

START OF TRANSCRIPT

[00:00:10] ? PORT OF SEATTLE THEMED MUSIC ?
[00:00:28] GOOD MORNING. THIS IS COMMISSION
[00:00:31] PRESIDENT FRED FELLEMAN CALLING TO ORDER
[00:00:32] THE SPECIAL MEETING OF APRIL 27 2021.
[00:00:36] THE TIME NOW IS 9:01.
[00:00:39] WE'RE STARTING REMOTELY TODAY VIA TEAMS
[00:00:42] TO COMPLY WITH THE GOVERNOR'S SAFE
[00:00:44] START, STAY HEALTHY ORDER AND IN
[00:00:46] ACCORDANCE WITH PROCLAMATION 20-28,
[00:00:48] THIS IS A STUDY SESSION OF THE
[00:00:50] COMMISSION REGARDING SUSTAINABLE
[00:00:51] AVIATION FUELS. PRESENT WITH ME TODAY.
[00:00:54] OUR COMMISSIONERS, CALKINS CHO AND
[00:00:57] STEINBREUCK IS COMMISSIONER BOWMAN IS
[00:01:01] LIKELY TO JOIN SHORTLY. I WILL ASK THAT
[00:01:04] YOU DO A ROLL CALL OF THE COMMISSIONERS
[00:01:05] TO ENSURE EVERYONE IS IN LINE ON THE
[00:01:08] LINE. IN LINE IS NOT LIKELY. CLERK HART,
[00:01:11] PLEASE CALL THE ROLL. THANK YOU.
[00:01:12] BEGINNING WITH COMMISSIONER CALKINS
[00:01:17] HERE. THANK YOU, COMMISSIONER CHO.
[00:01:21] PRESENT. THANK YOU, COMMISSIONERS STEINBREUCK
[00:01:24] HERE. THANK YOU, COMMISSIONER BOWMAN.
[00:01:28] I DO NOT HAVE COMMISSIONER BOWMAN ON THE
[00:01:30] LINE WITH US JUST YET, BUT SHE'LL BE
[00:01:32] JOINING SHORTLY, I'M SURE. AND THE
[00:01:34] COMMISSIONER FELLEMAN, WE DO HAVE A
[00:01:35] QUORUM. THANK YOU, CLERK HART, AND THANK
[00:01:38] YOU TO MEMBERS OF THE COMMISSION STAFF
[00:01:40] AND OUR LISTENING PUBLIC ON THE TEAMS
[00:01:42] LINK FOR JOINING US TODAY. WELCOME,
[00:01:45] EVERYONE. I'M LOOKING FORWARD TO HEARING
[00:01:47] TODAY'S PRESENTATIONS ON SEVERAL RECENT
[00:01:49] INVESTMENTS BEING MADE TO SECURE THE USE
[00:01:52] AND PRODUCTION OF SUSTAINABLE AVIATION
[00:01:54] FUELS NATIONALLY, THIS NEWS IS
[00:01:56] PARTICULARLY EXCITING IN LIGHT OF THE
[00:01:57] FACT THAT THE NEW STATE LEGISLATION
[00:02:00] CREATING A CLEAN FUEL STANDARD
[00:02:01] SIGNIFICANTLY INCREASES THE LIKELIHOOD
[00:02:03] THAT SUCH INVESTMENTS WILL ALSO BE MADE
[00:02:05] IN WASHINGTON STATE. BUT FIRST, I'D LIKE
[00:02:08] TO SAY A FEW THANK YOUS TO THE PRIMARY
[00:02:10] ORGANIZATION ORGANIZERS OF TODAY'S
[00:02:12] SESSION, AARON PRITCHARD AND ERICA CHUNG
[00:02:15] FROM THE COMMISSION OFFICE. AND
[00:02:17] STEPHANIE MEYN, WHO'S AN INVALUABLE
[00:02:18] SOURCE OF INFORMATION WE'RE VERY
[00:02:20] FORTUNATE TO HAVE WITHIN THE PORT. MOST
[00:02:23] IMPORTANTLY, I'D LIKE TO THANK OUR
[00:02:24] PRESENTERS REPRESENTING NATIONAL AND
[00:02:26] GLOBAL LEADERS FROM AIRLINES,
[00:02:28] INVESTORS, PRODUCERS AND BUSINESSES WHO
[00:02:30] TOGETHER HAVE BROUGHT SAF FROM A
[00:02:32] CONCEPT TO COMMERCIAL APPLICATION. I WAS
[00:02:35] JUST TOLD THAT SAF IS ONE OF THE TOP
[00:02:37] BUZZWORDS IN CONGRESS RIGHT NOW, AND A
[00:02:39] RECOMMENDATION FROM PRESIDENT BIDENS
[00:02:41] RECENTLY CONVENED LEADER SUMMIT ON
[00:02:43] CLIMATE CALLS FOR "THE DEVELOPMENT AND
[00:02:46] DEPLOYMENT OF HIGH INTEGRITY SUSTAINABLE

[00:02:48] AVIATION FUELS". I EXPECT FEDERAL
[00:02:51] INCENTIVES ARE FUCKED TO FOLLOW SOON.
[00:02:53] SPECIAL RECOGNITION GOES TO
[00:02:55] REPRESENTATIVE FITZGIBBON AND CENTERED
[00:02:58] CARLISLE FOR THEIR INCREDIBLE WORK ON
[00:02:59] CLIMATE LEGISLATION THIS SESSION. AND
[00:03:01] I'M PARTICULARLY ENTHUSIASTIC ABOUT THE
[00:03:03] PROJECT. THE PORT AND KING COUNTY ARE
[00:03:05] FUNDING TO EXPLORE THE FEASIBILITY OF
[00:03:07] USING THE COUNTY SOLID WASTE TO MAKE SAF
[00:03:10] AND REDUCE DEMAND ON ITS LANDFILL. THE
[00:03:13] COMBINATION OF INDUSTRY, LEADERSHIP,
[00:03:15] INNOVATION AND NEWLY CREATED STATE
[00:03:17] LEGISLATIVE INCENTIVES MAKES ME
[00:03:19] INCREASINGLY OPTIMISTIC THAT THE PORT
[00:03:21] CAN MEET OUR GOAL OF HAVING 10% OF THE
[00:03:23] FUEL USED AT SEATAC BEING SOURCED FROM
[00:03:26] REGIONALLY PRODUCE SUSTAINABLE
[00:03:28] FEEDSTOCKS. NOW, LET'S HEAR FROM OUR
[00:03:30] PRESTIGIOUS SPEAKERS TO SHOW US HOW TO
[00:03:32] GET IT DONE. THANK YOU VERY MUCH. BUT
[00:03:35] BEFORE I INTRODUCE OUR FIRST SPEAKER, I
[00:03:38] ASK ALL COMMISSIONERS AND STAFF TO
[00:03:39] REMAIN MUTED WHEN SPEAKING WHEN NOT
[00:03:42] SPEAKING. AND WE HAVE A FULL AGENDA THIS
[00:03:44] MORNING. SO PLEASE, I WILL ASK THAT THE
[00:03:47] QUESTIONS BE KEPT TO A MINIMUM AFTER
[00:03:49] PRESS AFTER EACH PRESENTATION, PLEASE
[00:03:52] USE YOUR HAND TOOL FOR ME TO RECOGNIZE
[00:03:54] YOU, AND I'LL BE WATCHING THE CLOCK TO
[00:03:56] KEEP EVERYONE ON TRACK. I WANT TO MAKE
[00:03:58] SURE WE HEAR FROM THESE FANTASTIC
[00:03:59] SPEAKERS. IT'S NOW MY PLEASURE TO
[00:04:01] INTRODUCE THE PORT SENIOR ENVIRONMENTAL
[00:04:03] PROGRAM MANAGER, STEPHANIE MEYN, TO
[00:04:05] LEVEL SET US WITH A SAP OVERVIEW.
[00:04:10] THANK YOU, COMMISSIONER FELLEMAN, DO WE
[00:04:14] HAVE THE PRESENTATION? YES, DEFINITELY.
[00:04:16] GIVE ME JUST A MOMENT AND I'LL SHARE
[00:04:18] THAT AND PULL IT UP. IN THE MEANTIME,
[00:04:21] I'D LIKE TO RECOGNIZE THE COMMISSIONER.
[00:04:23] BOWMAN HAS JOINED US.
[00:04:28] ALL RIGHT. WELCOME, COMMISSIONERS, AND
[00:04:31] THANK YOU. AND GOOD MORNING AGAIN. I'M
[00:04:33] STEPHANIE MEYN, THE CLIMATE PROGRAM
[00:04:35] MANAGER FOR THE AIRPORT. AND AS
[00:04:37] COMMISSIONER FELLEMAN MENTIONED, THE
[00:04:39] PURPOSE OF TODAY'S STUDY SESSION IS
[00:04:40] REALLY TO UPDATE THE COMMISSION AND THE
[00:04:43] PUBLIC ON ALL OF THE ADVANCEMENTS THAT
[00:04:44] HAVE BEEN HAPPENING IN THE SUSTAINABLE
[00:04:46] AVIATION FUEL SPACE SINCE WE LAST BRIEF
[00:04:50] THE COMMISSION AS A WHOLE ON THE
[00:04:52] STRATEGIC PLAN IN 2018. IT'S ALSO A
[00:04:55] CHANCE, AS COMMISSIONER FELLEMAN
[00:04:57] MENTIONED, TO DO SOME LEVEL STUDYING FOR
[00:04:58] COMMISSIONERS. I KNOW THAT THOSE WHO
[00:05:00] SERVED ON THE ENERGY AND SUSTAINABILITY
[00:05:02] COMMITTEE IN THE LAST COUPLE OF YEARS
[00:05:04] GOT A LOT MORE EXPOSURE TO THE TOPIC
[00:05:06] THAN OTHERS, AND IT'S, OF COURSE, AN
[00:05:09] OPPORTUNITY TO CELEBRATE THE PASSAGE OF
[00:05:11] THE LOW CARBON FUEL STANDARD HERE IN

[00:05:12] WASHINGTON, WHICH JUST OCCURRED THIS
[00:05:14] PAST WEEKEND. AND AS IT'S BRILLIANT
[00:05:16] TIMING. SO I'LL BEGIN WITH A VERY QUICK
[00:05:19] OVERVIEW OF WHAT SUSTAINABLE AVIATION
[00:05:21] FUEL IS, HOW MUCH IS AVAILABLE, AND THEN
[00:05:24] PROVIDE AN UPDATE ON OUR STRATEGIC PLAN
[00:05:26] AND OUR PROGRESS TOWARDS THE GOAL BEFORE
[00:05:28] TURNING IT OVER TO THE AIRLINES AND
[00:05:30] PRIVATE SECTOR PARTNERS TO OFFER THEIR
[00:05:32] PERSPECTIVES. NEXT SLIDE.
[00:05:36] SO SUSTAINABLE AVIATION FUEL IS
[00:05:40] A DROP IN FUEL MADE FROM SUSTAINABLE
[00:05:42] SOURCES, AND WHAT WE MEAN BY DROPPING IS
[00:05:45] THAT YOU DO NOT NEED TO MAKE ANY
[00:05:47] MODIFICATIONS TO TANKS OR TWO ENGINES.
[00:05:49] IT IS SOMETHING THAT CAN JUST BE DROPPED
[00:05:51] INTO THE REGULAR SUPPLY CHAIN WITHOUT
[00:05:54] ANY ADDITIONAL CHANGES. THE FUEL, IN
[00:05:58] ORDER FOR IT TO BE SUSTAINABLE, MUST BE
[00:06:00] MADE FROM SOURCES SUCH AS WASTE OILS,
[00:06:04] FROM BIOLOGICAL ORIGIN, AGRICULTURE,
[00:06:06] CULTURAL OR FOREST RESIDUES, MUNICIPAL
[00:06:09] SOLID WASTE, AND SO ON. IT CAN BE MADE
[00:06:11] FROM PURPOSEGROWN CROPS SUCH AS OIL
[00:06:14] SEEDS. BUT ONE OF THE CHALLENGES WITH IT
[00:06:16] MAINTAINING THAT SUSTAINABILITY CRITERIA
[00:06:19] IS WHAT IS KNOWN AS INDIRECT LAND USE
[00:06:21] CHANGE, OR THERE'S OTHER CRITERIA
[00:06:23] RELATED TO THOSE FEEDSTOCKS THAT MAY
[00:06:25] MAKE THAT NOT SUSTAINABLE. AND THOSE
[00:06:29] SUSTAINABILITY STANDARDS ARE SET BY THE
[00:06:31] INTERNATIONAL CIVIL AVIATION
[00:06:33] ORGANIZATION. BUT ONE THING THAT'S
[00:06:35] IMPORTANT TO NOTE IS THAT OTHER
[00:06:37] JURISDICTIONS CAN HAVE ADDITIONAL
[00:06:39] CRITERIA THAT HAVE TO BE MET. AND ONE
[00:06:42] GREAT EXAMPLE OF THAT IS THE LOW CARBON
[00:06:44] FUEL STANDARD, WHICH SETS STRICT
[00:06:46] CALCULATIONS FOR HOW INDIRECT LAND USE
[00:06:48] CHANGE IS TREATED AS PART OF THAT CARBON
[00:06:51] INTENSITY CALCULATION. AND WHAT THAT
[00:06:53] DOES IS IT MEANS THAT SOME FEED STOCKS.
[00:06:55] AND ONE EXAMPLE IS PALM OIL. THEY DON'T
[00:06:58] END UP QUALIFYING UNDER THAT THRESHOLD
[00:07:00] IN ORDER TO GENERATE CREDITS. AND SO
[00:07:02] THAT'S WHY THEY TEND NOT TO THEN BE
[00:07:04] USED, BECAUSE THEN YOU DON'T GET THE
[00:07:05] INCENTIVES ASSOCIATED WITH THEM.
[00:07:07] NEXT SLIDE.
[00:07:11] SO WHERE ARE WE TODAY?
[00:07:15] THERE'S STILL ONLY ONE PRODUCTION
[00:07:18] FACILITY IN THE US. SO I THINK WHEN I
[00:07:20] LAST BRIEFED COMMISSIONERS, THAT'S WHERE
[00:07:22] WE WERE AS WELL. THE WORLD ENERGY
[00:07:24] FACILITY IN PARAMOUNT, CALIFORNIA THAT
[00:07:26] IS SERVING LAX IS STILL THE ONLY
[00:07:28] PRODUCTION FACILITY THAT WE HAVE SORT OF
[00:07:30] COMMERCIAL AND OPERATIONAL IN THE US,
[00:07:33] BUT THERE ARE MORE VOLUMES OF
[00:07:35] SUSTAINABLE AVIATION FUEL BEING
[00:07:36] IMPORTED. NESTA FUELS OF FINLAND HAS NOW
[00:07:40] STARTED IMPORTING SOME SUSTAIN
[00:07:42] ALLEVIATION FUEL. AND I'LL TALK IN MY

