

0588

1 DR. WALSH: GOOD MORNING, EVERYONE. GREAT  
2 TO SEE YOU SURVIVED THE EARTHQUAKE. WE'VE HAD FLASH  
3 FLOODS AND AN EARTHQUAKE. WHAT BETTER WAY TO WELCOME  
4 YOU TO THE BIG ISLAND?

5 I'M YOUR MODERATOR FOR TODAY, ALTHOUGH THIS  
6 MORNING ROB SOCOLOW WILL BE HANDLING THE FIRST TWO  
7 PANELS. I'M MICHAEL WALSH WITH THE CHICAGO CLIMATE  
8 EXCHANGE, AND I HAVE THE HONOR OF SERVING AS THE  
9 CO-CHAIR OF THE ORGANIZING COMMITTEE. SO I THANK YOU  
10 ALL VERY MUCH FOR YOUR TREMENDOUS EFFORTS AND YOUR  
11 COMING ALL THE WAY TO HAWAII.

12 I THINK TODAY IS GOING TO BE A VERY  
13 INTERESTING DAY TO SUM UP AND PROVIDE SOME DEGREE OF  
14 INFORMATIONAL CLOSURE TO THE TREMENDOUS SCIENTIFIC  
15 INFORMATION THAT WE HAVE SHARED WITH YOU THE LAST  
16 COUPLE OF DAYS.

17 WE'VE GOT MITIGATION OPTION SESSIONS  
18 CHAIRED BY DR. SOCOLOW. I WILL BE MODERATING A PANEL  
19 INVOLVING THREE OF THE VERY CUTTING-EDGE STATE-LEVEL  
20 POLICY INITIATIVES THAT ARE ONGOING. IN THE EARLY  
21 AFTERNOON, I WILL DO A BRIEF OVERVIEW, SORT OF AN  
22 INTERNATIONAL REVIEW OF WHERE CARBON MARKETS ARE AND  
23 USE OUR OWN EXCHANGE AS A CASE STUDY AND TALK A  
24 LITTLE BIT ABOUT THE POLICY ENVIRONMENT AT THE U.S.  
25 NATIONAL LEVEL. BUT I HAVE TO REMIND YOU THAT WE

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1 HAVE A VERY EXCITING CLOSING PANEL. SO THOSE OF YOU  
2 HEADED TO THE GOLF COURSE, MAKE IT A MINI GOLF COURSE  
3 AND CHANGE YOUR PLANS. THE 3:45-TO-5:00 PANEL IS  
4 GOING TO BE A TERRIFIC, REALLY A WORLD-CLASS GROUP OF  
5 FOLKS THAT RAY WEISS WILL MODERATE. WE'LL HAVE RALPH  
6 CICERONE; SUSAN SOLOMON; PIETER TANS; JOANNE MORIN  
7 FROM NEW HAMPSHIRE, WHO YOU'LL MEET LATER THIS  
8 MORNING; INEZ FUNG FROM THE UNIVERSITY OF CALIFORNIA,  
9 BERKLEY; AND BRUCE BRAINE FROM AMERICAN ELECTRIC  
10 POWER. AND I'M SETTING THE BAR HIGH FOR THAT ONE. I  
11 WANT THAT SESSION TO MAKE THAT FIRE DANCER LAST NIGHT  
12 LOOK LIKE A CHILDISH LOW-RISK AMATEUR. ALL RIGHT.  
13 SO WE WANT SOME EXCITEMENT.

14 (LAUGHTER)

15 THAT WAS GREAT ENTERTAINMENT.

16 WITH THAT, LET ME JUST BRIEFLY INTRODUCE  
17 OUR SPEAKERS THIS MORNING; AND ROB WILL TAKE IT  
18 FURTHER.

19 OF COURSE, YOU KNOW ROB SOCOLOW FROM  
20 PRINCETON UNIVERSITY. AND ROB WILL FURTHER INTRODUCE  
21 THE PANEL, WHICH WILL FEATURE DR. CHUCK KUTSCHER, WHO  
22 YOU HAVE SEEN IN THE LAST COUPLE OF DAYS FROM THE  
23 NATIONAL RENEWABLE ENERGY LAB IN GOLDEN; AND FOR THE  
24 FIRST TIME ON THE PANEL, DR. JULIO FRIEDMANN, WHO IS  
25 THE CARBON MANAGEMENT PROGRAM LEADER FROM LAWRENCE

0590

1 LIVERMORE NATIONAL LABORATORY, WHERE HE LEADS  
2 INITIATIVES AND RESEARCH INTO CARBON CAPTURE,  
3 STORAGE, AND FOSSIL FUEL RECOVERY AND UTILIZATION.

