISTIC.

HAVING SAID THAT, I BELIEVE IT'S EQUALLY MIS-LEADING TO BELIEVE WE CAN SIMPLY DRILL OUR WAY TO A SECURE ENERGY FUTURE. AS I'LL DISCUSS LATER, MORE ACCESS AND GREATER DEVELOPMENT OF OUR DOMESTIC RESOURCES IS CLEARLY NEEDED AND SHOULD BE A KEY COMPONENT OF OUR ENERGY PLANS BUT ALONE IT'S NOT THE SOLUTION.

THE FACT IS THERE IS NO SINGLE SOLUTION, IT'S NOT EITHER DRILLING OR RENEWABLES OR SOLELY CONSERVATION, IT'S ALL OF THESE AND MORE.

WE NEED A WELL-REASONED, FACT-BASED
COMPREHENSIVE ENERGY SECURITY STRATEGY THAT IS
FULLY INTEGRATED AND CONSISTENT WITH A CLIMATE
CHANGE PLAN AND WHICH PROVIDES FOR THE
INVESTMENT AND TIME REQUIRED TO TRANSITION FROM
WHERE WE ARE TODAY TO A NEW ENERGY FUTURE.

MUCH WORK HAS ALREADY BEEN DONE IN THIS REGARD.
STUDIES AND RECOMMENDATIONS HAVE BEEN
FORTHCOMING FROM VARIOUS ORGANIZATIONS OVER
THE LAST YEAR:

- NATIONAL PETROLEUM COUNCIL "FACING THE HARD TRUTHS ABOUT ENERGY".
- U.S. CHAMBER OF COMMERCE "BLUEPRINT FOR SECURING AMERICA'S ENERGY FUTURE".
- COUNCIL ON COMPETITIVENESS INITIATIVE ON ENERGY SECURITY, INNOVATION, AND SUSTAINABILITY.
- AND SEVERAL OTHERS.

THERE ARE THREE KEY THEMES THAT ARE FAIRLY
COMMON ACROSS ALL OF THESE STUDIES: 1) THE NEED
FOR GREATER ENERGY EFFICIENCY AND CONSERVATION;
2) THE NEED TO DIVERSIFY AND INCREASE OUR ENERGY
SUPPLIES; AND 3) THE NEED FOR INNOVATION AND NEW
TECHNOLOGIES.

I WANT TO BRIEFLY DISCUSS EACH AREA.

FIRST, THE CHEAPEST AND FASTEST FORM OF NEW ENERGY IS ENERGY EFFICIENCY AND CONSERVATION.

REASONABLE PROGRESS HAS BEEN MADE IN THE PAST.
IN FACT, IF YOU LOOK BACK, THE U.S. ECONOMY HAS
INCREASED 155 PERCENT SINCE 1977, WHILE OUR
ENERGY USE HAS ONLY INCREASED ABOUT 30 PERCENT.

BUT MUCH MORE CAN BE DONE. TO GIVE A SENSE OF THE POTENTIAL IMPACT, A SIX PERCENT REDUCTION IN ENERGY USE – IF IT WERE ALL PETROLEUM-BASED – WOULD REDUCE U.S. CRUDE OIL IMPORTS BY 29 PERCENT.

I THINK EFFORTS TO INCREASE ENERGY EFFICIENCY SHOULD FOCUS ON A FEW KEY AREAS:

• THE FIRST IS TO IMPROVE VEHICLE FUEL ECONOMY.

THE ENERGY SECURITY BILL SIGNED INTO LAW

ALMOST A YEAR AGO MAKES IMPROVEMENTS AND

SETS TIMETABLES IN THIS IMPORTANT AREA, BUT

MORE CAN BE DONE THROUGH MORE RAPID

DEPLOYMENT OF ENGINE AND MATERIALS

TECHNOLOGIES.

- WE ALSO HAVE TO REDUCE ENERGY CONSUMPTION IN THE RESIDENTIAL AND COMMERCIAL SECTORS THROUGH MORE AGGRESSIVE BUILDING CODES AND APPLIANCE STANDARDS. THE NEW LEGISLATION CONTAINS SOME ENHANCED STANDARDS AND IMPROVEMENTS IN THIS AREA AS WELL.
- AND LASTLY, WE NEED TO INCREASE THE EFFICIENCY OF OUR INDUSTRIAL SECTOR.

TO THE LATTER POINT, OUR INDUSTRY IS TAKING ACTION.