[00:07:44] NEXT SLIDE ABOUT WHY THAT IS AND WHAT'S
[00:07:46] HAPPENING IN THAT SPACE. GREAT NEWS IS
[00:07:49] THAT A FACILITY IN NEVADA THAT IS FULL
[00:07:51] CRIME BIOENERGY, WHICH YOU SEE FEATURED
[00:07:54] IN THE PHOTO ON THE LEFT, IS NEARING
[00:07:56] COMPLETION, AND THAT FACILITY IS
[00:08:00] CONVERTING MUNICIPAL SOLID WASTE TO
[00:08:03] LIQUID FUELS ONTO SUSTAINABLE AVIATION
[00:08:05] FUEL. THERE'S ANOTHER FACILITY IN OREGON
[00:08:07] THAT'S UNDER CONSTRUCTION THAT IS
[00:08:09] CONVERTING FOREST RESIDUE INTO LIQUID
[00:08:13] FUELS THAT HAD A MUCH LENGTHIER
[00:08:16] PERMITTING PROCESS THAN WAS EXPECTED.
[00:08:17] SO THAT'S STILL UNDER CONSTRUCTION.
[00:08:20] UNFORTUNATELY, THAT MEANS THAT WITHOUT
[00:08:23] THIS SORT OF LARGER INCREASE IN
[00:08:26] PRODUCTION CAPACITY, WE STILL HAVE
[00:08:28] WORLDWIDE VOLUMES AT AROUND 5,000,000
[00:08:30] GALLONS PER YEAR. I THINK WHEN I LAST
[00:08:33] BRIEF COMMISSIONED, IT WAS STILL IN THAT
[00:08:34] THREE TO 4,000,000 GALLONS PER YEAR
[00:08:36] RANGE. AND SO THAT REMAINS A
[00:08:40] CHALLENGE. BUT THE GOOD NEWS IS THAT
[00:08:42] CAPACITY IS INCREASING STEADILY. WE'RE
[00:08:45] SEEING MORE CAPACITY COMING ONLINE AS
[00:08:47] WELL IN EUROPE, AND THAT IS INCREASING
[00:08:50] OUR GLOBAL NUMBERS. NEXT SLIDE.
[00:08:55] AND SO A VERY CRITICAL REASON FOR THE
[00:08:59] INCREASED PRODUCTION AND THE COMMITMENTS
[00:09:01] THAT WE'VE SEEN JUST IN RECENT YEARS IS
[00:09:03] DUE TO THE ABILITY OF SUSTAINABLE
[00:09:05] AVIATION FUEL TO GENERATE CREDITS UNDER
[00:09:08] CALIFORNIA'S LOW CARBON FUEL STANDARD.
[00:09:10] AND THAT ALLOWANCE TO GENERATE THOSE
[00:09:13] CREDITS BEGAN IN 2019. SO THE SHIFT AND
[00:09:16] IN TERMS OF THAT DEMAND HAS REALLY BEEN
[00:09:18] MORE RECENT. AND I'LL POINT OUT THAT THE
[00:09:20] LOW CARBON FUEL STANDARD THAT WAS JUST
[00:09:22] PASSED IN WASHINGTON ON THIS WEEKEND
[00:09:24] ALREADY HAS THIS SAF CREDIT GENERATION
[00:09:27] CAPABILITY BAKED IN. AND WHAT THAT
[00:09:30] CREDIT DOES, AT LEAST IN CALIFORNIA,
[00:09:32] FROM THE VALUE OF THE CREDITS THERE IS
[00:09:34] IT REDUCES THE PRICE OF THAT FUEL BY
[00:09:37] ABOUT A DOLLAR 25 TO A DOLLAR 50 PER
[00:09:40] GALLON. AND WHEN YOU COMBINE THAT WITH
[00:09:41] FEDERAL INCENTIVES, THAT REALLY STARTS
[00:09:44] BRINGING THAT PRICE DOWN TO SOMETHING
[00:09:45] THAT THE AIRLINES CAN FIND MORE
[00:09:48] MANAGEABLE. AND SO AS A RESULT OF THAT
[00:09:50] LOW CARBON FUEL STANDARD, WE HAVE SEEN
[00:09:52] MORE SAF VOLUMES AT LAX. AND THEN WE
[00:09:55] NOW HAVE A MORE STEADY SUPPLY THAT IS
[00:09:58] BEING IMPORTED FROM NESTA FUELS INTO.
[00:10:01] SFO. ONE CHALLENGE THAT STILL REMAINS,
[00:10:04] THOUGH, IS THAT INCENTIVES STILL REMAIN
[00:10:06] SLIGHTLY HIGHER FOR ONROAD FUELS SUCH AS
[00:10:09] RENEWABLE DIESEL. SO IF YOU'RE A
[00:10:12] PRODUCER AND YOU'VE JUST MADE A HUGE
[00:10:13] CAPITAL INVESTMENT AND YOU'RE PAYING
[00:10:15] DOWN YOUR DEBT SERVICE, YOU'RE GOING TO
[00:10:17] PICK AND YOU HAVE THE ABILITY ALSO TO
[00:10:19] CHOOSE WHICH FUEL YOU MAKE, WHETHER YOU

[00:10:21] TWEAK THE PRODUCTION TOWARDS DIESEL OR
[00:10:23] TO JET FUEL, YOU'RE GOING TO PICK DIESEL
[00:10:26] IF IT'S THE ONE THAT IS THE HIGHEST
[00:10:29] REVENUE GENERATING FUEL. AND SO WE STILL
[00:10:31] HAVE SOME CHALLENGE WITH LOOKING FOR WAYS
[00:10:34] THAT WE CAN CREATE A LITTLE MORE
[00:10:35] INCENTIVE TO LEVEL THE PLAYING FIELD.
[00:10:37] NEXT SLIDE, SO NOW
[00:10:42] I'LL TALK A LITTLE BIT MORE ABOUT THE
[00:10:44] STRATEGIC PLAN SPECIFIC TO OUR AIRPORT
[00:10:46] AND OUR PROGRESS TOWARDS THE 10% SAF GOAL.
[00:10:50] NEXT SLIDE,
[00:10:54] FOR THOSE COMMISSIONERS WHO WEREN'T HERE
[00:10:56] IN 2017, JUST A QUICK REMINDER THAT THE
[00:10:59] COMMISSION STAFF GOAL THAT WAS ADOPTED
[00:11:01] THEN WAS TO HAVE A 10% BLEND OF
[00:11:04] SUSTAINABLE AVIATION FUEL HERE AT SEATAC
[00:11:06] BY 2028, AND THAT IS THE EQUIVALENT
[00:11:10] OF 75,000,000 GALLONS OF MEAT OR WHAT
[00:11:12] YOU'D CALL PURE SUSTAINABLE AVIATION
[00:11:15] FUEL BASED ON WHAT WE'RE PROJECTING FOR
[00:11:18] THE TOTAL FUEL THAT WE WOULD HAVE AT
[00:11:20] THIS AIRPORT BY 2028, AND THEN THAT
[00:11:22] WOULD INCREASE TO 25% BY 2035 AND 50%
[00:11:26] OR MORE WHATEVER IS MAXIMUM ALLOWED TO
[00:11:29] BE BLENDED BY 2050. NEXT SLIDE,
[00:11:33] SO THE SAF STRATEGIC PLAN WAS ADOPTED
[00:11:37] IN 2018 REALLY IN RESPONSE TO THAT
[00:11:40] GOAL. AND SO THAT STRATEGIC PLAN HAD
[00:11:43] FOUR MAIN PILLARS, YOU COULD SAY. AND
[00:11:46] FOR TODAY'S BRIEFING, IN ORDER TO KEEP
[00:11:50] ON TRACK WITH OUR VERY PACKED AGENDA, I
[00:11:52] WILL JUST FOCUS ON TWO OF THE KEY
[00:11:55] STRATEGIES THAT WE HAD MOST OF THE
[00:11:58] PROGRESS IN, AND THEN JUST DO A VERY
[00:12:00] QUICK UPDATE ON THE OTHER TWO. THE ONES
[00:12:02] THAT I'LL FOCUS A LITTLE BIT MORE ON IS
[00:12:04] OUR AIRLINE AIRPORT COOPERATIVE MODEL.
[00:12:07] AND THAT'S REALLY BASED ON WHAT WE SAW
[00:12:10] HAPPENING IN EUROPE AT THE TIME, WHICH
[00:12:12] IS REALLY AIRPORTS, AIRLINES AND EVEN
[00:12:15] CORPORATIONS THAT FLY ON THOSE AIRLINES
[00:12:18] COMING TOGETHER TO EITHER SEND AN
[00:12:20] AGGREGATE DEMAND SIGNAL TO THE MARKET,
[00:12:22] BUT ALSO FINDING WAYS THAT THEY CAN
[00:12:24] COVER THAT INCREMENTAL COST OF THE FUEL.
[00:12:27] THE OTHER UPDATE, AND OF COURSE,
[00:12:30] WE'LL PROBABLY MENTION IT 100 MORE TIMES
[00:12:33] TODAY. THAT IS REALLY WHAT WE DID
[00:12:36] IN THE LOCAL, STATE AND FEDERAL POLICY
[00:12:39] RANGE, BECAUSE WE REALLY FOCUSED ON THAT
[00:12:41] AS A MAJOR MILESTONE THAT WE
[00:12:45] NEEDED TO HIT. AND THEN THE TWO THAT I
[00:12:47] WON'T SPEAK AS MUCH ABOUT IS OBTAINING
[00:12:49] FAA APPROVAL TO USE AIRPORT FUNDS OR
[00:12:52] GRANTS FOR STAFF CO BENEFITS AND THE
[00:12:55] LARGE CO BENEFIT THERE IS REALLY THE AIR
[00:12:57] POLLUTION REDUCTION. WE'VE STARTED
[00:12:59] TALKING TO OTHER AIRPORTS WHO WOULD LIKE
[00:13:01] TO SORT OF WORK AS A COLLECTIVE TO REACH
[00:13:03] OUT TO FAA, BUT WE HAVE NOT YET GONE
[00:13:06] THROUGH A FULL PROCESS WITH FAA. AND
[00:13:09] THEN I WON'T TALK AS WELL ABOUT REALLY

[00:13:12] THE AWARENESS BUILDING THAT WE DID,
[00:13:14] LARGELY BECAUSE 90% PROBABLY
[00:13:17] OF OUR AWARENESS BUILDING WAS REALLY
[00:13:19] FOCUSED ON LEGISLATORS BECAUSE WE REALLY
[00:13:23] UNDERSTOOD THE CRITICAL VALUE OF HAVING
[00:13:26] A LOW CARBON FUEL STANDARD IN THE STATE
[00:13:28] AND REALLY FOCUS THAT FOR OUR AWARENESS
[00:13:31] BUILDING. SO NEXT SLIDE,
[00:13:35] ANOTHER WAY TO THINK ABOUT THE DIFFERENT
[00:13:38] PARTS OF OUR STRATEGIC PLAN IS TO
[00:13:40] CONSIDER THEM AS A WAY TO ADDRESS THE
[00:13:43] INCREMENTAL COST OF SAF COMPARED TO
[00:13:45] CONVENTIONAL JET FUEL. SO YOU CAN SEE ON
[00:13:47] THE BOTTOM IN BLUE IS THE REGULAR COST
[00:13:49] OF JET FUEL, WHICH THE AIRLINES
[00:13:50] TYPICALLY PAY. BUT THEN THERE'S AN
[00:13:52] INCREMENTAL COST ABOVE THAT IN GREEN.
[00:13:54] AND I WANT TO REALLY FIRST CLARIFY THAT
[00:13:57] THIS IS JUST AN ILLUSTRATION AND ISN'T
[00:14:00] MEANT TO REPRESENT A PARTICULAR SAF
[00:14:02] TOTAL PRICE OR A PARTICULAR PROGRAM.
[00:14:04] BUT REALLY JUST TO SHOW HOW DIFFERENT
[00:14:06] ELEMENTS CONTRIBUTE TO BRINGING DOWN THE
[00:14:09] COST CLOSER TO PARITY ARE CLOSER TO WHAT
[00:14:12] AIRLINES TYPICALLY PAY. AND YOU CAN SEE
[00:14:15] IN THIS ILLUSTRATION THAT POLICY
[00:14:17] INCENTIVES, CORPORATE BUYING PROGRAMS,
[00:14:19] FAA SUPPORT, THEY'RE ALL IMPORTANT
[00:14:22] PIECES OF THE PUZZLE. BUT WHAT THIS
[00:14:24] ILLUSTRATION DOESN'T REFLECT IS THE GOOD
[00:14:26] NEWS AT THE TOP, LIGHT GREEN PART OF THE
[00:14:29] BARREL WHICH REFLECTS THE LOW CARBON
[00:14:31] FUEL STANDARD AND THE FEDERAL RIN
[00:14:32] VALUES, IS IN ACTUALITY A MUCH BIGGER
[00:14:35] SLICE AND IN MANY CASES ABOUT A THIRD TO
[00:14:38] ABOUT HALF OF THIS GREEN INCREMENTAL
[00:14:40] COST PORTION. ARE WE TAKING
[00:14:44] QUESTIONS NOW, STEPHANIE? BUT WE DO HAVE
[00:14:46] QUESTIONS, SO I'D LIKE TO SAVE LIKE 10
[00:14:49] MINUTES AT THE END. SO IF YOU COULD
[00:14:50] QUICKLY WRAP UP ON THIS INTRODUCTION,
[00:14:53] WE WILL BE ABLE TO ENTERTAIN SOME
[00:14:55] QUESTIONS. GREAT. A SPECIFIC
[00:14:59] SLIDE HERE, BUT WE REALLY WANT TO SAVE
[00:15:02] THE PETER. RUN THROUGH IT. ALL
[00:15:04] RIGHT, YOU'RE THE BOSS. GOODBYE,
[00:15:08] OUR COMMISSIONERS. JUST TO NOTE THAT WE
[00:15:10] HAVE FOUR MINUTES LEFT IN THIS A
[00:15:12] PRESENTATION IN 10 MINUTES AFTER FOR
[00:15:13] QUESTIONS. ALRIGHT.
[00:15:17] I'LL QUICKLY RUN THROUGH THE REMAINDER
[00:15:19] OF MY SLIDES. SO THE NEXT SLIDE,
[00:15:21] PLEASE.
[00:15:25] SO WITH RESPECT TO THAT FIRST STRATEGY,
[00:15:28] WHICH IS THE COOPERATIVE MODEL, WE DID
[00:15:30] MAKE A LOT OF STRIDES UNDER THE SLOW OF
[00:15:33] FOUR AGREEMENT THAT WAS SIGNED BY THE
[00:15:35] AIRLINES. IN 2018, ABOUT 15 AIRLINES
[00:15:37] SIGNED AN MLU TO AGREE TO PARTICIPATE IN
[00:15:40] A WORK GROUP TO DEVELOP A PLAN TO MEET
[00:15:42] THE SAF GOAL AND TO REDUCE EMISSIONS.
[00:15:45] BUT THIS WORK GROUP RECOGNIZED THAT
[00:15:47] THERE ARE SIGNIFICANT CHALLENGES TO