4 I'M GOING TO STEP DOWN FROM THE PODIUM AND

5 LET ROB TAKE IT OVER. BUT I WAS ALSO ADVISED TO TELL  
6 YOU THAT THOSE SPECIAL MUGS THAT ARE IN YOUR GIFT  
7 PACKAGE HAVE A VERY UNIQUE GEOPHYSICAL FEATURE. PUT  
8 WARM WATER OR COFFEE OR TEA IN THE CUPS AND WATCH  
9 WHAT HAPPENS TO THE COASTLINES. THERE'S SOME  
10 ENTERTAINMENT FACTOR THERE, AS WELL.

11 DR. SOCOLOW, PLEASE TAKE IT OVER.  
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0591

1 SESSION 10  
2 MITIGATION OPTIONS: PART 1

3 [Socolow's introductory presentation was removed from this file.]

4 (APPLAUSE)

[Kutscher's presentation was removed from this file.]

24 (APPLAUSE)

11 DR. SOCOLOW: OKAY. WE WANT TO KEEP MOVING  
12 RIGHT ALONG.

13 JULIO FRIEDMANN, AT LAWRENCE LIVERMORE LAB.  
14 LET ME INTRODUCE HIM WITH THE OBSERVATION THAT FOR  
15 SEVEN YEARS, STEVE PACALA AND I HAVE RUN A CARBON  
16 CAPTURE AND STORAGE-BASED RESEARCH PROGRAM CALLED THE  
17 CARBON MITIGATION INITIATIVE IN THE BUILDING WHICH  
18 HOUSES THE GEOLOGY DEPARTMENT, INCLUDING SOME QUITE  
19 EMINENT HARD ROCK GEOLOGISTS; AND I DON'T THINK THERE  
20 HAS BEEN A SINGLE OCCASION IN WHICH ONE OF THOSE HARD  
21 ROCK GEOLOGISTS HAS COME IN AND SAID, "WHERE DO I FIT  
22 IN?" THE QUESTION I KEEP ASKING YOU.

23 JULIO, SOME YEARS BACK AND FOR REASONS  
24 PERHAPS HE'LL EXPLAIN IN HIS OPENING REMARKS, HAS  
25 FELT A CALLING TO LEGITIMATE THE STUDY OF CARBON

0620

1 CAPTURE AND STORAGE IN THE GEOLOGY PROFESSION; AND HE  
2 HAS DONE THAT FROM VARIOUS VANTAGE POINTS. HE'S  
3 TAKEN THE TROUBLE TO EDUCATE HIMSELF ABOUT THE  
4 ENGINEERING ABOVE-GROUND THAT GOES WITH THE GEOLOGY  
5 BELOW-GROUND. AND YOU'RE IN FOR A TREAT.

6 PLEASE WELCOME JULIO FRIEDMANN.

7 (APPLAUSE)

[Friedmann's presentation was removed from this file.]

8 (APPLAUSE)  
18 DR. SOCOLOW: OKAY. SO WE HAVE A FEW  
19 MINUTES FOR QUESTIONS. WE'LL CUT INTO THE COFFEE  
20 HOUR BY JUST A LITTLE BIT; A COFFEE HALF HOUR. AND  
21 ADDRESS THEM TO ANY ONE OF THE THREE OF US, AND  
22 HOPEFULLY TO THE OTHER TWO.  
23 STATE YOUR NAME FOR THE REPORTER.

[Q&A for Kutscher and Friedmann was removed from this file.]

24 DR. SOCOLOW: OKAY. LET'S THANK THE  
10 SPEAKERS, AND 15 MINUTES IS ALL WE'RE GOING TO HAVE  
11 FOR THE COFFEE BREAK. BE HERE AT 10:15.  
12 (APPLAUSE)  
13 (BREAK)  
14 DR. WALSH: THANK YOU.  
15 I WAS ASKED TO MAKE AN ANNOUNCEMENT OF SOME  
16 INTEREST TO YOU FOLKS. I THINK IT'S AN OPPORTUNITY  
17 TO WIN A DOOR PRIZE, A HIGHLY VALUABLE DOOR PRIZE,  
18 IT'S A NOAA WEATHER RADIO. WHEN YOU VISIT THE BIG  
19 ISLAND, YOU MIGHT WANT TO HAVE IT HANDY.  
20 IN THE POSTER AREA, JUST BEHIND THIS WALL,  
21 THERE IS A BIG NOAA DISPLAY, A BEAUTIFUL ONE. PUT  
22 YOUR BUSINESS CARD IN THERE, BUT PLEASE ONLY ONE CARD  
23 PER CUSTOMER.  
24 THANK YOU.