IN 2002, AMERICA'S OIL AND GAS COMPANIES MADE A PLEDGE TO THE GOVERNMENT THAT WE'D IMPROVE ENERGY EFFICIENCY IN OUR REFINERIES BY TEN PERCENT OVER TEN YEARS. AND I'M PLEASED TO REPORT THAT THE INDUSTRY IS MAKING SOLID PROGRESS TOWARD THAT GOAL OF IMPROVED EFFICIENCY. FOR EXAMPLE, IN 2006 ALONE, U.S. REFINERS SAVED THE ENERGY EQUIVALENT OF TAKING 528,000 CARS OFF THE ROAD.

FOR OUR PART, AT MARATHON WE ESTIMATE THAT OVER THE LAST FIVE YEARS OUR SEVEN REFINERIES HAVE IMPROVED ENERGY EFFICIENCY BY ALMOST 4½ PERCENT, AND WE ARE ON TRACK TO ACHIEVE THE TEN PERCENT GOAL BY 2012.

THE SECOND KEY THEME IS TO BOTH INCREASE THE SUPPLY AND DIVERSITY OF OUR ENERGY.

I WANT TO BEGIN WITH A DISCUSSION AS TO OIL AND NATURAL GAS.

FIRST, AS I INDICATED BEFORE, OIL AND GAS WILL
REMAIN THE DOMINANT SOURCES OF ENERGY FOR A
VERY LONG PERIOD OF TIME DUE IN LARGE PART TO
SIGNIFICANT COST AND INFRASTRUCTURE ADVANTAGES.

SECOND, DESPITE WHAT PEAK OIL THEORISTS MAY SAY,
THERE IS MORE THAN AMPLE OIL AND GAS RESOURCE IN
THE WORLD TO MEET DEMAND.

HOWEVER, ACCESS TO THESE CRITICAL RESOURCES, ESPECIALLY FOR U.S. COMPANIES, IS BECOMING INCREASINGLY DIFFICULT AND COSTLY DUE TO AN INTENSE WAVE OF NATIONALISM BY THOSE COUNTRIES WHO HOLD THE BULK OF THE WORLD'S RESOURCE, AND FRANKLY BY RESTRICTIVE POLICIES ON U.S. FEDERAL LAND ACCESS – BOTH ONSHORE AND OFFSHORE – BY OUR OWN GOVERNMENT.

UNDER PRESSURE FROM THE AMERICAN PEOPLE,
CONGRESS RECENTLY TOOK ACTION TO LIFT THE
DRILLING MORATORIUM ON THE OUTER CONTINENTAL
SHELF.

BUT THE ELECTION IS NOW OVER AND ALREADY .......
THERE'S DISCUSSION OF POTENTIAL ACTIONS AND
PLANS TO FURTHER LIMIT ACCESS TO BOTH ONSHORE
AND OFFSHORE FEDERAL LANDS, I SUSPECT WE ARE IN
FOR MANY MORE CHALLENGES BOTH FROM A
LEGISLATIVE AND REGULATORY STANDPOINT.

PART OF THIS OPPOSITION TO OUR INDUSTRY IS DRIVEN BY THE PERCEPTION OF "BIG OIL". THE FACT IS ON A GLOBAL SCALE, THE LARGEST U.S. OIL AND GAS COMPANIES ARE REALLY QUITE SMALL WHEN COMPARED TO OUR GLOBAL COMPETITORS, ESPECIALLY THE NATIONAL OIL COMPANIES (NOCs).

IN FACT, U.S. OIL COMPANIES IN TOTAL ONLY HOLD
ABOUT SIX TO EIGHT PERCENT OF THE WORLD'S PROVED
OIL AND GAS RESERVES. THAT'S NOT WHAT I WOULD
CALL BIG OIL.

THE NATIONAL OIL COMPANIES AND THEIR HOST GOVERNMENTS CONTROL ABOUT 80 PERCENT OF THE WORLD'S PROVEN OIL AND GAS RESERVES AND THESE ARE INCREASINGLY GLOBAL COMPANIES WHO ARE FINANCIALLY STRONG, WHO HAVE ACCESS TO WORLD CLASS TECHNOLOGY, AND THEY HAVE THE FULL BACKING AND SUPPORT OF THEIR RESPECTIVE GOVERNMENTS.