[00:15:49] DEVELOPING INCREASED SAF USE AT OUR
[00:15:51] AIRPORT BECAUSE ALL OF THOSE SAME
[00:15:53] AIRLINES FLY OUT OF CALIFORNIA, THEY
[00:15:55] COULD TAKE ADVANTAGE OF THE LOW CARBON
[00:15:57] FUEL STANDARD INCENTIVES THAT WERE THERE
[00:15:59] AT THE TIME. SO IN 2019, THE GROUP CAME
[00:16:02] TOGETHER WITH A STRATEGY REALLY TO FIND
[00:16:05] A HOST OF ACTIONS THAT COULD REDUCE THE
[00:16:07] EQUIVALENT AMOUNT OF EMISSIONS AS THE
[00:16:10] 10% SUSTAINABLE AVIATION FUEL GOAL ON A
[00:16:13] LANDING AND TAKEOFF EMISSION BASES,
[00:16:15] WHICH WAS ABOUT EQUIVALENT TO 73,000
[00:16:18] METRIC TONS OF CO2 PER YEAR. AND THAT
[00:16:20] REPORT WAS COMPLETED AND PUBLISHED IN
[00:16:22] EARLY 2020. YOU CAN SEE IT AT THE TOP
[00:16:24] OF THE SLIDE AND I'LL TALK A LITTLE BIT
[00:16:27] MORE ABOUT THE STRATEGIES IN MY NEXT
[00:16:29] SLIDE. ALSO IN 2019, THE PORT HIRED
[00:16:32] WASHINGTON STATE UNIVERSITY TO EXPLORE
[00:16:34] THE ABILITY OF THIS REGION TO MEET THE
[00:16:36] 10% SAF GOAL FROM LOCAL FEEDSTOCKS.
[00:16:38] AND I'LL BE COMING BACK LATER IN THE
[00:16:40] SESSION TO TALK ABOUT THE RESULTS OF
[00:16:41] THAT STUDY AND THE CONTINUING WORK FROM
[00:16:43] THAT NEXT SLIDE. SO I
[00:16:48] NOTICE THIS ONE IS SUPER BUSY, BUT THIS SLIDE
[00:16:50] IS REALLY JUST SHOWING AN AGGREGATION OF
[00:16:52] DIFFERENT AIR SIDE IN BLUE AND LAND SIDE
[00:16:56] IN GREEN STRATEGIES THAT THE AIRLINES
[00:16:59] COULD WORK TOGETHER WITH OUR AIRPORT TO
[00:17:01] IMPLEMENT AS PART OF THAT MLU WORK GROUP
[00:17:04] IN 2020. AND I KNOW THERE'S A LOT OF
[00:17:06] TINY FONT ON THIS SLIDE, BUT THE MAIN
[00:17:08] POINT I JUST WANT TO MAKE ABOUT THE
[00:17:09] RESULTS OF THIS WORK IS THAT THE GROUP
[00:17:12] IDENTIFIED A NUMBER OF ACTIONS THAT CAN
[00:17:14] MEET THAT 73,000 METRIC TON GOAL THAT
[00:17:16] YOU SEE ON THE DASH LINE AT THE TOP.
[00:17:18] AND THEY IDENTIFIED THE COST OR
[00:17:20] INVESTMENTS REQUIRED TO MEET EACH OF
[00:17:22] THEM. AND THE MOST CRITICAL AND
[00:17:24] SIGNIFICANT ACTION YOU CAN SEE IN THE
[00:17:25] DARKEST SHADE OF BLUE AT THE BOTTOM IS
[00:17:27] BETTER AIRCRAFT APU RUNTIME COMPLIANCE,
[00:17:31] WHICH ALSO ALSO HAPPENS TO REQUIRE LOWER
[00:17:34] FINANCIAL INVESTMENTS BECAUSE WE'VE MADE
[00:17:35] MOST OF THE INVESTMENTS ALREADY HERE AT
[00:17:37] THE AIRPORT. SO FOR THAT REASON, WE
[00:17:39] CONTINUE TO FOCUS ON APU REDUCTIONS AND
[00:17:42] HAVE FORMED A TARGETED WORK GROUP WITH
[00:17:43] DELTA AND ALASKA AIRLINES TO MEET THOSE
[00:17:46] APU RUNTIME REGULATIONS THAT CAME INTO
[00:17:48] EFFECT IN JANUARY OF THIS YEAR. SO THIS
[00:17:50] IS REALLY A COMPLEMENT TO THE EMISSION
[00:17:52] REDUCTIONS THAT CAN BE DONE IN THE
[00:17:53] MEANTIME, WHILE WE BUILD UP THE SUPPLY
[00:17:56] AND BRING DOWN THE COST OF SUSTAINED
[00:17:59] ALLEVIATION FUEL. NEXT SLIDE.
[00:18:02] THIS ONE GOES WITHOUT SAYING THAT THE
[00:18:04] OTHER SAF STRATEGY WHERE WE MADE
[00:18:06] SIGNIFICANT STRIVE IS REALLY ON POLICY
[00:18:08] AND LEGISLATION. THIS COMMISSION AND THE
[00:18:11] PORT HAVE BEEN REALLY POWERFUL

[00:18:13] ADVOCATES. I REALLY THINK THE COMMISSION
[00:18:17] SO MUCH FOR THEIR CONTINUED SUPPORT IN
[00:18:18] PUTTING THE LCFF AS THE NUMBER ONE
[00:18:21] LEGISLATIVE PRIORITY OVER THE YEARS.
[00:18:23] AND I THINK THAT REALLY HELPS TO THE
[00:18:27] SUCCESSFUL PASSAGE OF THAT LEGISLATION.
[00:18:31] WHERE WE NOW SEE A LOT OF FOCUS AND
[00:18:33] INTEREST IN ENERGY IS WHAT THE BIDEN
[00:18:35] ADMINISTRATION IS DOING. WE'RE REALLY
[00:18:37] EXCITED TO SEE THE AMOUNT OF FEDERAL
[00:18:39] SUPPORT COMING. THE NEXT ONE COMING THAT
[00:18:41] WE SEE IS A BLENDED TAX CREDIT FOR
[00:18:43] SUSTAINABLE AVIATION FUEL. THE
[00:18:45] EQUIVALENT WAS DONE FOR THE BIODIESEL
[00:18:47] INDUSTRY, AND THAT WAS SHOWN
[00:18:50] TO BE A VERY EFFECTIVE TOOL FOR BRINGING
[00:18:52] DOWN THE COST. SO WE'LL CONTINUE TO
[00:18:54] ENGAGE THE COMMISSION ON OPPORTUNITIES
[00:18:56] FOR THAT NEXT SLIDE.
[00:19:01] AND IT'S MY FINAL SLIDE.
[00:19:03] SECOND FINAL. SO WHERE WE ARE
[00:19:07] WITH MEETING THE 10% SAF GOAL IS REALLY
[00:19:10] ON TWO FRONTS. WE NEED NEAR PARITY WITH
[00:19:13] THE PRICE FOR AT LEAST THE INCENTIVES
[00:19:17] OFFERED IN OTHER JURISDICTIONS, BECAUSE
[00:19:18] ONE REAL CHALLENGE WITH THE AIRLINES AS
[00:19:22] COMPARED TO MAYBE AN ONROAD FLEET, IS
[00:19:25] THAT THEY HAVE THE OPPORTUNITY TO BUY
[00:19:27] THIS FUEL IN WHATEVER MARKET THEY'RE IN,
[00:19:30] THAT IS THE LEAST EXPENSIVE. SO IF THEY
[00:19:32] HAVE A 5% SAF GOAL AND THEY CAN BUY
[00:19:35] ALL OF THAT SAF IN THE CHEAPEST
[00:19:37] MARKET, THEY'LL CONTINUE TO DO THAT. SO
[00:19:39] WE STILL HAVE THE LCFF TOOK A GIANT
[00:19:42] CHUNK OUT OF THAT PARODY ISSUE, BUT
[00:19:44] WE'LL STILL CONTINUE TO LOOK FOR WAYS
[00:19:46] THAT WE CAN BRING THAT PRICE DOWN AND
[00:19:48] THEN WHERE WE ALSO NEED TO DO CONTINUED
[00:19:51] WORK IS A DEDICATED PRODUCTION FACILITY
[00:19:53] BEING BROUGHT ONLINE QUICKLY. AND SO
[00:19:55] WE'LL CONTINUE TO LOOK AND TALK TO THE
[00:19:57] DEPARTMENT OF COMMERCE ABOUT INCENTIVES
[00:19:58] TO SPEED PERMITTING AND TO BRING DOWN
[00:20:01] CAPITAL AND OPERATIONAL COSTS. AND WE DO
[00:20:03] SEE THOSE CAPITAL COST OPPORTUNITIES
[00:20:05] HAPPENING WITH THE BIDEN ADMINISTRATION
[00:20:07] THAT ARE VERY SIMILAR TO WHAT WE SAW THE
[00:20:09] OBAMA ADMINISTRATION OFFER. AND IS THE
[00:20:11] REASON WHY THE FACILITIES IN OREGON AND
[00:20:13] NEVADA THAT ARE ABOUT TO COME ONLINE ARE
[00:20:17] REALLY AT THE STAGE THEY'RE AT IS REALLY
[00:20:19] FROM THE CAPITAL INCENTIVE THAT THE
[00:20:21] FEDERAL GOVERNMENT OFFERED. NEXT SLIDE,
[00:20:25] PLEASE WRAP UP QUICKLY, TRULY THE FINAL
[00:20:28] SLIDE. SO REALLY, THE MAIN DEVELOPMENT
[00:20:30] SINCE 2018, OF COURSE, IS THE LOW
[00:20:33] CARBON FUEL STANDARD PASSAGE, WHICH IS
[00:20:34] JUST THIS WEEKEND. BUT WHAT WE ALSO SAW
[00:20:38] A LOT OF PROGRESS IN IN WHERE I THINK
[00:20:39] THIS STUDY SESSION IS GOING TO BE A
[00:20:42] REALLY FANTASTIC LEVEL SETTING IS WHAT'S
[00:20:44] HAPPENED IN THE PRIVATE SECTOR. WE SAW
[00:20:47] HINTS OF THIS IN EUROPE THAT THERE IS

[00:20:50] THIS IDEA THAT CORPORATIONS WOULD LIKE
[00:20:52] TO REDUCE THEIR FLYING EMISSIONS
[00:20:54] ASSOCIATED WITH THEIR BUSINESS TRAVEL IN
[00:20:56] WAYS THAT WERE DIRECTLY ASSOCIATED WITH
[00:20:58] THE SUSTAINABLE AVIATION FUEL, RATHER
[00:21:00] THAN BUYING OFFSETS THAT WERE UNRELATED
[00:21:03] TO THAT. AND SO WE WILL HAVE SPEAKERS
[00:21:05] TODAY FROM THE AIRLINES AND THE PRIVATE
[00:21:06] SECTOR TALKING ABOUT WHAT'S HAPPENING IN
[00:21:09] THAT SPACE TO REALLY ADVANCE THAT. AND
[00:21:11] WHAT WE'VE ALSO SEEN IS EUROPEAN NATIONS
[00:21:13] ACTUALLY SENDING A SIGNAL TO SET
[00:21:17] NATIONAL SAF TARGETS. SO WE SAW NORWAY
[00:21:19] AND SWEDEN, THEIR NATIONAL GOVERNMENTS
[00:21:21] HAVE ANNOUNCED INTENTIONS TO SET
[00:21:23] NATIONAL TARGETS FOR THE PERCENTAGE OF
[00:21:26] SAF IN THEIR FUEL BLEND. SO WE REALLY
[00:21:29] ARE SEEING A GROWTH AND A MOMENTUM
[00:21:33] THAT HAS REALLY ACCELERATED JUST IN THE
[00:21:35] LAST TWO YEARS IN THIS SPACE. SO WITH
[00:21:37] THAT ALL I'LL CONCLUDE, MAKE SURE WE HAVE THE
[00:21:40] TIME FOR QUESTIONS BEFORE WE MOVE ON TO
[00:21:41] OUR OTHER PRESENTERS. THANK YOU. THANKS
[00:21:44] SO MUCH, STEPHANIE. WE DEFINITELY HAD A
[00:21:47] DIFFERENCE IN TIME SCHEDULE AT THE
[00:21:49] CLERK. SO I WOULD LIKE TO JUST TAKE A
[00:21:51] COMMISSIONER IN STEINBREUCKS QUESTION. WE HAVE
[00:21:53] ACCESS TO YOU AS OUR COMMISSION, HAVING
[00:21:55] YOU AS AN IN HOUSE TALENT. SO
[00:21:57] COMMISSIONER STEINBREUCK, YOU'VE BEEN VERY
[00:21:59] PATIENT. LET'S JUST TAKE YOUR QUESTION.
[00:22:01] AND VERY MUCH SO THIS PRESENTATION,
[00:22:04] WHO ARE THE INDUSTRY EXPERTS? THANK YOU.
[00:22:07] I JUST WANTED TO HEAR HOW LARGE
[00:22:11] IS THE GAP BETWEEN THE MARKET PRICE FOR
[00:22:15] CONVENTIONAL FUEL AND THE ESTIMATED
[00:22:19] TOTAL COST OF PROVIDING THE SAF?
[00:22:22] WHAT IS THAT GAP THAT HAS TO BE CLOSED?
[00:22:25] WHAT'S THE DIFFERENTIAL? YEAH. THE
[00:22:27] DIFFERENTIAL IS VERY DEPENDENT ON THE
[00:22:30] TECHNOLOGY AND THE FEED STOCK. SO NOT
[00:22:33] ALL SAFIS THE SAME PRICE. THE SAF
[00:22:36] THAT'S AVAILABLE IN THE MARKET RIGHT NOW
[00:22:38] IS. AND I'M GOING TO HAND WAVE A LITTLE
[00:22:40] BIT HERE BECAUSE THESE ARE GUARDED
[00:22:43] SECRETS IN THE PRIVATE SECTOR, BUT IT'S
[00:22:45] GENERALLY YOU COULD HAND WAVE AT ABOUT
[00:22:46] SIX DOLLARS A GALLON AND YOU COMPARE
[00:22:49] THAT TO ABOUT TWO DOLLARS A GALLON.
[00:22:51] THAT IS SORT OF THE TRADITIONAL JET FUEL
[00:22:54] PRICE. SO YOU'RE TALKING ABOUT A FOUR
[00:22:55] DOLLARS INCREMENT. BUT WE'RE NOW SEEING
[00:22:57] THAT THESE FEDERAL AND STATE INCENTIVES
[00:23:00] COLLECTIVELY CAN BRING THAT DOWN BY
[00:23:02] ANOTHER. MAYBE YOU CAN GET IT
[00:23:05] UP TO THREE DOLLARS OFF THE TOP OF THAT.
[00:23:07] SO YOU'RE STILL LEFT WITH MAYBE A
[00:23:08] DOLLAR. BUT WHEN YOU MULTIPLY THAT BY
[00:23:11] THE NUMBER OF GALLONS IN JUST ONE
[00:23:13] AIRPLANE, IT GETS TO BE PRETTY PRICEY.
[00:23:15] SO EVERYTHING WE CAN DO TO BRING THAT
[00:23:17] COST DOWN IS CRITICAL. YEAH. AND THAT'S
[00:23:18] THE NUMBER ONE OPERATING COST FOR FOR