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1 SESSION 11  
2 MITIGATION OPTIONS: PART 2  
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4 DR. WALSH: FOR THE NEXT SESSION, AGAIN,  
5 DR. ROB SOCOLOW WILL MODERATE.  
6 DAVID KEITH IS DIRECTOR OF THE INSTITUTE  
7 FOR SUSTAINABLE ENERGY ENVIRONMENT AND ECONOMY ENERGY  
8 AND ENVIRONMENTAL SYSTEMS GROUP, AT THE UNIVERSITY OF  
9 CALGARY.  
10 DAVID KARL, MANY OF YOU KNOW, OF COURSE, IS  
11 PROFESSOR OF OCEANOGRAPHY AT THE SCHOOL OF OCEAN AND  
12 EARTH SCIENCE AND TECHNOLOGY AT THE UNIVERSITY OF  
13 HAWAII.  
14 DR. SOCOLOW, TAKE IT AWAY, PLEASE.  
15 (APPLAUSE)

[Socolow's introductory presentation was removed from this file.]

23 (APPLAUSE)

[Keith's presentation was removed from this file.]

7 DR. SOCOLOW: OKAY. SO THE SAME ISSUES IN  
8 A VERY DIFFERENT FRAMING IN THE OCEAN; A DIFFERENT  
9 APPLICATION, I SHOULD SAY. A LITTLE MORE PRESENT, AS  
10 SOME OF YOU KNOW, COMPANIES ARE ABOUT TO SELL CREDITS  
11 FOR GEOENGINEERING IN THE OCEAN, OR ARE SELLING  
12 CREDITS.

13                   DAVID KARL KNOWS ABOUT THIS SUBJECT. HE'S  
14 BEEN VERY THOUGHTFULLY ENGAGED IN IT. HE IS OUR  
15 HAWAIIAN ON THE PROGRAM IN THE SENSE THAT HE HAS BEEN  
16 AT THE UNIVERSITY OF HAWAII FOR 30 YEARS. HIS FIELD  
17 IS MICROBIAL OCEANOGRAPHY; AND HE HAS, IT SAYS IN THE  
18 PROGRAM, GOT THE OCEAN ANALOGUE OF MAUNA LOA IN THE  
19 SENSE THAT THEY HAVE -- THEY OWN A HOT SPOT, A  
20 SPECIFIC LOCATION IN THE OCEAN THAT THEY HAVE BEEN  
21 MONITORING FOR 19 YEARS. SO BOOK YOUR PLANE TRAVEL  
22 FOR 31 YEARS FROM NOW WHEN WE CELEBRATE THE 50TH  
23 ANNIVERSARY OF A SPOT IN THE OCEAN CALLED ALOHA.

24                   DAVID.  
25                   PLEASE WELCOME DAVID KARL.

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1                   (APPLAUSE)

[Karl's presentation was removed from this file.]

2                   (APPLAUSE)  
15                  DR. SOCOLOW: SO WE WILL TAKE SOME MINUTES  
16 FOR QUESTIONS. I'VE BEEN TOLD WE'RE ALLOWED TO DO  
17 THAT, ALTHOUGH OUR OFFICIAL TIME IS REACHED AT THIS  
18 MOMENT. SO QUESTIONS FOR DAVID KARL AND DAVID KEITH,  
19 OR ABOUT THE TOPIC AS A WHOLE.  
20                  SUSAN IS LEADING OFF.

[Q&A for Keith and Karl was removed from this file.]