AS THESE NATIONAL OIL COMPANIES HAVE GROWN
MORE INDEPENDENT, MORE NATIONALISTIC – VENEZUELA
IS AN EXCELLENT EXAMPLE – IT IS INCREASINGLY
DIFFICULT FOR U.S. COMPANIES TO ACCESS THE OIL AND
GAS RESOURCE OPPORTUNITIES THAT WE NEED TO
DEVELOP, PRODUCE AND BRING TO AMERICAN
CONSUMERS.

SO IT'S CRITICAL FOR WASHINGTON, AND I BELIEVE THE AMERICAN PEOPLE IN GENERAL, TO RECOGNIZE THAT OUR NATION IS IN A TOUGH GLOBAL COMPETITION FOR NEW SUPPLIES OF OIL AND GAS AND THAT THE U.S. OIL AND GAS COMPANIES ARE INDEED OUR BEST ALLY IN THIS COMPETITION.

IT SIMPLY MAKES NO SENSE TO FURTHER HINDER OUR ABILITY TO COMPETE BY UNFAIR TAXATION, REGULATION, OR UNREASONABLY RESTRICTING ACCESS TO CERTAIN U.S. OIL AND GAS BASINS THAT HOLD THE POTENTIAL TO SUPPLY OUR NATION WITH CRITICAL ENERGY FOR DECADES TO COME.

OUR INDUSTRY HAS MADE GREAT STRIDES IN
TECHNOLOGY OVER THE PAST 20 YEARS AND THESE
ADVANCES, COUPLED WITH THE EXCELLENT TRACK
RECORD OF EXPERIENCE WE'VE GOT, CLEARLY
DEMONSTRATE OUR ABILITY TO PRODUCE OIL AND GAS
AND PROTECT THE ENVIRONMENT AT THE SAME TIME.

ONE NEED SIMPLY LOOK AT HOW THE INDUSTRY'S WILLINGNESS TO ADDRESS TECHNOLOGICAL AND ECONOMIC CHALLENGES AND MAKE SIGNIFICANT INVESTMENTS HAS UNLOCKED THE VAST POTENTIAL OF UNCONVENTIONAL OIL AND GAS RESOURCES IN OUR COUNTRY.

THESE NEW DEVELOPMENTS WERE SPEAR-HEADED BY
THE INDEPENDENT EXPLORATION AND PRODUCTION
OPERATORS AIDED BY THE TECHNOLOGY PROVIDED BY
THE SERVICE COMPANIES.

PRODUCTION FROM THE BARNETT SHALE ALONE HAS REVERSED THE LONG DECLINE IN U.S. NATURAL GAS PRODUCTION.

ANOTHER UNCONVENTIONAL RESOURCE THAT IS KEY TO OUR NATION'S ENERGY FUTURE LIES IN THE HEAVY OIL SANDS OF CANADA.

IN THE ATHABASCA REGION OF NORTHERN ALBERTA,
THERE IS AN ESTIMATED 175 BILLION BARRELS OF
RECOVERABLE CRUDE BITUMEN – OR HEAVY OIL – WHICH
AMOUNTS TO THREE-QUARTERS OF NORTH AMERICAN
PETROLEUM RESOURCES AND PUTS CANADA IN SECOND
PLACE IN THE WORLD IN TERMS OF OIL RESERVES,
SECOND ONLY TO SAUDI ARABIA.

ABOUT ONE YEAR AGO, MARATHON INVESTED ALMOST \$7
BILLION TO ACQUIRE AN INTEREST IN THE ATHABASCA
OIL SANDS PROJECT (AOSP)TO SURFACE MINE THE
BITUMEN, AND ULTIMATELY LINK THIS WORLD-CLASS OIL
RESOURCE WITH OUR U.S. REFINERIES.

IN FACT, WE ARE MOVING FORWARD WITH A PROJECTED \$1.9 BILLION HEAVY OIL UPGRADING PROJECT AT OUR DETROIT REFINERY, WHICH WILL BECOME A DESTINATION FOR REFINING SOME OF THE CANADIAN BITUMEN.

UNFORTUNATELY, ALBERTA'S OIL SANDS RESOURCES
HAVE BEEN LABELED "DIRTY OIL" BY SOME BECAUSE
THE OIL EXTRACTION PROCESS IS CARBON INTENSIVE
AND OPPONENTS ARE TRYING TO PROHIBIT THE IMPORT
OF THESE IMPORTANT RESOURCES.