[00:23:21] COMMERCIAL AIRLINES. SO THAT'S A PRETTY
[00:23:24] BIG SPREAD THERE. OKAY. AND OF COURSE,
[00:23:27] AS THE SUPPLY INCREASES, THE PRODUCTION
[00:23:30] INCREASES, THE COST COMES DOWN. BASIC
[00:23:33] ECONOMICS. YES. AND I'LL HAVE A LOT MORE
[00:23:36] IN MY PRESENTATION AT THE END ON THE
[00:23:39] FINDINGS FROM THE WSU REPORT THAT WILL
[00:23:42] OUTLINE HOW THE CAPITAL AND THE
[00:23:44] OPERATIONAL COST INFLUENCE THE FINAL
[00:23:46] COST OF FUEL. RIGHT. OKAY. THANK YOU.
[00:23:47] I'M DONE. THANKS VERY MUCH FOR THAT
[00:23:50] IMPORTANT QUESTION TO HAVE CLARIFIED.
[00:23:52] AND THANKS AGAIN SO MUCH, STEPHANIE. WE
[00:23:55] REALLY APPRECIATE HAVING YOUR IN HOUSE
[00:23:57] TALENT. AND THANK YOU FOR MY COLLEAGUES
[00:23:59] FOR ALLOWING US TO GET BACK ON TIME
[00:24:02] PRECISELY BECAUSE THE POINT IN MATTER IS
[00:24:04] THE FACT THAT THERE STILL IS A DELTA.
[00:24:07] SO WE SAY IN THE COSTS, THE AIRLINES ARE
[00:24:10] USING IT. AND SO IT'S REALLY THIS IS
[00:24:12] WHAT I WOULD LOVE TO HEAR, HOW THEY ARE
[00:24:15] MAKING THIS WORK AND HOW WE CAN HELP
[00:24:17] MAKE IT WORK HERE IN WASHINGTON. SO NOW
[00:24:20] I'D LIKE TO WELCOME KIRK MYERS FROM
[00:24:23] ALASKA AIRLINES, KEITH TAYLOR FROM DELTA
[00:24:26] AND TOM MICHAELS FROM UNITED. EACH OF
[00:24:29] OUR GUESTS WILL HAVE 10 MINUTES FOR
[00:24:30] PRESENTATION, AND WE HAVE AN ADDITIONAL
[00:24:32] FIVE MINUTES FOR COMMISSION QUESTIONS
[00:24:34] AFTERWARDS. OUR FIRST PRESENTER IS KIRK
[00:24:37] MYERS, SUSTAINABILITY DIRECTOR FROM
[00:24:39] ALASKA AIRLINES. THANK YOU FOR JOINING
[00:24:42] US TODAY, KIRK. AND PLEASE LET US KNOW
[00:24:44] WHEN YOU'RE READY TO DISPLAY YOUR
[00:24:45] PRESENTATION, AND THE CLERK WILL ADVANCE
[00:24:47] THE SLIDES WHEN YOU SIGNAL OR YOU HAVE
[00:24:50] THE FLOOR. THANK YOU, COMMISSIONER
[00:24:52] FELLEMAN. AND GOOD MORNING TO EVERYBODY.
[00:24:54] VERY EXCITED TO HAVE THE OPPORTUNITY AND
[00:24:57] INVITATION TO SHARE A BIT OF OUR PATH ON
[00:24:59] STAFF HERE IN ALASKA AIRLINES. AND I DO
[00:25:01] HAVE A BRIEF PRESENTATION SO WE CAN
[00:25:02] START SHARING THAT NOW AS THAT GETS
[00:25:04] PULLED UP. JUST WANTED TO SAY THANK YOU
[00:25:06] TO STEPHANIE FOR, AS ALWAYS, A REALLY
[00:25:08] COMPREHENSIVE YET CONCISE OVERVIEW OF
[00:25:11] THE SAF MARKET. AND SHE SET THE STAGE
[00:25:14] VERY WELL FOR SOMETHING, BUT I CAN SPEND
[00:25:16] A BIT LESS TIME ON SINCE SHE COVERED IT
[00:25:18] SO WELL. SO I'M STANDLEY DIRECTOR IN THE
[00:25:20] LAST AIRLINES, KIRK MYERS IS KISHA ELLEN
[00:25:22] SAID, WE'VE BEEN ON A JOURNEY OF SAF
[00:25:25] IN SAFINNOVATION FOR OVER A DECADE,
[00:25:27] SO IF WE GO TO THE NEXT SLIDE, I CAN
[00:25:30] SHARE A LITTLE BIT AROUND WHAT WE'VE
[00:25:32] BEEN DOING IN THIS SPACE. FIRST OFF,
[00:25:34] WE'RE REALLY, REALLY PROUD AND EXCITED.
[00:25:36] LAST WEEK, WE LAUNCHED OUR NEW CLIMATE
[00:25:38] GOALS. SO WE HAD HAD A SET OF CLIMATE
[00:25:40] GOALS VOLUNTARY CLIMATE GOALS THAT LED
[00:25:42] US THROUGH 2020 AND LAST WEEK WAS
[00:25:44] LAUNCHING OF A NEW AND VERY WHAT WE
[00:25:46] CONSIDER TO BE A BOLD AND AGGRESSIVE

[00:25:48] GOAL AROUND BEING NET ZERO ENERGY OR AT
[00:25:50] ZERO CARBON BY 2020. AND THIS SLIDE A
[00:25:53] LOT OF WORDS HERE. YOU CAN FIND IT ON
[00:25:55] OUR WEBSITE. I CAN SHARE IT IN OTHER
[00:25:56] WAYS IF IT'S APPROPRIATE. SHOWS THE
[00:26:00] PATHWAYS THAT WE SEE NEEDED INNOVATION
[00:26:03] AND SUCCESS ON TO NET ZERO 2040
[00:26:06] GOAL. AS YOU LOOK HERE AT THE
[00:26:07] FOUNDATION, OPERATIONAL EFFICIENCY IS
[00:26:09] ABSOLUTELY A KEY THING THAT WE ARE
[00:26:10] FOCUSING ON WHERE THE NEXT YEAR OR TWO
[00:26:12] AND BUILDING A CULTURE OF EFFICIENCY
[00:26:14] AROUND CARBON. JUST AS WE HAVE A CULTURE
[00:26:16] OF SAFETY. OUR ANNOUNCEMENT AROUND
[00:26:18] UPGRADING OUR FLEET WITH A SIGNIFICANT
[00:26:20] NUMBER OF NEW ADDITIONAL MAX AIRPLANES
[00:26:22] HELPS US OUT QUITE A BIT. BUT AS WE LOOK
[00:26:24] FORWARD, ESPECIALLY OVER THE NEXT THREE
[00:26:26] TO 5 YEARS AND BEYOND, STABILIZATION FUEL IS
[00:26:29] ABSOLUTELY ONE OF THE BIGGEST ELEMENTS
[00:26:32] OF AREAS THAT WE NEED TO FIND SUCCESS IN
[00:26:34] FINDING THAT KIND OF FIT BETWEEN
[00:26:36] FINANCIAL PERFORMANCE AND ALSO HAVING
[00:26:38] SCALE OR IN THE MARKET. AND WE LOOK AT
[00:26:41] THIS CHARTER SOUND IS ACTUALLY THE AREA
[00:26:44] THAT HAS THE MOST VARIABILITY IN TERMS
[00:26:45] OF MODELING AND OUR FORECASTING LOOKING
[00:26:47] FORWARD BASED EXACTLY ON WHAT STEPHANIE
[00:26:50] SAID AROUND POTENTIAL PRICING AROUND
[00:26:51] POTENTIAL VOLUMES, AND THAT'S REALLY OUR
[00:26:54] FOCUS IS TO HELP ACCELERATE THE GROWTH
[00:26:56] OF THIS MARKET AS QUICKLY AS POSSIBLE IN
[00:26:58] THE MOST SUSTAINABLE WAY, BUT
[00:26:59] FINANCIALLY AND OF COURSE,
[00:27:00] ENVIRONMENTALLY. SO MOVING TO THE NEXT
[00:27:02] SLIDE, WE ARE ALSO REALLY PROUD
[00:27:06] THAT WE BUILT INTO OUR INTERNAL EMPLOYEE
[00:27:09] BONUS PROGRAM FOR ALL EMPLOYEES
[00:27:11] PERFORMANCE METRIC AROUND OUR CARBON
[00:27:13] EFFICIENCY FOR THIS YEAR. WE BELIEVE
[00:27:14] WE'RE ONE OF THE FIRST AIRLINES AND
[00:27:16] ACTUALLY ONE OF THE FIRST 400-500
[00:27:18] COMPANIES TO DIRECTLY TIE PERCENT, IN
[00:27:21] THIS CASE, 10% OF OUR ALL EMPLOYEE BONUS
[00:27:23] PROGRAM TO OUR PERFORMANCE ON OUR CARBON
[00:27:25] EFFICIENCY, WHICH DIRECTLY RELATES TO
[00:27:27] OUR FUEL USE AND DIRECTLY RELATES TO
[00:27:29] ALSO IN THE FUTURE, ADDITIONAL VOLUMES
[00:27:32] OF SAFCAN HELP REDUCE THAT CARBON
[00:27:34] INTENSITY. THIS IS PART OF THE ALASKA
[00:27:37] WAY. WE HAVE A VERY STRONG CULTURE,
[00:27:39] VERY OPERATIONALLY SAVVY CULTURE AND
[00:27:43] REALLY ESTABLISHING WITH ALL OF OUR
[00:27:46] TEAMS THINKING ABOUT THIS EFFICIENCY
[00:27:48] AVERAGING OF USING LESS FUEL IN THE
[00:27:50] FIRST PLACE HELP US ON OUR CARBON PATH
[00:27:52] AND OF COURSE, REDUCES THE GAP THAT WE
[00:27:54] NEED IN TERMS OF THE GALLONS OF SAF TO
[00:27:55] HELP ACHIEVE OUR GOALS. SO NEXT SLIDE,
[00:28:01] AS I MENTIONED, WE'VE HAD A LONG HISTORY
[00:28:04] OF THE SPACE FROM JOINING THE STATION
[00:28:06] FUEL USERS GROUP BACK IN 2009 TO
[00:28:08] ACTUALLY FLYING THE MOST NUMBER OF EARLY

[00:28:10] FLIGHTS. COMMERCIAL FLIGHTS WITH SOME
[00:28:12] SUSTAINABLE AVIATION FUEL HAVE PIONEERING
[00:28:14] PRODUCTION BATCHES. AND THROUGH THAT,
[00:28:17] WORKING IN THE PAST DECADE OF WORK WAS
[00:28:20] REALLY AROUND WHAT STEPHANIE HAD TALKED
[00:28:22] ABOUT AROUND VALIDATING SAF AS A DROP
[00:28:25] AND FUEL DOING TESTS AND PILOTS AROUND
[00:28:28] NEW FEEDSTOCKS, NEW PRODUCTION PATH
[00:28:30] WAYS. ALL OF THE THINGS THAT REALLY ARE
[00:28:32] SETTING THE STAGE FOR A ROBUST AS WE
[00:28:34] HOPE WE SAF MARKET AND A PRODUCTION
[00:28:42] MARKET BASICALLY FOR EVERYBODY. SO WITH
[00:28:44] THIS WE HAVE SOME LAWS AND LONG
[00:28:46] PARTNERSHIPS WITH WSU AND WITH A C
[00:28:48] PROGRAM AND WITH NARA AND DIFFERENT
[00:28:50] GROUPS LIKE THAT. A LOT OF CONNECTION
[00:28:51] WITH THE PORT OF SEATTLE. AND AS IT
[00:28:53] MENTIONS HERE ON THE BOTTOM OF THE
[00:28:54] SLIDE, WE ARE DOING AN OFF TAKE ON
[00:28:57] ONGOING OFFTAKE AT SAN FRANCISCO AIRPORT
[00:28:59] WITH THE NESTA FUEL THAT STEPHANIE
[00:29:01] MENTIONED, ALONG WITH SOME OTHER
[00:29:02] AIRLINES MOVING TO THE NEXT SLIDE. HERE
[00:29:04] SOME OF OUR NEWEST WORKS AS WE SHIFT
[00:29:07] FROM THIS KIND OF ESTABLISHING WITH THE
[00:29:09] MARKET AND REALLY PIONEERING, AND PROVING
[00:29:12] OUT THAT SAF IS A DROP IN TO REALLY
[00:29:15] TRY AND SCALE THE MARKET TO MAKE THIS
[00:29:17] EVERYDAY USE WITHIN AIRLINES ACROSS THE
[00:29:20] COUNTRY AND ACROSS THE WORLD. WE'VE
[00:29:22] TAKEN SOME OF THE NEW APPROACHES AROUND
[00:29:24] PARTNERING WITH FOLKS LIKE MICROSOFT AND
[00:29:26] JULIE FIDDLER IS ON THE AGENDA LATER.
[00:29:27] SHE CAN TALK MUCH MORE DEEPLY ABOUT THAT
[00:29:30] PART PARTNERSHIP, BUT LEANING INTO THESE
[00:29:32] KEY CORPORATE LEADERS WHO HAVE VERY
[00:29:35] SEELY BOTH CLIMATE GOALS AND VERY
[00:29:36] POWERFUL CLIMATE GOALS AND NEED THEIR
[00:29:39] CORPORATE TRAVEL TO HAVE LESS CARBON
[00:29:41] INTENSITY AND IDEALLY ZERO CARBON
[00:29:43] INTENSITY AND THEN RUNNING THEIR
[00:29:44] BUSINESS AND MOVING FORWARD. SO WE
[00:29:46] LAUNCHED A RENEWABLE ROUTE PROGRAM WITH
[00:29:48] MICROSOFT LAST FALL AND THEN ALSO JUST
[00:29:51] RECENTLY WE ANNOUNCED AN MLU WITH SKY
[00:29:54] ENERGY. AMERICA IS LOOKING SPECIFICALLY
[00:29:57] AT CREATING SAF FROM DISCIPLE SOLID
[00:29:58] WASTE HERE IN PACIFIC NORTHWEST.
[00:30:00] ADDRESSING SOME OF THOSE CHALLENGES,
[00:30:02] ARE LOOKING TO FIND WASTE TO INNOVATE
[00:30:04] AND POTENTIALLY CREATE PRODUCTION
[00:30:05] VOLUME, AS WE HOPE HERE IN THE NORTHWEST
[00:30:08] AND HAVE ALL THE CO BENEFITS TO THAT AS
[00:30:11] WELL AS FUEL SUPPLY FOR WHERE OUR
[00:30:13] BIGGEST CONSUMPTION IS, WHICH IS HERE.
[00:30:17] NEXT SLIDE.
[00:30:19] YEAH, JUST A LITTLE BIT MORE ABOUT THE
[00:30:21] MICROSOFT STAFF PARTNERSHIP. I'M SURE
[00:30:23] JULIE WILL GO AND MORE DEPTH WITH THE
[00:30:25] DEEP WORK THEY'RE DOING THE SPACE. BUT
[00:30:27] WHAT WE LAUNCHED WITH MICROSOFT WAS
[00:30:28] ESSENTIALLY USING SAF IN THIS CASE IN
[00:30:32] CALIFORNIA IS STEPHANIE HAD MENTIONED