21                  (APPLAUSE)  
15                  (BREAK)

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0729

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2                                   SESSION 12  
3                                   REGIONAL EFFORTS

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5                  DR. WALSH: FIRST, I'M HONORED TO INTRODUCE  
6 THE HONORABLE FRAN PAVLEY. MS. PAVLEY HAS SERVED  
7 THREE TERMS IN THE CALIFORNIA STATE ASSEMBLY, WHERE  
8 SHE HAS ESTABLISHED A REPUTATION AS A HIGHLY  
9 EFFECTIVE LEGISLATOR IN A WIDE VARIETY OF AREAS, MANY  
10 OF THEM OF GREAT ENVIRONMENTAL IMPORTANCE. IN FACT,  
11 SHE IS THE CO-AUTHOR OF THE CALIFORNIA ASSEMBLY  
12 BILL 32, THE GLOBAL WARMING SOLUTIONS ACT OF 2006,  
13 WHICH CODIFIES THE STATE'S GOAL BY REQUIRING THAT THE  
14 STATE-WIDE GREENHOUSE GAS EMISSIONS BE REDUCED TO  
15 1990 LEVELS BY 2020 BUT ALSO HAS LONGER-TERM  
16 OBJECTIVES, AS WELL.

17 SHE IS ALSO THE AUTHOR OF SOMETHING THAT IS  
18 WIDELY REFERRED TO AROUND THE CONTINENT AS THE PAVLEY  
19 BILL, WHICH INSTRUCTS THE CALIFORNIA RESOURCES BOARD  
20 TO ADOPT REGULATIONS THAT ACHIEVE THE MAXIMUM  
21 FEASIBLE, COST-EFFECTIVE, AND TECHNOLOGICALLY  
22 ACHIEVABLE REDUCTIONS OF GREENHOUSE GASSES FROM NEW  
23 PASSENGER VEHICLES. NUMEROUS STATES AND PROVINCES  
24 HAVE REPLICATED THIS AUTOMOBILE EFFICIENCY STANDARD.  
25 AND THEN THE NOTES SAY TO ME HERE, PROBABLY

0730

1 DO NOT WANT TO SAY THIS BECAUSE IT COULD LOOK LIKE A  
2 CAMPAIGN ENDORSEMENT, BUT FOR YOUR INFORMATION, SHE  
3 IS RUNNING FOR STATE SENATE IN 2008. SO I HAVE TO  
4 RETRACT MY EARLIER STATEMENT.

5 FRAN PAVLEY.  
6 (APPLAUSE)

[Pavley's presentation was removed from this file.]

7 (APPLAUSE)  
16 DR. WALSH: THANK YOU, FRAN.  
17 THESE PANELISTS HAVE GRACIOUSLY AGREED TO  
18 DO REALLY SHORT PRESENTATIONS. THEY CAME A VERY LONG  
19 WAY; AND I WOULD LOVE TO HAVE TIME IN THE FOLLOW-UP,  
20 WHICH WE WILL HAVE, TO HEAR SOME OF THE WAR STORIES.  
21 I IMAGINE THERE ARE A FEW IN EACH OF YOUR CASES.  
22 NEXT WE HAVE JOANNE MORIN FROM THE STATE OF  
23 NEW HAMPSHIRE.  
24 JOANNE IS THE MANAGER OF THE CLIMATE AND  
25 ENERGY PROGRAMS FOR THE AIR DIVISION OF THE NEW

0739

1 HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICE. SHE'S  
2 RESPONSIBLE FOR MANY INITIATIVES TO PROMOTE CLEANER  
3 ENERGY SOURCES, ENERGY EFFICIENCY, AND CONSERVATION  
4 IN THE TRANSPORTATION, POWER GENERATION, COMMERCIAL,  
5 INDUSTRIAL AND RESIDENTIAL SECTORS. FOR THE PAST  
6 THREE YEARS, SHE HAS SERVED AS THE NEW HAMPSHIRE  
7 REPRESENTATIVE ON THE STAFF WORKING GROUP FOR THE  
8 REGIONAL GREENHOUSE GAS INITIATIVE, AN EMERGING  
9 CAP-AND-TRADE PROGRAM FOR LIMITING CARBON DIOXIDE  
10 EMISSIONS FROM MAJOR ELECTRIC POWER PLANTS IN THE 10  
11 NORTHEASTERN STATES.

12 JOANNE, WE LOOK FORWARD TO YOUR  
13 PRESENTATION.

14 [Morin's presentation was removed from this file.]