THE FACT IS CONCRETE STEPS ARE BEING TAKEN IN SEVERAL OIL SANDS PROJECTS TO REDUCE THEIR GHG INTENSITY AND BASED ON PLANS WE AND OUR PARTNERS WILL IMPLEMENT AT AOSP, WE BELIEVE THE FULL CYCLE GHG INTENSITY OF OUR OPERATIONS WILL BE EQUAL TO THAT OF CONVENTIONAL OIL.

PUTTING TOGETHER LONG-TERM AND
ENVIRONMENTALLY RESPONSIBLE SOLUTIONS TO
ECONOMICALLY PRODUCE AND TRANSPORT AND REFINE
THE MULTI-BILLION BARREL, LONG-LIFE RESERVES OF
THE CANADIAN OIL SANDS IS ANOTHER KEY EXAMPLE OF
HOW WE WILL HELP MEET AMERICAN ENERGY DEMAND
FOR CLEAN FUELS.

TURNING TO ALTERNATIVE AND RENEWABLE SOURCES
OF ENERGY:

AMERICA'S OIL AND NATURAL GAS COMPANIES HAVE MADE MAJOR INVESTMENTS IN EMERGING ENERGY TECHNOLOGIES.

BETWEEN 2000 AND 2007, THE U.S. OIL AND NATURAL GAS INDUSTRY INVESTED AN ESTIMATED \$121 BILLION IN NEW TECHNOLOGIES, INCLUDING RENEWABLES, FRONTIER HYDROCARBONS SUCH AS SHALE AND OIL SANDS, AND END-USE TECHNOLOGIES, SUCH AS FUEL CELLS.

IMPORTANTLY, THESE INVESTMENTS ARE MORE THAN DOUBLE THE AMOUNT INVESTED BY THE FEDERAL GOVERNMENT AND ALL OTHER U.S. COMPANIES – COMBINED.

OUR INDUSTRY HAS INVESTED HEAVILY TO MEET AND EXCEED FEDERAL REQUIREMENTS FOR ETHANOL-BLENDED GASOLINE. IN 2007, AS AN INDUSTRY, WE USED 6.85 BILLION GALLONS OF ETHANOL – 46 PERCENT MORE THAN WHAT WAS LEGALLY MANDATED. THIS YEAR THE INDUSTRY WILL USE APPROXIMATELY NINE BILLION GALLONS.

MARATHON WAS ONE OF THE FIRST COMPANIES TO SEE THE POTENTIAL OF ETHANOL. MARATHON IS, WE BELIEVE, THE LARGEST BLENDER OF ETHANOL IN THE MIDWEST, ONE OF THE FIRST U.S. OIL COMPANIES TO INITIATE ITS OWN ETHANOL PRODUCTION OPERATIONS, A LEADER IN QUALITY TESTING OF ETHANOL, AND A PIONEER IN CREATING THE INFRASTRUCTURE NECESSARY TO DISTRIBUTE ETHANOL INTO MORE AND LARGER MARKETS IN THE MIDWEST AND SOUTHEAST.

WE ARE CONCERNED, HOWEVER, ABOUT THE
AGGRESSIVE AND PRESCRIPTIVE NEW RENEWABLE FUEL
REQUIREMENTS CONTAINED IN THE ENERGY
LEGISLATION JUST SIGNED INTO LAW IN DECEMBER OF
LAST YEAR.

THIS LAW REQUIRES RENEWABLES TO INCREASE FROM THE PREVIOUS FEDERAL MANDATE OF 7.5 BILLION GALLONS PER YEAR BY 2012, TO 36 BILLION GALLONS PER YEAR IN 2022.

LET'S BREAK DOWN THIS MANDATE. FIFTEEN BILLION
GALLONS PER YEAR OF THIS TOTAL MUST BE SUPPLIED
FROM CORN-BASED ETHANOL BY 2015, WITH THE
REMAINING 21 BILLION GALLONS PER YEAR FROM
ADVANCED BIOFUELS BY THE 2022 DEADLINE.

THE CHALLENGE HERE IS THAT THE TECHNOLOGY TO MANUFACTURE THESE 21 BILLION GALLONS PER YEAR OF ADVANCED BIOFUELS IS NOT YET ESTABLISHED, NOT TO MENTION THE ASSOCIATED COMMERCIAL VIABILITY OR WHAT WILL BE REQUIRED TO MANUFACTURE AND DISTRIBUTE THESE FUELS ON THE LARGE SCALE REQUIRED BY LAW.