[00:30:34] AROUND WHERE THE VOLUME IS OCCURRING
[00:30:36] RIGHT NOW TO ESSENTIALLY TARGET THE
[00:30:38] FLIGHTS THAT MICROSOFT IS TAKEN FROM
[00:30:40] SEATTLE DOWN TO THERE ON THEIR MOST
[00:30:41] FREQUENT ROUTE DOWN TO CALIFORNIA TO THE
[00:30:43] BAY AREA AS WELL AS TO SAN DIEGO. AND IN
[00:30:47] THAT IN THAT SPACE RIGHT NOW,
[00:30:49] LEVERAGING AND PARTNERING AND
[00:30:50] COLLABORATING IN THE SPACE AROUND TRYING
[00:30:52] TO REDUCE THIS COST PREMIUM AND GET SOME
[00:30:54] ADDITIONAL FUNDING. I HAVE SUPPORT FOR
[00:30:57] MAKING IT MORE VIABLE TO PICK UP MORE
[00:30:59] VOLUMES. THAT'S EXACTLY THE CONCEPT
[00:31:00] HERE. AND I THINK SOME OF THE PARTNERS
[00:31:02] OR OTHER AIRLINES, WE'LL TALK ABOUT SOME
[00:31:04] OF THE NEW RECENTLY ANNOUNCED
[00:31:06] CONVERSATIONS THAT HAVE HAPPENED, OTHER
[00:31:08] PARTNERSHIPS IN THE CORVET SPACE. AND WE
[00:31:10] CERTAINLY ARE LOOKING IN THE SAME WAY TO
[00:31:12] LOOK UP AND DOWN OUR KEY PARTNERS ON THE
[00:31:14] WEST COAST TO ACCELERATE AND GROW THIS
[00:31:17] GROUP OF THE WHO CAN DO THIS WORK AND
[00:31:19] ARE WILLING TO DO THIS WORK. NEXT SLIDE.
[00:31:23] AND THIS IS MY LAST SLIDE. SO I'LL KEEP
[00:31:26] THIS BRIEF HERE, BUT WE DID LAUNCH THE
[00:31:28] STANDARD AMERICA'S MLU. WE'RE VERY,
[00:31:30] VERY EXCITED ABOUT WHERE THIS MIGHT GO.
[00:31:32] WE BELIEVE THAT THE SAF MARKET NEEDS TO
[00:31:34] BE ROBUST. IT NEEDS TO BE BROAD AND
[00:31:36] NEEDS TO BE DYNAMIC. IT NEEDS TO INCLUDE
[00:31:38] MANY DIFFERENT FEED STOCKS, AND THERE
[00:31:39] ARE POTENTIAL, MANY DIFFERENT PROCESSES
[00:31:41] THAT COULD BECOME ECONOMICALLY VIABLE IN
[00:31:42] THIS SPACE. AND SO THIS MLU IS SOMETHING
[00:31:45] IS REALLY LOOKING SPECIFICALLY AT
[00:31:47] PACIFIC NORTHWEST. THERE IS A STRONG
[00:31:49] POLICY CONVERSATIONS. SO THE EVENING
[00:31:51] THEY ARE THE WEEKENDS DO HERE IN
[00:31:53] WASHINGTON STATE IS VERY EXCITING. AND
[00:31:55] ALSO I WANT TO MENTION THAT ERIC
[00:31:56] SCHOENFELD, AS WELL AS KATE GALEVECTOR,
[00:31:58] WHO IS OUR DIRECTOR OF GOVERNMENT
[00:31:59] AFFAIRS IN DC, HAVE BEEN PARTNERING HAND
[00:32:02] IN HAND ON FEDERAL POLICY AROUND THE
[00:32:04] BLENDER'S TAX CREDIT AND SOME OF THE
[00:32:06] FEDERAL STEPS THAT COULD BE IMPLEMENTED
[00:32:08] TO HELP REDUCE THIS COST PREMIUM FOR US.
[00:32:10] AND SO THAT PARTNERSHIP IS GREATLY
[00:32:12] APPRECIATED. IN ADDITION TO THEM
[00:32:14] BRINGING IN SOME ADDITIONAL PARTNERS
[00:32:15] LIKE WSU, BOEING AND AND A FEW OTHER KEY
[00:32:18] FOLKS TO REALLY ADVOCATE FOR WHAT'S
[00:32:20] GOING TO BE MOST BENEFICIAL TO OUR
[00:32:21] REGION INTO THE THE GOALS THAT WE HAVE
[00:32:23] HERE. WITH THIS SKYNRG. ONE NOTE
[00:32:26] AROUND IT IS THAT IT IS THINKING ABOUT
[00:32:27] MUNICIPAL SOLID WASTE, OF TRUE WASTE,
[00:32:29] AND SOMETHING THAT WE SEE AS A
[00:32:32] POTENTIALLY IS A VERY FUNCTIONAL AND
[00:32:35] VALUABLE FEEDSTOCK MOVING FORWARD,
[00:32:36] SOMETHING THAT USING THIS AS A FEEDSTOCK
[00:32:39] WILL SOLVE MULTIPLE CHALLENGES AND
[00:32:40] PROVIDE MULTIPLE BENEFITS TO THE LOCAL

[00:32:42] COMMUNITIES IN THE AREAS WHERE WE'RE
[00:32:44] WORKING AT. SO IS THAT I'LL STOP AND KEEP
[00:32:46] THIS SHORT. BUT I REALLY APPRECIATE THE
[00:32:49] TIME. AND AND I'M THE LONG PARTNERSHIP
[00:32:51] THAT YOU'LL AIRLINES HAD FOR SEATTLE
[00:32:54] THROUGH THE MLU WORK THROUGH
[00:32:56] DIFFERENT STUDIES AROUND INFRASTRUCTURE
[00:32:57] AND HOW TO GET SAF TO THE AIRPORT AS WELL
[00:32:59] AS THE ONGOING WORK THAT IS GOING ON.
[00:33:01] SO THAT I'LL STOP AND SEE IF THEY'RE
[00:33:03] QUESTIONS. WELL, THANKS SO MUCH, KIRK.
[00:33:06] IT'S GREAT TO HAVE THIS BRILLIANT WORK
[00:33:08] GOING ON RIGHT IN OUR BACKYARD. SO LET'S
[00:33:11] MOVE ON TO QUESTIONS AND COMMENTS FROM
[00:33:12] THE COMMISSION. CLERK. HART, COULD YOU
[00:33:14] PLEASE CALL THE ROLL? THANK YOU.
[00:33:15] BEGINNING WITH COMMISSIONER BOWMAN.
[00:33:21] COMMISSIONER BOWMAN, IF YOU'RE ON THE LINE,
[00:33:23] STAR SIX TO UNMUTE. I UNDERSTAND
[00:33:27] SHE WAS HAVING SOME TECHNICAL PROBLEMS
[00:33:28] EARLIER THAT'S COME I UNDERSTAND. THANK
[00:33:30] YOU. WE'LL MOVE TO COMMISSIONER CALKINS.
[00:33:33] HI. GOOD MORNING. AND THANKS FOR THE
[00:33:35] PRESENTATION. SO FAR. BOTH KIRK AND
[00:33:37] STEPHANIE, IT IS TRULY EXCITING TO GET
[00:33:41] TO BE IN THE SEAT AND FEELING LIKE WE'RE
[00:33:43] AT THE VANGUARD OF SOMETHING REALLY
[00:33:45] EXTRAORDINARY FOR OUR REGION AND OUR
[00:33:47] PORT AND OUR PORT PARTNERS, LIKE THE
[00:33:49] AIRLINES. I GUESS MY QUESTION IT WAS
[00:33:55] MENTIONED IN STEPHANIE'S PRESENTATION.
[00:33:57] SLOW FIVE WAS A MECHANISM BY WHICH THE
[00:34:00] AIRPORTS AND THE PORT AND THE AIRLINE
[00:34:03] COULD ALIGN EXPECTATIONS ON WHERE WE'RE
[00:34:05] GOING WITH SAF. AND I'M WONDERING IF
[00:34:07] SLOW SIX WOULD BE AN APPROPRIATE
[00:34:09] MECHANISM FOR ADVANCING THAT
[00:34:11] RELATIONSHIP. THE MLU IS SUCCESSFUL IN
[00:34:13] GETTING EVERYBODY ON THE SAME PAGE AS
[00:34:15] THE PLAYBOOK WE NOW HAVE AN LCFS IN
[00:34:19] WASHINGTON STATE. AND SO A BIG CONCRETE
[00:34:22] QUESTION FOR US IS WHAT'S NEXT? AND I
[00:34:24] THINK WE'LL BE MOST SUCCESSFUL IF WE ALL
[00:34:26] AGREE AND PUT IT ON PAPER. AND SO I'M
[00:34:28] WONDERING IF THAT'S A MECHANISM FOR
[00:34:30] DOING THAT. AND THEN MY SECOND QUESTION
[00:34:33] IS AROUND THE LOW HANGING FRUIT
[00:34:36] OF APU USAGE AT THE AIRPORT. AND AGAIN,
[00:34:39] THIS IS A QUESTION THAT MAY NOT BE ABLE
[00:34:42] TO BE ANSWERED HERE, BUT I AM WONDERING
[00:34:44] HOW MUCH OF THAT REDUCING THE USE
[00:34:48] OF THE APU REALLY RESTS WITH THE PORT,
[00:34:51] PROVIDING THE INFRASTRUCTURE NEEDED FOR
[00:34:52] PLANES TO BE ABLE TO PLUG IN QUICKER,
[00:34:53] AND HOW MUCH OF THAT IS JUST HABIT OR
[00:34:56] NEED TO CHANGE KIND OF PRACTICES AT THE
[00:34:59] AIRLINE LEVEL. RYAN, THAT'S TWO
[00:35:03] QUESTIONS. PLEASE PICK ONE OF THEM.
[00:35:07] THESE CAN BE ADDRESSED IN WRITING TO US
[00:35:10] BEYOND THIS. I KNOW THESE ARE BIG
[00:35:12] QUESTIONS, BUT I JUST WANTED TO THROW
[00:35:14] THOSE OUT THERE. GREAT COMMISSIONER CALKINS.
[00:35:16] I WILL DEFER ON THE SLOW QUESTION. I THINK