(APPLAUSE)  
20 DR. WALSH: THANK YOU SO MUCH, JOANNE.  
21 TERRIFIC PRACTICAL INSIGHTS, AS WELL AS THE POLITICAL  
22 INSIGHTS, WHICH A REMINDER, I MEAN THE PARTS OF THE  
23 COUNTRY REPRESENTED BY THESE PANELISTS TEND TO BE  
24 MORE POLITICALLY LIBERAL AND, HENCE, THE CHALLENGE  
25 THAT WE'LL SEE IN THE FORTHCOMING FUTURE HERE WITH

0751

1 CONGRESS AS TO WHAT IS THE APPETITE AND WHAT IS THE  
2 COST TOLERANCE IN ALL OF THIS DEBATE.  
3 NOW, LET'S COMPLETE THE PRESENTATION WITH

4 MR. DAVID VAN'T HOF. DAVID IS A SUSTAINABILITY  
5 POLICY ADVISOR FOR OREGON GOVERNOR TED KULONGOSKI.  
6 HIS AREA OF FOCUS INCLUDES IMPLEMENTING THE  
7 GOVERNOR'S EXECUTIVE ORDER ON SUSTAINABILITY,  
8 DIRECTING THE GOVERNMENT'S CLIMATE CHANGE  
9 INITIATIVES, AND FOSTERING THE DEVELOPMENT OF  
10 RENEWABLE ENERGY AND ASSOCIATED TECHNOLOGIES IN  
11 OREGON.

12 THERE'S MORE INFORMATION ON DAVE'S VERY  
13 INTERESTING PERSONAL BACKGROUND IN THE BOOKLET.  
14 DAVID.

[Van't Hof's presentation was removed from this file.]

15 (APPLAUSE)

23 DR. WALSH: I THINK WE HAVE AN INTERESTING  
24 OBSERVATION FROM DAVID WHEN YOU HAVE THE STATES OF  
25 KANSAS AND IOWA TEAMING UP WITH OTHER SIGNIFICANT

0761

1 COAL-PRODUCING AND CONSUMING STATES. YOU KNOW THIS  
2 REGIONAL CONCEPT IS CONTAGIOUS. IT IS A VERY  
3 INTERESTING DEVELOPMENT.

4 SO I'M HOPING WE CAN HAVE SOME QUESTIONS  
5 COMING FORWARD.

6 YES, SIR.

[Q&A for Pavley, Morin and Van't Hof was removed from this file.]

7 LET ME JUST CLOSE WITH A COUPLE OF SHORT

0779

1 HOUSEKEEPING ANNOUNCEMENTS BEFORE I SAY MY THANKS TO  
2 THE PANELISTS.

3 JIM BUTLER HAD ASKED IF EVERYBODY COULD  
4 ASSEMBLE AFTER LUNCH FOR A GROUP PHOTO. AND I THINK  
5 GIVEN THE MAGNITUDE OF THIS EVENT AND THE HISTORY IT  
6 REPRESENTS, I WOULD REALLY APPRECIATE IF YOU COULD  
7 JOIN IN THAT GROUP PHOTO.

8 AND FINALLY, FOR THOSE WHO MAY FIND  
9 THEMSELVES SHUT OUT, THE TRIP TO THE OBSERVATORY  
10 TOMORROW IS CANCELLED. THERE WILL BE A REFUND. BUT,  
11 AGAIN, THERE'S STILL A HANDFUL OF OPENINGS FOR THE  
12 BUS PENDING THE WEATHER CONDITIONS.

13 BUT LET ME ASK YOU TO GIVE A VERY SINCERE  
14 ROUND OF THANKS TO OUR PANELISTS WHO CAME A LONG WAY  
15 TO TALK ABOUT THIS ISSUE.

16 (APPLAUSE)

17 (BREAK)

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ECONOMIC TOOLS & FINANCIAL INCENTIVES

15 DR. BUTLER: WE CAN TAKE ABOUT 10 MINUTES  
16 ON QUESTIONS.  
17 (APPLAUSE)

[Q&A for Walsh was removed from this file.]

18 (APPLAUSE)

23 DR. BUTLER: OKAY. BEFORE YOU HEAD OUT  
24 HERE, WE'RE GOING TO MAKE THIS -- BE VERY MEAN AND  
25 CRUEL TO YOU, AND WE'RE GOING TO CUT THIS BREAK TO  
0821

1 15 MINUTES SO WE CAN GET BACK ON SCHEDULE. THAT'S  
2 BECAUSE WE WANT TO HAVE A FULL PANEL THIS AFTERNOON,  
3 AND AFTER 5:00 THAT BECOMES DIFFICULT.

4 SO YOU GOT ABOUT A 15-MINUTE BREAK. GET  
5 BACK HERE AT 3, AND WE'LL START OFF WITH WOUTER  
6 PETERS' TALK, AND THAT WILL BE ON CARBON TRACKER. IT  
7 WILL BE FOLLOWED BY THE PANEL.