ALL OF THIS CREATES UNCERTAINTY FOR THOSE OF US
THAT ARE EXPECTED TO MEET THESE MANDATED
LEVELS, AND WHILE 2022 MAY SEEM A LONG WAY OFF, 14
YEARS IS PRETTY SHORT GIVEN ALL THAT NEEDS TO BE
DONE.

THE POTENTIAL IS ALSO HIGH FOR UNINTENDED
NEGATIVE CONSEQUENCES SUCH AS IMPACTS TO FOOD
AND WATER SUPPLIES.

THIS IS A GOOD EXAMPLE OF WELL INTENDED, BUT MISGUIDED EFFORTS TO FOCUS ON WHAT APPEARS TO BE A "SILVER BULLET" SOLUTION – ETHANOL – TO THE EXCLUSION OF OTHER FORMS OF ENERGY.

SPEAKING OF OTHER FORMS OF ENERGY, LET ME TURN TO OTHER ALTERNATIVES. RENEWABLES LIKE SOLAR, WIND, HYDROPOWER, GEOTHERMAL, AND BIOMASS ENERGY HAVE IMPORTANT ROLES TO PLAY AND WILL GROW IN USE IN THOSE SPECIFIC LOCALES WHERE THEY ARE ABUNDANTLY AVAILABLE. IN FACT, WIND POWER IS THE FASTEST GROWING SOURCE OF ELECRICITY IN THE U.S. AND THE U.S. IS NOW THE LARGEST PRODUCER OF WIND POWER IN THE WORLD.

BUT WE NEED STABLE AND PREDICTABLE FEDERAL POLICIES TO ENSURE WE DON'T GO THROUGH BOOM AND BUST CYCLES IN DEVELOPMENT OF THESE IMPORTANT ENERGY SOURCES.

NUCLEAR ENERGY IS NOT EXACTLY A NEW ENERGY SOURCE EITHER, BUT WE MUST USE TECHNOLOGY TO HELP OVERCOME THE CHALLENGES OF COST AND WASTE DISPOSAL, ALONG WITH PERCEIVED SAFETY ISSUES. IT'S CRITICAL THAT NUCLEAR ENERGY PLAY A MUCH LARGER ROLE THAN IT CURRENTLY DOES OR IS EVEN ENVISIONED IN TERMS OF A MAJOR ENERGY SOURCE WITH LITTLE ENVIRONMENTAL IMPACT.

TO WRAP UP ON ALTERNATIVE ENERGY SOURCES, NONE OF THESE OPTIONS ALONE WILL MEET OUR NEEDS, BUT EACH WILL HAVE ITS OWN NICHE AND IN TOTAL, THEY ARE CAPABLE OF INCREASING THE SUPPLY AND DIVERSITY OF ENERGY SOURCES.

THE THIRD KEY THEME OF A U.S. ENERGY SECURITY
STRATEGY LIES IN INNOVATION AND THE DEVELOPMENT
AND APPLICATION OF NEW TECHNOLOGIES.

TECHNOLOGY IS VITALLY IMPORTANT IN INCREASING THE SUPPLY OF ENERGY, IN MODERATING DEMAND, AND IN PROTECTING THE ENVIRONMENT.

HOWEVER, IN MY VIEW, NO AREA OF INNOVATION OR TECHNOLOGY DEVELOPMENT IS OF A HIGHER PRIORITY THAN CARBON CAPTURE AND SEQUESTRATION, OR CCS.

AS I INDICATED EARLIER, FOSSIL FUELS – OIL, NATURAL GAS AND COAL – ARE GOING TO CONTINUE TO BE THE DOMINANT SOURCES OF ENERGY FOR THE U.S. AND THE WORLD FOR A LONG TIME.

OBVIOUSLY WITH GROWTH IN THE CONSUMPTION OF THESE ENERGY RESOURCES, THERE WILL BE INCREASES IN CO<sub>2</sub> EMISSIONS, ABOUT 1.6 PERCENT PER YEAR THROUGH 2030 BASED ON GOVERNMENT POLICIES ADOPTED BEFORE MID 2008.

MOST OF THE INCREASES WILL OCCUR IN THE NON-OECD COUNTRIES WHERE THERE IS STRONG DEMAND GROWTH IN BOTH TRANSPORTATION AND POWER GENERATION WITH A HEAVY RELIANCE ON COAL.