[00:35:19] THE PARTNERSHIP IS ABSOLUTELY KEY, AND
[00:35:20] THAT'S OUR AIRPORT PEERS TEAM VALLEY,
[00:35:23] WICK, AND I SPEND MORE TIME ON THE
[00:35:25] COURSE STABILITY SIDE. SO I'M NOT EXPERT
[00:35:27] TO SPEAK ON THAT FOR ALASKA, BUT IN
[00:35:29] TERMS OF APU USAGE, WE ARE LOOKING VERY
[00:35:31] ACTIVELY. I MENTIONED THAT CULTURE OF
[00:35:33] EFFICIENCY. WE ARE GOING BACK IN AND
[00:35:35] REALLY LOOKING AT OUR OPERATIONAL BEST
[00:35:37] PRACTICES AND REALLY LOOKING AT HOW DO
[00:35:41] WE MAXIMIZE THE OF OUR APU OR MINIMIZE
[00:35:44] THE VERY FEW AS WELL AS THINGS LIKE
[00:35:46] SINGLE AND TAX AND EVERYTHING IS
[00:35:48] ESSENTIALLY INVOLVED IN THE AIRPORT
[00:35:49] TURN. WE'VE GOT SOME INTERNAL
[00:35:51] CONVERSATIONS BOTH BETWEEN ALASKA
[00:35:53] MAINLINE AS WELL AS HORIZON, OUR
[00:35:55] REGIONAL AIRLINE, TO LOOK AT THOSE
[00:35:57] OPPORTUNITIES AND REALLY MAXIMIZE THAT.
[00:36:00] WE WANT TO BE THE MOST EFFICIENT AIRLINE
[00:36:02] IN TERMS OF HOW WE RUN OUR OPERATIONS.
[00:36:04] WE BELIEVE THAT'S GREAT FOR THE
[00:36:05] BUSINESS. IT'S GREAT FOR THE
[00:36:06] ENVIRONMENT. AND IT REALLY IS PART OF
[00:36:08] SOMETHING THAT WE'VE EXCEL AT. SAFETY.
[00:36:10] INSTEAD OF TAKING THAT MODEL IS REALLY
[00:36:12] KEY. WE CAN GO IN FURTHER DETAIL AROUND
[00:36:14] WHEN SOMETHING DOESN'T WIN. THERE ARE
[00:36:17] GAPS. WHAT ARE THOSE WHAT'S OCCURRING IN
[00:36:20] THAT SPACE BECAUSE THERE MIGHT BE A
[00:36:22] WINTER STORM? OR ARE THERE DIFFERENT
[00:36:25] CONTINGENCIES THAT HAPPENED? BUT IDENTIFYING,
[00:36:28] AND MINIMIZING THOSE THAT OUR
[00:36:29] STANDARD OPERATING PROCEDURES IS TO DO
[00:36:32] THE BEST THAT WE CAN IS ABSOLUTELY ONE
[00:36:34] OF OUR GOALS. THAT'S GREAT, KIRK. AND I
[00:36:36] THINK THIS IS ONE OF THOSE THINGS THAT
[00:36:37] THE START FORUM SHOULD REALLY BE
[00:36:39] MONITORING AS WELL. CLERK HART, THE NEXT
[00:36:42] SPEAKER. COMMISSIONER, PLEASE. THANK
[00:36:45] YOU. COMMISSIONER BOWMAN.
[00:36:48] I DO SEE THAT SHE'S JOINED THE CALL.
[00:36:51] WE'LL COME BACK. COMMISSIONER CHO,
[00:36:53] YEAH. THANKS SO MUCH FOR BEING
[00:36:56] HERE TODAY. I WANTED TO ASK YOU A
[00:36:58] QUESTION WITH REGARDS TO THE BROADER
[00:37:01] MACRO LEVEL PERSPECTIVE. OBVIOUSLY,
[00:37:05] WHAT WE DO HERE IN THE PACIFIC NORTHWEST
[00:37:07] IS A VERY SMALL PORTION OF THE FOOTPRINT
[00:37:09] WHEN IT COMES TO AVIATION FUEL. AND SO I
[00:37:11] WANTED TO GIVE YOUR THOUGHTS ON WHAT WE
[00:37:13] COULD BE DOING OR WHAT WE SHOULD BE
[00:37:14] ADVOCATING MORE ON A NATIONAL LEVEL TO
[00:37:17] GET THE ENTIRE INDUSTRY TO ADOPT A
[00:37:20] SUSTAINABLE AVIATIONAL FUELS FASTER.
[00:37:24] SO IT'S A GREAT QUESTION. AND PETE
[00:37:27] GALLAGHER AS I MENTIONED IS OUR DIRECTOR ON
[00:37:29] AFFAIRS WHO WORKS REALLY ON THE FEDERAL
[00:37:30] POLICY LEVEL. AND THAT IS AN AREA WHERE
[00:37:32] THE PARTNERSHIP THAT'S ONGOING WITH PORT
[00:37:34] OF SEATTLE AND OTHER PARTNERS IS REALLY,
[00:37:36] REALLY KEY. WE DO BELIEVE THAT HAVING
[00:37:39] FEDERAL POLICY AND SUPPORT IN THE SPACE

[00:37:42] IN THE APPROPRIATE WAY IS KEY TOWARDS
[00:37:44] SCALING THIS MARKET AND EACH SAF
[00:37:47] PROCESS. STEPHANIE MENTIONED THIS, I GOT
[00:37:49] ITS OWN UNIQUE ECONOMIC DRIVERS IN
[00:37:51] DIFFERENT VARIABLES THAT PLAY INTO IT IN
[00:37:53] EACH REGION ALSO HAS ITS OWN VARIABLES.
[00:37:55] SO HAVING CONSISTENT KNOWN SUPPORT
[00:37:59] SPECIFICALLY AROUND SAF IS THE LARGEST
[00:38:01] THING I THINK COULD BE HELPFUL IN TERMS
[00:38:04] OF SUPPORTING THIS AND ALLOWING THE
[00:38:06] DIFFERENT REGIONS TO FIND WHAT SOLUTIONS
[00:38:07] WORK ECONOMICALLY AND ALSO FROM A
[00:38:09] SUSTAINABILITY PERSPECTIVE FOR THOSE
[00:38:11] AREAS. GREAT. THANK YOU. SO WE'RE
[00:38:15] VERY LUCKY TO HAVE HIM WORKING WITH
[00:38:17] SCHOENFELD ON THIS. WE HAVE THE TALENT TO
[00:38:19] DO THAT. SO PLEASE, WHO'S THE NEXT?
[00:38:22] THANK YOU, COMMISSIONER.
[00:38:25] SIR, PLEASE. SOMEBODY HAS THEIR
[00:38:29] XYLOPHONE GOING, PLEASE MUTE. IS IN
[00:38:32] THE MORNING. KURT, THANK YOU VERY MUCH
[00:38:35] FOR THIS REALLY INTRIGUING PRESENTATION.
[00:38:39] I THINK THERE'S A LARGER PICTURE HERE
[00:38:41] THAT YOUR PRESENTATION SPEAKS TO BEYOND
[00:38:44] SAF, WHICH IS THE FOCUS OF THIS STUDY
[00:38:47] SESSION, ALWAYS AND MEANS IN WHICH WE
[00:38:50] CAN REDUCE THE CARBON FOOTPRINT. AND YOU
[00:38:53] OUTLINE FIVE STRATEGIES THERE,
[00:38:55] INCLUDING SAF. BUT I RECALL
[00:38:59] A FEW YEARS AGO WHEN I FIRST JOINED THE
[00:39:02] COMMISSION, I ASKED ALASKA, WHAT HAS
[00:39:05] BEEN YOUR ACCOMPLISHMENT WITH REGARD TO
[00:39:07] REDUCING CARBON EMISSIONS THROUGH
[00:39:10] WHATEVER MEANS? AND I RECALL A FIGURE OF
[00:39:13] 37% REDUCTION WITH
[00:39:18] THE STRONGEST RESULTS COMING FROM FLEET
[00:39:23] UPGRADES. SO I JUST WANT TO POINT THAT
[00:39:26] OUT. LET'S LOOK AT THE TOTAL PICTURE
[00:39:29] HERE AND ALL MEANS AND WAYS TO ACHIEVE
[00:39:32] THE RESULTS WE'RE SEEKING. I DO BELIEVE
[00:39:35] THE SAF IS AN IMPORTANT COMPONENT OF
[00:39:37] THIS AND THAT IT HAS A VERY PROMISING
[00:39:39] FUTURE NOW, ESPECIALLY WITH THE CARBON
[00:39:42] FUEL STANDARD LEGISLATION JUST PASSED.
[00:39:45] I WANTED TO ASK YOU ABOUT NOVEL
[00:39:47] PROPULSION, WHAT WORK HAS BEEN DONE
[00:39:50] THERE, AND HOW DOES THAT FIT INTO THE
[00:39:52] PICTURE AS ONE OF YOUR FIVE STRATEGIES?
[00:39:54] IT'S A GREAT QUESTION. IS SOMETHING
[00:39:56] WE'RE LOOKING AT VERY CLOSELY? WE HAVE A
[00:39:58] PILOT OR FLIGHT OPERATIONS TEAM WHO HAS
[00:40:00] A DEEP EXPERIENCE IN INNOVATION AND IN
[00:40:03] DIFFERENT AREAS OF SUSTAINABILITY IN
[00:40:05] NOVEL PROPULSION, BOTH WITHIN ALASKA AND
[00:40:07] OUTSIDE OF ALASKA. AND WE HAPPEN TO BE
[00:40:10] HERE ON THE WEST COAST WHERE A LOT OF
[00:40:11] INTERESTING INNOVATION IS HAPPENING WITH
[00:40:13] HYDROGEN, WITH ELECTRIC HYBRID, WITH
[00:40:15] DIFFERENT VERSIONS AND DIFFERENT
[00:40:17] TECHNOLOGIES THAT WE SEE AS A POTENTIAL
[00:40:19] FIT IN THE MID TO LONG TERM, CERTAINLY
[00:40:22] ESPECIALLY FOR OUR REGIONAL SEAT. AND SO
[00:40:24] WE ARE INVESTING TIME, ENERGY AND TO

[00:40:27] UNDERSTAND WHERE WE CAN INNOVATE AND CEO
[00:40:29] WOULD HELP WITH OUR EXISTING FLIGHT LOAD
[00:40:31] IN OUR CIP CAPACITY IN THIS SMALLER
[00:40:33] AIRCRAFT, WHERE WE SEE THE BIGGEST
[00:40:35] OPPORTUNITY FOR MAIN LINE. WE THINK THAT
[00:40:37] SAF IS REALLY EFFICIENCY. JUST AS YOU
[00:40:39] MENTIONED, WE ARE VERY PROUD THAT WE'VE
[00:40:40] INCREASED OUR EFFICIENCY SIGNIFICANTLY
[00:40:42] SINCE 2009 WITH FLEET UPGRADES WITH
[00:40:44] OTHER OPERATIONAL UPGRADES, AND THAT'S
[00:40:47] ABSOLUTELY NECESSARY AND NOT SUFFICIENT
[00:40:50] TO GET US ALL THE WAY TO THE GOAL WE
[00:40:52] WANT TO THAT WE WANT TO HAVE. GREAT.
[00:40:54] THANK YOU VERY MUCH. THANKS, KURT. I
[00:40:57] WOULD LIKE TO TAKE THIS TIME TO REALLY
[00:40:59] APPRECIATE WORKING IN ALASKA DOES AND
[00:41:02] WILL NOW HEAR FROM KEITH TAYLOR,
[00:41:04] SUSTAINABLE AVIATION AND QUALITY GENERAL
[00:41:07] MANAGER WITH DELTA AIRLINES. PLEASE LET
[00:41:10] US KNOW WHEN YOU'RE READY TO DISPLAY
[00:41:11] YOUR PRESENTATION AND THE CLERK WILL
[00:41:13] ADVANCE THE SLIDES WHEN YOU SIGNAL.
[00:41:14] KIRK, THE FLOOR IS YOURS. SO GOOD
[00:41:18] MORNING TO EVERYBODY. MORNING
[00:41:20] COMMISSION. FIRST OF ALL, THANK YOU FOR
[00:41:22] ALLOWING US TO HAVE THIS OPPORTUNITY TO
[00:41:24] PRESENT OUR STRATEGIES THAT ARE KEY TO
[00:41:27] SUSTAINABLE AVIATION AND SUSTAINABLE
[00:41:30] FUELS AS WELL AS THE CLIMATE. YOU CAN
[00:41:34] PRESENTATION, PLEASE. I'M SORRY,
[00:41:37] KEITH. DID I SAY KIRK, I MISS YOU,
[00:41:40] BUT THAT'S OKAY. THAT'S OKAY. NO
[00:41:43] WORRIES. MY APOLOGIES. WE'RE HEARING NOW
[00:41:46] FROM KEITH TAYLOR WITH DELTA AIRLINES.
[00:41:50] I'M SORRY. AGAIN. YES. SO AGAIN, I'M
[00:41:52] KEITH TAYLOR. I'M THE GENERAL MANAGER,
[00:41:53] SUSTAINABLE FUELS AS WELL AS FUEL
[00:41:55] QUALITY ASSURANCE. I WANT TO TALK TODAY
[00:41:59] SPECIFICALLY ABOUT A COUPLE OF POINTS,
[00:42:00] THE EFFORTS THAT DELTAS PUT TOGETHER FOR
[00:42:04] CLIMATE IMPROVEMENTS, CARBON NEUTRAL
[00:42:07] ACTIVITIES YOU CAN EVENT TO SLIDE, BY
[00:42:09] THE WAY, AS WELL AS WHAT WE'RE LOOKING
[00:42:11] AT ON THE WASHINGTON FRONT IN THE STATE
[00:42:14] OF WASHINGTON FRONT IN TERMS OF
[00:42:16] POTENTIAL PROJECT THAT WE ARE LOOKING AT
[00:42:18] WITH NORTHWEST ADVANCED BIOFUELS. SO
[00:42:20] AGAIN, GOOD MORNING TO EVERYONE. I'LL
[00:42:22] TRY TO STAY WITHIN MY 10 MINUTE TIME
[00:42:24] FRAME AND I'LL BE WATCHING A CLOCK AS IT
[00:42:26] COMES OUT. SO FIRST OF ALL,
[00:42:28] SUSTAINABILITY IS A CORE OF DELTA.
[00:42:30] WE'VE BEEN WORKING FOR A DECADE OR MORE
[00:42:33] NOW, WORKING AT LOOKING AT OUR MISSIONS
[00:42:35] CLOSELY TO DIFFERENT INNOVATIONS,
[00:42:37] DIFFERENT EFFICIENCY IMPROVEMENTS,
[00:42:39] THINGS OF THAT NATURE. WE WOULD WANT THE
[00:42:42] ONLY GLOBAL AIRLINE TO VOLUNTEER CAP OUR
[00:42:45] MISSIONS AT THE 2012 LEVELS. WE'VE BEEN
[00:42:47] DOING IT EVERY SINCE JUST A YEAR AGO.
[00:42:51] WE LOOKED AT A NEW CARBON STRATEGY
[00:42:54] THAT WE WANT TO DO. WE WANT TO BECOME
[00:42:56] CARBON NEUTRAL. FROM MARCH 2020