8 SO GRAB A QUICK CUP, TAKE CARE OF THE OTHER  
9 BUSINESS, AND SEE YOU BACK SHORTLY.

10 THANK YOU VERY MUCH.

11 (BREAK)

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0822

1 SESSION 14  
2 FUTURE MEASUREMENTS AND RESEARCH  
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4 DR. WALSH: WE HAVE SOME METEOROLOGICAL  
5 NEWS: THE TRIP TO MAUNA LOA LOOKS LIKE IT'S ON OR  
6 LIKELY TO BE ON. AND JUST A REMINDER: THOSE GOING  
7 ON THE TRIP, MEET IN THE LOBBY AT 8:30 TOMORROW. BE  
8 PREPARED FOR COLD AND WET WEATHER. OKAY? YOU KNOW  
9 IT'S AT HIGH ALTITUDE, AND LOTS OF MOISTURE IN THE  
10 AIR.

11 WE WANT TO MOVE ON TO OUR NEXT SPEAKER.

12 WOUTER PETERS HAS JOINED US FROM THE  
13 NETHERLANDS. HE'S THE PERSON WHO DEVELOPED THE  
14 CARBON TRACKER. THIS IS THE FIRST AND CURRENTLY THE  
15 BEST OBSERVATION-BASED MAPS OF CO2 FLUXES AND CO2  
16 WEATHER.

17 I'M VERY MUCH LOOKING FORWARD TO AN  
18 INTRIGUING PRESENTATION.  
19 DR. PETERS.  
20 (APPLAUSE)

[Peters' presentation was removed from this file.]

21 (APPLAUSE)  
5 MR. WALSH: IF WE CAN HAVE THE QUESTIONS BE  
6 VERY CRISP, BECAUSE WE ONLY HAVE A SHORT TIME.  
7 (APPLAUSE)

[Q&A for Peters was removed from this file.]

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1 SESSION 15  
2 PANEL DISCUSSION: NEW RESEARCH FOR A COMMITTED WORLD  
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[Panel moderated by Weiss was removed from this file.]

4 (APPLAUSE)  
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0911

1 CONCLUDING REMARKS  
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3 DR. BUTLER: PLEASE DON'T LEAVE YET. WE'VE  
4 GOT A FEW CLOSING REMARKS FROM KEY PLAYERS IN THIS  
5 CONFERENCE AND PUTTING IT TOGETHER. IT WILL BE  
6 SHORT, I KNOW. IT WAS GIVEN A HALF AN HOUR ON THE  
7 PROGRAM. THEY'VE ALL PROMISED ME THAT IT WILL BE  
8 BRIEF. THERE WILL BE NO SLIDES. THERE'S A FEW  
9 THINGS IN SUMMARY THAT THEY DO WANT TO BRING UP.  
10 AND THAT WOULD BE TONY HAYMET, WHO IS THE DIRECTOR OF  
11 SCRIPPS INSTITUTION OF OCEANOGRAPHY, A MAJOR PLAYER

12 IN PUTTING THIS TOGETHER. THIS CONFERENCE BEGAN WITH  
13 DISCUSSIONS BETWEEN NOAA AND SCRIPPS TO BUILD IT.  
14 SECOND WOULD BE MIKE WALSH FROM THE CHICAGO CLIMATE  
15 EXCHANGE. YOU'VE BEEN ENTERTAINED BY MIKE ALL DAY,  
16 SO YOU KNOW WHO HE IS.

17 AND SANDY MACDONALD, WHO IS HERE UNDER  
18 SEVERAL CAPACITIES, ACTUALLY THREE SINCE HE'S BEEN  
19 SITTING HERE FOR RICK SPINRAD, WHO CAN'T BE HERE, BUT  
20 SANDY IS ALSO THE DEPUTY FOR LABS AND PROGRAMS AT  
21 OAR, AND HE IS DIRECTOR OF NOAA'S EARTH SYSTEM  
22 RESEARCH LABORATORY. HE WILL WRAP UP THE FINAL  
23 REMARKS.

24 SO I'M GOING TO STEP DOWN AND LET THESE  
25 THREE GENTLEMEN TAKE IT.

0912

1 TONY, WOULD YOU LIKE TO LEAD IT OFF.  
2 (APPLAUSE)

[Haymet's concluding presentation was removed from this file..]