SO IN ORDER TO PROTECT THE ENVIRONMENT, WE MUST CAPTURE AND PERMANENTLY SEQUESTER A LARGE FRACTION OF THE CO<sub>2</sub> PRODUCED BY CONSUMING THESE FOSSIL FUELS.

WHILE MOST OF THE TECHNOLOGIES FOR CCS ARE ESSENTIALLY AVAILABLE, MUCH REMAINS TO BE DONE IN IMPROVING THE CAPTURE STAGE, DEMONSTRATING FEASIBILITY ON A VERY LARGE SCALE, AND LOWERING THE COST.

THERE ARE SEVERAL MAJOR CCS PROJECTS UNDERWAY AROUND THE WORLD TODAY BUT WE NEED GREATER COLLABORATION AND TEAMWORK BETWEEN PRIVATE, ACADEMIC, AND GOVERNMENT ENTITIES TO ACCELERATE THE VIABILITY AND COMMERCIAL APPLICATION OF CCS. IN FACT, A KEY STRATEGY RECOMMENDATION OF THE NATIONAL PETROLEUM COUNCIL IS FOR OUR NATION TO "DEVELOP THE LEGAL AND REGULATORY FRAMEWORK TO ENABLE CARBON CAPTURE AND SEQUESTRATION."

BY WAY OF EXAMPLE, I AM PLEASED TO TELL YOU THAT MARATHON, ALONG WITH OUR ATHABASCA OIL SANDS PROJECT PARTNERS, ARE PURSUING A CCS PROJECT THAT WILL CAPTURE 1.2 MILLION TONNES OF CO<sub>2</sub> ANNUALLY AT OUR UPGRADER AND SEQUESTER IT IN A SALINE AQUIFER.

SO IN CLOSING......I'VE BEEN IN THE OIL AND NATURAL GAS INDUSTRY FOR 36 YEARS AND I'VE SEEN A LOT OF CHANGE IN THE BUSINESS. BUT AT NO TIME IN MY CAREER HAVE I EXPERIENCED A TIME OF MORE DRAMATIC AND RAPID CHANGE THAN WHAT'S HAPPENING TODAY.

THINK OF IT – IN THE SPAN OF JUST THE PAST FEW MONTHS, THE PRICE OF CRUDE OIL FELL FROM A RECORD HIGH OF \$145 PER BARREL TO JUST UNDER \$60 PER BARREL TODAY.

OUR INDUSTRY HAS ALWAYS CONFRONTED PRICE **VOLATILITY, GEOLOGIC AND GEOPOLITICAL RISK, AND** TREMENDOUS UNCERTAINTY AND STILL MET THE ENERGY DEMANDS OF OUR NATION AND THE WORLD. BUT GIVEN THE MAGNITUDE OF THE ENERGY, ENVIRONMENTAL, AND ECONOMIC CHALLENGES WE FACE, I'M HOPEFUL THAT GOING FORWARD, WE, INCLUDING IOGCC, WILL BE CONSIDERED AND ENGAGED AS PART OF THE SOLUTION. RATHER THAN THE PROBLEM OR THE OPPOSITION, AND WILL HAVE A PLACE AT THE TABLE IN DEVELOPING THE BALANCED, INTEGRATED SOLUTIONS THAT INCLUDE SLOWING THE RATE OF GROWTH IN ENERGY DEMAND, PROVIDING INCREASED SUPPLIES OF ENERGY FROM DIVERSE SOURCES, ALL THE WHILE MINIMIZING THE IMPACT ON OUR ENVIRONMENT.

TO ME AND MY 30,000 FELLOW MARATHON EMPLOYEES,
AND ALL OF OUR COLLEAGUES THROUGHOUT THE
INDUSTRY, ENERGY SECURITY ISN'T A GLIB PHRASE THAT
CAN BE USED IN SPEECHES OR POSTED ON OUR WEB
SITE OR HUNG ON OFFICE WALLS.

RATHER, ENERGY SECURITY IS WHAT OUR WORK IS ALL ABOUT AS WE PROUDLY DELIVER AFFORDABLE, RELIABLE ENERGY THAT'S VITAL TO OUR STANDARD OF LIVING AND THE ECONOMIC WELL-BEING OF OUR COUNTRY AND THE WORLD.

THANK YOU FOR HAVING ME HERE TODAY, AND NOW I'M EAGER TO HEAR YOUR COMMENTS AND QUESTIONS ON THIS VITAL TOPIC.