[00:42:59] ONWARDS, WE WERE COMMITTED TO INVESTING
[00:43:01] A BILLION DOLLARS OVER THE NEXT DECADE
[00:43:03] TO DO THAT, THE KEY PILLARS THAT WE'RE
[00:43:05] LOOKING AT. OBVIOUSLY, ONE IS CARBON
[00:43:07] REDUCTION. YOU GUYS HAVE HEARD A LOT
[00:43:08] ABOUT THAT, BUT THAT'S IN TELLING FLEET
[00:43:10] OPERATIONS IMPROVEMENT, CHANGING UP WITH
[00:43:13] OUR FLEET MODERNIZATION OF THE FLEET TO
[00:43:16] IMPROVE THE EFFICIENCY GAINS ON THE
[00:43:18] AIRCRAFT ITSELF. WE'VE HAD A FEW
[00:43:21] ANNOUNCEMENTS AROUND THAT THE LATEST
[00:43:22] BEING THE A THRU 21 NEODES, WHICH IS ABOUT
[00:43:25] 12% IMPROVEMENT ON EFFICIENCY PER SE.
[00:43:28] WE ALSO LOOKED AT, OBVIOUSLY THINGS
[00:43:32] LIKE THE OPERATIONAL ENHANCING OF HOW WE
[00:43:34] TRAVEL THERE, PUTTING THE RIGHT AIRCRAFT
[00:43:36] IN THE RIGHT ROUTE ADDITIONALLY. SO AS
[00:43:39] PART OF THAT STRATEGY AS WELL, WHICH
[00:43:41] WE'LL GET TO IN A MINUTE. AND ALSO WE
[00:43:44] TALKED A LITTLE BIT ABOUT IT. BUT APU
[00:43:47] BURN HAS BEEN A KEY FOCUS ON OUR RADAR
[00:43:51] SCREEN FOR YEARS. WE'VE ALSO HAD A ROAD
[00:43:53] SHOW IN 2019, INCLUDING INTO SEATTLE,
[00:43:56] LOOKING AT AREAS WHERE WE CAN PROVE THE
[00:43:58] APU BURN WORKING WITH THE SEATTLE
[00:44:00] PARTNERS AND STEPHANIE AND COMPANY IN
[00:44:03] TERMS OF TRYING TO REDUCE THAT OUTPUT
[00:44:06] THERE. SO THE OTHER THING THAT WE'RE
[00:44:08] LOOKING AT IS CARBON REMOVAL, WHICH
[00:44:10] ENTAILS PROJECT OUTSIDE OF OUR OWN,
[00:44:13] OUR OWN CARBON QUEST THAT
[00:44:17] CAN BE DIRECT AIR CAPTURE, CARBONCY,
[00:44:19] QUESTION STORAGE, FORESTRY,
[00:44:22] RESTORATION, THINGS OF THAT NATURE TO GO
[00:44:25] BEYOND JUST WHAT WE'RE LOOKING AT FROM
[00:44:27] OUR OWN CARBON FOOTPRINT. A STAKEHOLDER
[00:44:30] ENGAGEMENT. EXCUSE ME, KEITH, WE'VE BEEN
[00:44:32] USING THE TERM APU THROUGHOUT THIS
[00:44:34] PRESENTATION. COULD YOU JUST QUICKLY LET
[00:44:37] OUR LISTENING PUBLIC UNDERSTAND WHAT THE
[00:44:40] ACRONYM MEANS? ABSOLUTELY. SO APU, THE
[00:44:43] AUXILIARY POWER UNIT IS A UNIT ON THE
[00:44:46] AIRCRAFT THAT WE CAN UTILIZE, AND IT
[00:44:49] CONSUMES JET FUEL TO KEEP THE AIRCRAFT
[00:44:52] CLIMATE COOL. BUT THERE'S ALSO
[00:44:56] ALTERNATIVE ROUTE THAT WE PREFER. BUT
[00:44:58] BASICALLY, WHEN YOU USE THE APU, YOU'RE
[00:45:00] BURNING A LITTLE BIT OF A JET. WE TRY TO
[00:45:03] AVOID THAT BECAUSE THAT'S AGAIN, TAIL
[00:45:04] PIPE CONDITIONS THAT WE TRY TO REDUCE
[00:45:06] OUR CARBON. IT IS A GOOD WAY OF REDUCING
[00:45:10] THE AMOUNT OF FUEL THAT YOU'RE CONSUMING
[00:45:12] IN YOUR FLIGHTS AND OVER THE YEARS. AND
[00:45:14] THAT REDUCTION ALSO AGAIN AFFECTS YOUR
[00:45:17] CARBON FOOTPRINT. SO THAT'S WHEN WE SAY
[00:45:19] APU, THAT'S WHAT WE'RE TALKING ABOUT.
[00:45:21] AND THE FACT THAT YOU CAN PLUG IN AT
[00:45:22] SEATAC ALLOWS YOU TO AVOID THAT NEED,
[00:45:26] RIGHT? ABSOLUTELY. THAT'S THE AUXILLARY
[00:45:29] ANCILLARY EFFORTS THAT WE'RE TRYING TO
[00:45:30] DO TO AVOID TAPU BURN. CORRECT. STAKE ON
[00:45:34] ENGAGEMENT. THERE'S ANOTHER AREA THAT
[00:45:35] WE'RE LOOKING AT HIGHLY FOCUS ON BECAUSE

[00:45:37] OUR CORPORATE CLIENTS ARE LOOKING AT
[00:45:39] WAYS THAT IT CAN REDUCE THE CARBON
[00:45:41] FOOTPRINT THROUGH TRAVEL. WE HAVE
[00:45:43] ENGAGED SEVERAL OF THOSE COMPANIES,
[00:45:47] NIKE COMES TO MIND THE LORD IS ANOTHER
[00:45:49] COMPANY THAT'S COME TO MIND THAT WE'VE
[00:45:50] HAD PUBLIC ANNOUNCEMENTS AROUND THAT WE
[00:45:52] LOOK TO ENGAGE TO INCREASE SOUTH
[00:45:55] INVESTMENT, WHICH IS KEY. AS STEPHANIE
[00:45:57] MENTIONED EARLIER, THE SAF PRODUCTION
[00:46:00] LEVELS IS 5,000,000 AROUND. THAT
[00:46:02] 5,000,000 GALLONS PER YEAR RANGE OR WIDE
[00:46:05] FOR US. FOR DELTA, YOU'RE LOOKING AT
[00:46:08] ROUGHLY ON TODAY'S TRAVEL FUEL
[00:46:10] CONSUMPTION, ABOUT ONE DAY OF DAILY
[00:46:14] TRAVEL CONSUMPTION FOR US, AND THAT'S
[00:46:16] ALL OF THE SOUTH THAT'S GOING GLOBALLY.
[00:46:17] SO I SAY THAT TO SAY THAT SOUTH HAS
[00:46:21] A WAYS TO GO, AND WE'RE LOOKING TO PUT
[00:46:24] OUR STAMP ON IT, MOVE THE DIRECTION.
[00:46:27] AND I THINK STAKEHOLDER ENGAGEMENT,
[00:46:28] INVESTMENTS AND TECHNOLOGY, THINGS OF
[00:46:30] THAT NATURE, WHICH WE'RE WORKING ON WITH
[00:46:32] OUR INVESTMENT AND WITH OUR PARTNERS,
[00:46:34] WILL GO A LONG WAY TO INCREASE THE
[00:46:36] AVAILABILITY OF SAF IN THE INDUSTRY. I
[00:46:39] LIKE TO SAY IF YOU LOOKED AT RYAN SIDE
[00:46:42] AND SLIDE, OUR EFFORTS HAVE NOT GONE
[00:46:44] UNRECOGNIZED. YOU CAN SEE THE BALL. ONE
[00:46:46] SUSTAINABLE INDEX. WE'VE BEEN A PART OF
[00:46:48] THAT FOR 10 YEARS. THE ONLY AIRLINE IN
[00:46:50] THAT INDEX, SP SP GLOBAL,
[00:46:54] THE SAME YEARBOOK MEMBER AS WELL AS THE
[00:46:56] PUT FOR GOOD SIX YEARS IN THAT RANGE.
[00:46:58] SO WE ARE BEING RECOGNIZED FOR OUR
[00:47:00] EFFORTS. WE WILL CONTINUE TO STRIVE TO
[00:47:02] IMPROVE EACH AND EVERY YEAR AS WE
[00:47:05] MANEUVER THROUGH THIS DECADE WITH THE
[00:47:07] 1,000,000,000 DOLLAR INVESTMENT WE
[00:47:08] MENTIONED EARLIER. NEXT SLIDE. SO HERE'S
[00:47:13] SOME HIGHLIGHTS OF WHAT WE'VE DONE.
[00:47:15] I'LL JUST PICK A FEW OF THEM FOR THE
[00:47:17] INTEREST OF TIME AGAIN, SAVING
[00:47:19] 33,000,000 GALLONS OF FUEL IN 2019
[00:47:22] ALONE. THAT GOES BACK TO THE EFFICIENCY
[00:47:24] GAINS TO FLEET CHANGING THE OPERATIONAL
[00:47:26] NATURE THAT WE TALK ABOUT IN THE APU
[00:47:28] BURN BEHAVIOR WISE. HOW DO WE MANAGE
[00:47:31] THAT? AND HOW DO WE IMPLEMENT STRATEGIES
[00:47:33] THAT WOULD IMPROVE AND REDUCE OUR
[00:47:35] OVERALL CONSUMPTION OF FUEL AS WELL AS
[00:47:37] IMPROVING THE EFFICIENCY OF OUR FLEET?
[00:47:39] WE'VE DONE A NUMBER OF RETIREMENTS. WE
[00:47:41] ACCELERATE RETIREMENTS OF AIRCRAFT IN 2020
[00:47:43] AS A RESULT OF THE PANDEMIC. BUT WE'RE
[00:47:46] STILL THAT WAS A LONG RANGING PLAN THAT
[00:47:48] JUST GOT ACCELERATED AT THAT TIME. AND
[00:47:50] WE CONTINUE TO LOOK AT WAYS THAT WE CAN
[00:47:52] IMPROVE OUR EFFICIENCY AS WELL AS TO
[00:47:55] FLEET MANAGEMENT, TO OPERATIONAL TO
[00:47:57] STRATEGY DEVELOPMENT, THINGS OF THAT
[00:47:59] NATURE. THE OTHER THINGS ARE 10,000,000
[00:48:03] GALLONS THAT WE'RE LOOKING AT FROM A

[00:48:05] SOUTH PERSPECTIVE. WE HAVE ENGAGED GIVO FOR
[00:48:08] RENEWABLE BIOFUELS AT THEIR FACILITIES
[00:48:12] THAT THEY ARE LOOKING TO ENGAGE. IT
[00:48:15] 2,000,000 GALLONS OF MORE FACILITY. WE
[00:48:17] HAVE SIGNED AN OFF TAKE AGREEMENT WITH
[00:48:19] THEM, WORKING WITH THEM TO PRODUCE THAT
[00:48:22] AROUND THE 2023 TO 2024 TIME FRAME.
[00:48:25] IN ADDITION TO THAT, WHEN WE'RE TALKING
[00:48:27] ABOUT SAF, WE'VE INVESTED 2,000,000
[00:48:30] DOLLARS IN A STUDY WITH NORTHWEST
[00:48:31] ADVANCED BIOFUELS PRODUCE FUEL FROM
[00:48:34] FOREST BREED. THIS WOULD ALL BE BASED OFF
[00:48:36] SEATAC FROM THE NORTHWEST OF PACIFIC
[00:48:38] NORTHWEST AREA ARE IN AND AROUND THE
[00:48:41] STATE OF WASHINGTON, STATE OF OREGON,
[00:48:42] AND SO FORTH. WE'RE LOOKING FOR A
[00:48:44] PRODUCTION FACILITY THAT WOULD ACTUALLY
[00:48:46] BE IN THE STATE OF WASHINGTON. SO WE'RE
[00:48:48] LOOKING FOR TO PUT A STAMP OF ACTUAL
[00:48:52] SAF PRODUCTION IN THE STATE. THIS IS A
[00:48:55] VERY EXCITING PROJECT. I'M ACTUALLY A
[00:48:59] PROJECT LEAD FOR DELTA ON THIS. AND SO
[00:49:00] I'M WORKING CLOSELY WITH THE NORTHWEST
[00:49:02] ADVANCED BIEOFUELS TEAM TO ADVANCE THAT
[00:49:05] EFFORT. THE OTHER THING THAT WE'RE
[00:49:07] LOOKING AT OBVIOUSLY NEAR TIME, WE HAVE
[00:49:11] THE ABILITY TO HAVE CARBON OFFSETS THAT
[00:49:13] WE'VE BEEN WORKING ON. AS I MENTIONED
[00:49:14] BEFORE, WE'RE THE ONLY AIRLINE THAT HAVE
[00:49:16] CAPPED OUR MISSIONS TO 2012 LEVELS,
[00:49:20] AND WE USE CARBON OFFSETS AND EFFICIENCY
[00:49:22] GAINS TO DO THAT. THAT STILL WILL BE A
[00:49:25] PART OF THE PORTFOLIO AT THIS TIME AS A
[00:49:28] NEAR TERM FIX OUR SOLUTION. BUT THE
[00:49:31] LONGER TERM, MEDIUM TERM, LONGER TERM,
[00:49:34] OBVIOUSLY, SAF DEVELOPMENT IMPROVEMENT
[00:49:36] AND THE ADVANCED TECHNOLOGIES TO REDUCE
[00:49:38] OUR CARBON TO A CARBON MUTUAL
[00:49:40] PERSPECTIVE. NEXT SLIDE. SO HERE'S
[00:49:48] A LITTLE BIT MORE ABOUT SAF. AS I
[00:49:51] MENTIONED BEFORE, WE'RE CHANGING OUR
[00:49:53] FLEET, LOOKING AT NEW WAYS TO MODERNIZE
[00:49:54] OUR FLEET WITH THE NEW AIRCRAFT TO COME
[00:49:56] ONLINE. AS WE DO THAT, WE'RE ALSO
[00:49:59] LOOKING AT OUR FIRST DELIVERY FLIGHTS.
[00:50:01] HOW DO WE MANAGE THAT SO THAT WE HAVE A
[00:50:03] CARBON MUTUAL OUTPUT. WE'VE WORKED WITH
[00:50:06] AIRBUS AND AIRBP ON SEVERAL DELIVERIES,
[00:50:10] ACTUALLY UTILIZING SAF AS PART OF THAT
[00:50:12] AND CARBON OFFSETS TO DELIVER TO THEIR
[00:50:15] DESTINATION FOR THEM TO ACTUALLY PUT
[00:50:17] THEM INTO DEplete MOBILITY OF DELTA.
[00:50:21] AND SO WE'VE BEEN WORKING WITH THOSE
[00:50:22] GUYS OVER THE LAST FEW YEARS IN DOING
[00:50:24] SO. AGAIN, THE BIOREFINERY. WHAT WE'RE
[00:50:27] LOOKING AT SUSTAINABLE BIO FINDER IN THE
[00:50:29] STATE OF WASHINGTON FEESTOCK IS THE WOOD
[00:50:31] RESIDUE THAT I MENTIONED EARLIER FROM
[00:50:33] FORESTS THAT WE'RE TRYING TO ELIMINATE
[00:50:36] FROM A FOREST MANAGEMENT, ANY POTENTIAL
[00:50:38] FIRE THAT IT MAY CAUSE. SO IT'S A GOOD
[00:50:41] THING FROM THAT PERSPECTIVE, OUR
[00:50:42] EXPECTATIONS OF AVAILABILITY, THAT FUEL