0920

1 DR. WALSH: I WOULD LIKE TO OFFER A COUPLE  
2 OF CLOSING OBSERVATIONS.

3 FIRST, IT'S AMAZINGLY HUMBLING TO BE WITH  
4 AN AUDIENCE AND A GROUP OF SPEAKERS OF SUCH  
5 CAPABILITY; AND IT HAS REALLY BEEN AN HONOR TO WORK  
6 WITH EVERYBODY ASSOCIATED WITH THIS EVENT; THE  
7 ORGANIZERS, SPEAKERS, AND DELEGATES. I WOULD  
8 ESPECIALLY LIKE TO SAY THANK YOU TO DR. MELINDA  
9 MARQUIS, TO JOY WILLIAMS, AND TO JIM BUTLER, WHO JUST  
10 DID YEOMEN'S WORK IN MAKING THIS HAPPEN.

11 CAN WE PLEASE GIVE THEM A BIG HAND.  
12 (APPLAUSE)

13 JIM'S ADVICE TO THE CHEF LAST NIGHT TURNED  
14 OUT PERFECT.

15 I DO WANT TO CLOSE ON A NOTE OF OPTIMISM.  
16 WE'RE SEEING EVERY DAY PEOPLE FINDING WIN-WIN  
17 SOLUTIONS TO THIS ISSUE, AND THEY'RE VERY PROUD OF  
18 WHAT THEY'RE DOING. THERE IS NOT THIS MONOLITH OF  
19 RESISTANCE. IN FACT, THERE'S A WHOLE LOT OF FOLKS  
20 THAT ARE MOVING VERY NICELY FORWARD, SAVING MONEY FOR  
21 THE COMPANIES, MAKING THEIR BUSINESSES WORK BETTER.  
22 BUT LET ME REFER TO ONE OF THE COMMENTS THAT I HEARD.  
23 IN CASE THERE IS ANY DOUBT, MY OBSERVATION IS WE NEED  
24 THE VERY BEST SCIENCE WE CAN POSSIBLY GET ON A  
25 CONTINUOUS, ONGOING, AND EXPANDING BASIS. WE'RE

0921

1 ABOUT TO ENDEAVOR ON A COURSE GLOBALLY, WE'RE GOING  
2 TO SPEND TRILLIONS OF DOLLARS TO ADDRESS THIS ISSUE.  
3 WE HAVE TO UNDERSTAND WHAT THE HECK WE'RE SPENDING  
4 OUR MONEY ON. WE HAVE TO UNDERSTAND WHAT GLOBAL  
5 IMPACTS WE'RE TRYING TO ADDRESS, WHAT GLOBAL IMPACTS  
6 WE'RE TRYING TO REDRESS, AND WHAT MITIGATION OPTIONS  
7 WORK BEST AND HOW TO MAKE THEM WORK EVEN BETTER.

8 NOW, THE BIG PICTURE ON THIS ISSUE, IT IS  
9 EASY TO BE SORT OF DEPRESSED. THIS IS AN EXTREMELY  
10 DIFFICULT, CHALLENGING, AND RISKY ISSUE; BUT WE, AS A  
11 COUNTRY, HAVE FACED INCREDIBLY DIFFICULT CHALLENGES

12 BEFORE. I REALLY ENCOURAGE YOU TO WATCH THAT SERIES  
13 CALLED "THE WAR." YOU WANT TO TALK ABOUT CHALLENGES  
14 IN TOUGH TIMES, AND I THOUGHT ABOUT SENATOR INOUE IN  
15 THE CONTEXT OF THAT, WHAT A HERO YOU HAD KICK THIS  
16 EVENT OFF.

17 NOW, THERE'S ALWAYS DOUBTERS, THERE'S  
18 ALWAYS BIG CHALLENGES, THERE'S ALWAYS CRITICS. I'M  
19 NOT SO OLD TO SAY THAT I HAVE BEEN DOWN THIS ROAD  
20 BEFORE, BUT I HAVE BEEN DOWN PART OF THE PATHWAY  
21 BEFORE. AND YOU HAVE TO STAY WITH IT. YOU ALL KNOW  
22 THIS. IF YOU WORK IN THE STATES, THEN YOU HAVE TO BE  
23 OPTIMISTIC TO DO THE JOBS YOU DO. YOU CAN'T LET THE  
24 PERFECT BE THE ENEMY OR WE WON'T BE MAKING THE  
25 PROGRESS WE NEED TO WORK. IT IS A HUMBLING SPACE.

0922

1 KEEP UP YOUR HARD WORK. IT'S AN HONOR TO WORK ON  
2 SOMETHING SO IMPORTANT. MY KIDS SAY, YOU KNOW,  
3 THEY'RE PROUD OF ME, AND THAT'S A NICE THING.

4 THERE ARE SOLUTIONS TO THIS ISSUE. I THINK  
5 SUSAN PUT IT RIGHT IN TALKING ABOUT MANAGING THE  
6 CHALLENGE, AND WE DO KNOW WHAT WE NEED TO DO, THANKS  
7 TO MUCH OF YOUR GOOD WORK.

8 BUT THAT SAID, IT'S TIME TO MOVE. WE NEED  
9 MORE TESTS. WE NEED MORE KNOWLEDGE. WE NEED MORE  
10 EXPANSION OF THE SKILL SETS ON A GLOBAL BASIS. WE  
11 NEED TO BE ABLE TO DELIVER CAPITAL TO THE SOLUTIONS  
12 ON A GLOBAL BASIS. WE NEED TO ADDRESS VERY TRICKY  
13 SCIENTIFIC AND SOCIOLOGIC ISSUES LIKE SLOWING DOWN  
14 DEFORESTATION. WE NEED TO FACE THIS BIGGEST  
15 CHALLENGE OF HOW WE'RE GOING TO HAVE OUR BROTHERS AND  
16 SISTERS IN THE DEVELOPING WORLD ENJOY THE BENEFITS OF  
17 ECONOMIC PROSPERITY AND LIVING STANDARDS AND HAVING A  
18 CHANCE TO HAVE YOUR KIDS GET EDUCATION, AND ALL THESE  
19 FUNDAMENTAL THINGS WE TAKE ADVANTAGE OF. HOW DO THEY  
20 DO THAT WITHOUT REALIZING THE CO2 FOOTPRINT THAT WE'VE  
21 EXPERIENCED IN THE WEST?

22 SO, AGAIN, THE SOLUTIONS ARE BEING TESTED  
23 AND IMPLEMENTED EVERY DAY. I'M INCREDIBLY PROUD OF  
24 THE 400 MEMBERS OF THE CHICAGO CLIMATE EXCHANGE, AND  
25 THEY'RE JUST AN EXAMPLE OF THE ACTION THAT'S GOING

0923

1 ON. THE MECHANICS OF COMPREHENSIVE CAP-AND-TRADE  
2 SYSTEM HAVE BEEN BUILT, TESTED, AND I THINK PROVEN.  
3 THIS CAN BE DONE, AND IT CAN DELIVER AN AFFORDABLE  
4 SOLUTION WHEN YOU PARTNER THE POWER OF THE MARKET AND  
5 THE POWER OF PRICING WITH KNOWLEDGE AND TECHNOLOGY  
6 AND SPREAD THAT.

7 SO WHAT WE ARE SEEING, AGAIN, ON A DAILY  
8 BASIS, MANY OF OUR MEMBERS ARE ENJOYING BETTER ENERGY  
9 EFFICIENCY, BETTER SHAREHOLDER RETURNS, BETTER  
10 RESISTANCE TO CLIMATE EXTREMES ON THE FARM AND THE  
11 FOREST IN THE MITIGATION OPTIONS THAT THEY ARE  
12 UNDERTAKING, AND THEY'RE HARNESSING THE SCIENCE THAT  
13 YOU HAVE HELPED THEM BUILD.

14 SO THE BEST I CAN SAY IS KEEP PUSHING HARD.  
15 WE, IN CHICAGO, WITH OUR MEMBERSHIP AND THE LITTLE  
16 BIT OF PROGRESS WE HAVE MADE, WE'LL KEEP PUSHING

17 HARD.  
18 SUCCESS IN THIS SPACE IS NOT AN OPTION; WE  
19 HAVE TO SUCCEED. AND IT IS A PIVOT POINT IN THE  
20 HISTORY OF HUMANITY, BUT I HAVE TO CONTINUE TO  
21 BELIEVE THESE ARE ACHIEVABLE ENDS. AND KEEP YOUR  
22 SCIENCE FEEDING INTO OUR POLICY AND OUR BUSINESSES,  
23 AND I GO AWAY WITH GREAT OPTIMISM.  
24 I THANK YOU VERY MUCH FOR ALL OF YOU COMING  
25 HERE AND PARTICIPATING IN THIS GREAT EVENT.

0924

1 (APPLAUSE)

[MacDonald's concluding presentation was removed from this file.]

2 (APPLAUSE)  
11 DR. WALSH: WITH THAT, THIS CONFERENCE IS  
12 ADJOURNED.  
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