[00:50:45] ON EARLY 2025 AND THE REGION THAT
[00:50:49] WE'RE LOOKING AT ARE OBVIOUSLY THE STATE
[00:50:51] OF WASHINGTON, SEATTLE. WE'RE ALSO
[00:50:53] LOOKING AT PORTLAND, SAN FRANCISCO AND
[00:50:56] LAX AS OTHER OPPORTUNITIES AS WELL.
[00:50:58] NEXT SLIDE, PLEASE. SO HERE'S
[00:51:03] MY LAST SLIDE. I WANT TO GET A LITTLE
[00:51:05] BIT MORE ABOUT THE PROJECT ITSELF.
[00:51:07] WHERE WE ARE TODAY IS WE'RE IN THE FEED
[00:51:09] STUDY PHASE THAT WE'RE LOOKING AT
[00:51:12] DEVELOPING THE DESIGN BASIS FOR
[00:51:15] THE PROJECT. WHAT WILL IT ENTAIL IN
[00:51:18] TERMS OF OPERATIONS? WE DO KNOW FROM THE
[00:51:20] PROJECT ITSELF, THE CHEMICAL OPERATIONS
[00:51:23] THAT ARE UNTIL ARE VERY TRADITIONAL.
[00:51:25] THEY'RE NOT SOMETHING NEW. THEY'RE VERY
[00:51:29] WELL TUNED IN INDUSTRY AND WELL KNOWN IN
[00:51:30] INDUSTRY. AND SO WHAT WE'RE LOOKING AT
[00:51:33] IS MARRYING THOSE DIFFERENT TECHNOLOGIES
[00:51:35] TOGETHER TO TAKE THE FEEDSTOCK, THE
[00:51:37] WOODY BIOMASS RESIDUE AND PRODUCING A
[00:51:41] CLEAN, SAF PRODUCT AND PRODUCTION
[00:51:46] CAPABILITIES ABOUT 60,000,000 GALLONS
[00:51:48] PER YEAR OVER A 10 YEAR PERIOD. THAT'S
[00:51:50] ABOUT 600,000,000 DOLLARS OF PRODUCT
[00:51:52] THAT WE WOULD SEE IN THAT WEST COAST
[00:51:55] REGION.
[00:51:57] I'D LIKE TO SAY FROM A STANDPOINT OF
[00:52:00] WHERE WE ARE TODAY AND LOOKING AT THE
[00:52:02] TIMELINE, NORTHWEST ADVANCED BIOFUELS
[00:52:05] HAVE BEEN WORKING VERY HARD AND VERY
[00:52:06] DILIGENTLY ON MOVING THIS PROJECT ALONG.
[00:52:10] AGAIN, WE ARE IN THE STUDY PHASE, SO WE
[00:52:12] GOT A LOT OF WORK TO DO. AND IF YOU CAN
[00:52:14] LOOK AT THE TIMELINE, WE EXPECT THAT
[00:52:16] FRONT ENGINEERING DESIGN TO BE DONE
[00:52:18] WITHIN ABOUT 10 TO 15 MONTHS. WE HOPE TO
[00:52:21] GET THAT CASCADED AND STARTED THIS YEAR.
[00:52:23] BUT ONCE WE HAVE THAT VIEW OF THE
[00:52:27] PROJECT ITSELF AND ITS FEASIBILITY, WE
[00:52:29] WILL BE LOOKING AT THE FINAL FUNDING
[00:52:31] REQUIREMENTS TO DO THAT. SO REALLY,
[00:52:33] THIS IS THE KEY STEP. THE KEY STEP IS
[00:52:35] THE KEY STEP AND DETERMINE THE PROJECT
[00:52:37] FEASIBILITY AND MOVING FORWARD. ONCE WE
[00:52:39] HAVE THAT AVAILABLE AND UNDERSTOOD.
[00:52:41] OBVIOUSLY, FUNDING WOULD BE NEXT TO GO
[00:52:44] INTO A FULL FLEDGED PROJECT IF WE ARE
[00:52:47] SUCCESSFUL, WHICH IS WHAT WE'RE WORKING
[00:52:50] ON TODAY PROJECT CONSTRUCTION. WE
[00:52:52] ESTIMATED SOMETIME IN 2022 WITH FULL
[00:52:56] PRODUCTION AGAIN AROUND 2025 TIME
[00:52:58] FRAME. WE ARE ENGAGED WITH NORTHWEST
[00:53:01] ADVANCED BIO HEAVILY ON THIS. THEY HAVE
[00:53:05] GREAT TEAM DYNAMICS THAT THEY'RE WORKING
[00:53:07] WITH INTERNALLY AS WELL AS EXTERNAL
[00:53:10] PARTNERS LIKE BLACK AND BEACH WHO ARE
[00:53:12] WELL RENOWNED ENGINEERING GROUP THAT'S
[00:53:15] GOING TO DO THE FRONT AND ENGINEERING
[00:53:17] STUDY. THEY HAVE AN LI IN PLACE AS WELL
[00:53:20] AS FROM THE FEED STOCK PERSPECTIVE,
[00:53:22] WHICH IS KEY AS WELL, LIS, ARE IN PLACE
[00:53:25] ON THAT PERSPECTIVE. IN ESSENCE OF THE

[00:53:28] OF THE PROJECT ANNUAL FEED STOCK
[00:53:30] REQUIREMENTS. THE FEED STOCK IS THERE.
[00:53:33] IT IS AVAILABLE. WE'RE LOOKING AT THE
[00:53:35] FEED STUDY TO DETERMINE THE NEXT STEPS IN
[00:53:37] TERMS OF PROJECT AVAILABILITY. FROM
[00:53:40] THERE, ASSUMING THE STUDY IS SUCCESSFUL,
[00:53:43] WE'RE VERY OPTIMISTIC HE WILL BE WE WILL
[00:53:47] MOVE INTO FUNDING AS WELL AS POTENTIAL
[00:53:50] CONSTRUCTION FOR THE PROJECT. AND AGAIN,
[00:53:52] ALL OF THIS WILL BE IN THE STATE OF
[00:53:53] WASHINGTON IS WHAT WE ARE ASSUMING AT
[00:53:55] THIS POINT IN TIME. THAT IS THAT
[00:54:00] CONCLUDES MY PRESENTATION. AGAIN, THANK
[00:54:02] YOU, COMMISSION AND COMMISSIONER FELLEMAN
[00:54:05] FOR YOUR TIME. AND I'M OPEN TO
[00:54:07] QUESTIONS. REALLY FANTASTIC AND EXCITING
[00:54:10] NEWS. KEITH, I'M DELIGHTED TO SEE THAT
[00:54:13] YOU'RE LOOKING AT WASHINGTON EXPANDING
[00:54:15] THESE FACILITIES THAT WE HAVE AS WELL.
[00:54:18] AND I'M JUST WONDERING WHETHER WE CAN
[00:54:19] GET THOSE CO BENEFIT TAX CREDITS FOR
[00:54:23] FIRE RETARDATION AND JOBS IN THE WOODS.
[00:54:26] IT'S ABOUT I'D LIKE TO HAVE OUR
[00:54:30] COLLEAGUES ON THE COMMISSION TO TAKE A
[00:54:31] MOMENT HERE TO SEE IF WE HAVE ANY
[00:54:34] QUESTIONS. AND CLERK, PLEASE CALL THE
[00:54:36] ROLL. THANK YOU. BEGINNING WITH
[00:54:38] COMMISSIONER BOWMAN, CAN YOU HEAR ME
[00:54:40] NOW? WE CAN YES. EXCELLENT. FANTASTIC.
[00:54:44] WE'RE GOING TO GET TO SAF AND GET
[00:54:45] TEAMS WORKING AT SOME POINT. IT'S MORE
[00:54:47] OF CONSISTENTLY. THANK YOU FOR YOUR
[00:54:49] PRESENTATION. BOTH, KEITH, AND ALSO
[00:54:52] APPRECIATE ALASKA AIRLINES. IT SOUNDS
[00:54:53] LIKE YOU'RE DOING A LOT OF SIMILAR
[00:54:55] THINGS AND REALLY LOOK FORWARD TO I
[00:54:57] THINK COMMISSIONER CALKINS BROUGHT IT UP
[00:54:59] AND WE NEGOTIATE THE NEXT SLOA REALLY
[00:55:02] INCREASE OUR OPPORTUNITIES TO BRING
[00:55:04] SAF TO SEATAC. MY SPECIFIC QUESTION
[00:55:08] WAS REALLY DO START TO TOUCH ON IT,
[00:55:10] KEITH, ABOUT WHAT DO YOU SEE THAT WE CAN
[00:55:12] DO? SEATAC AIRPORT, THE PORT OF SEATTLE
[00:55:15] IN THE STATE OF WASHINGTON TO
[00:55:16] INCENTIVIZE THE PRODUCTION IN WASHINGTON
[00:55:19] STATE, BECAUSE WITH ALL DUE RESPECT TO
[00:55:21] THE NEXT IMPORTS, THAT FOR ME, IT SORT
[00:55:25] OF NEGATES THE OPPORTUNITY AROUND
[00:55:27] REDUCING YOUR CARBON FOOTPRINT WHEN
[00:55:29] YOU'RE HAVING TO SHIP IN BIOFUELS. SO
[00:55:31] YOU TALKED A LITTLE BIT ABOUT IT,
[00:55:33] KEITH, BUT CAN YOU TALK ABOUT ANYTHING
[00:55:35] WITH THE STATE OF WASHINGTON OR WHAT YOU
[00:55:36] SEE THE PORT OF SEATTLE COULD DO TO HELP
[00:55:38] BE MORE OF A PARTNER IN INCENTIVIZING
[00:55:41] THE PRODUCTION IN WASHINGTON STATE?
[00:55:42] SURE. ABSOLUTELY. AND THANK YOU FOR
[00:55:44] THE QUESTION. I WANT TO SAY FIRST AND
[00:55:47] FOREMOST, BECAUSE I MISSED THIS POINT
[00:55:48] EARLIER. STEPHANIE BROUGHT UP WITH THE
[00:55:51] PASSAGE OF THE LCLS IN THE STATE OF
[00:55:53] WASHINGTON, PARTICULARLY WITH THE OPT IN
[00:55:56] AVAILABILITY FOR JET FUEL. THAT IS

[00:55:58] CERTAINLY HELP IN TERMS OF INCENTIVES
[00:56:00] FOR THE STATE. I DO UNDERSTAND THAT
[00:56:03] THERE IS SOME SOME TANGIBLES RELATED TO
[00:56:06] THE TRANSPORTATION BILL THAT GOES ALONG
[00:56:08] WITH THAT. OUR GOVERNMENT AFFAIRS TEAM
[00:56:10] WILL BE WATCHING THAT PIECE, BUT THAT
[00:56:12] CERTAINLY IS ONE INCENTIVE THAT WE SEE
[00:56:15] THAT DEFINITELY HELPS IN STATE OF
[00:56:17] WASHINGTON OTHER PROTOCOLS, AND WE CAN
[00:56:19] DEFINITELY DO I KNOW, FOR AN INTEREST OF
[00:56:21] TIME, WE CAN GO ANY MORE DETAIL LATER,
[00:56:24] BUT THE COMMISSION OBVIOUSLY, WE'RE OPEN
[00:56:26] TO THAT WITH OUR GOVERNMENT AFFAIRS PEOPLE.
[00:56:28] BUT I'M THINKING THAT SOME OF THE THINGS
[00:56:31] THAT WE'RE LOOKING AT FROM OUR PROJECT
[00:56:33] ITSELF, WHAT WE'RE CONTEMPLATING IS A
[00:56:38] 60,000,000 GALLONS OF MEAT PRODUCT,
[00:56:40] WHICH MEANS IT'S UNBLENDED WITH THAT.
[00:56:42] IN ESSENCE, WE WOULD LOOK FOR TAKING
[00:56:45] THAT PRODUCT INTO THE
[00:56:48] AIRPORT AS A BLENDING MATERIAL, AND IN
[00:56:50] OUR CASE SPECIFICALLY, THIS PRODUCT IS
[00:56:53] HAVE THE ABILITY TO BLEND WITH
[00:56:54] CONVENTIONAL JET FUEL UP TO 50% LEVEL.
[00:56:57] THAT IS AN ASTM REQUIREMENT BEFORE IT CAN
[00:57:00] BE USED IN COMMERCIAL AVIATION. THAT
[00:57:02] VARIES BETWEEN BETWEEN THE DIFFERENT
[00:57:04] PATHWAYS. BUT CERTAINLY FOR THE PATHWAY,
[00:57:06] THE WOODY BIOMASS THAT WE CAN
[00:57:08] CONTEMPLATE IS UP TO 50%. SO WHAT WE
[00:57:10] WILL LOOK FOR THAT MIGHT BE HELPFUL IS
[00:57:13] INFRASTRUCTURE NEEDS AROUND TANK
[00:57:15] BLENDING OPERATIONS OUTSIDE OF THE
[00:57:17] AIRPORTS. THAT CERTAINLY COULD MOVE THE
[00:57:20] PRODUCT INTO SEATAC BECAUSE SEATAC'S
[00:57:22] CURRENTLY THE PIPELINE FED FACILITY.
[00:57:25] BUT THAT PRODUCT HAS TO BE BLENDED
[00:57:27] BEFORE IT CAN BE MOVED IN AN APPRECIABLE
[00:57:29] WAY. SO THOSE TYPES OF INCENTIVES
[00:57:31] INFRASTRUCTURE, I THINK, WOULD BE
[00:57:33] PRIMARY TARGETS ALONG WITH THE OTHER
[00:57:35] BUSINESS INFRASTRUCTURE, TAXES, CITIES
[00:57:39] THAT I'M SURE NORTHWEST ADVANCE BIOFUELS
[00:57:41] WILL HAVE MORE DETAILS ON YOU. THANK
[00:57:43] YOU. THANK YOU. MOVING TO COMMISSIONER
[00:57:46] CALKINS FOR QUESTIONS.
[00:57:49] ALRIGHT, QUICK ONE. AND KEITH, I'LL PUT
[00:57:52] YOU ON THE SPOT. THANK YOU FOR THE
[00:57:53] PRESENTATION. BUT AS YOU MAY HAVE HEARD
[00:57:55] EARLIER, UP UNTIL SUNDAY, THE PORT OF
[00:57:58] SEATTLE NUMBER ONE LEGISLATIVE PRIORITY
[00:58:00] WAS PASSING A LOW CARBON FUEL STANDARD.
[00:58:02] NOW THAT WE'VE SEEN SUCCESS THERE,
[00:58:05] WHAT WOULD YOU SUGGEST IN TERMS OF THE
[00:58:07] REGULATORY ENVIRONMENT GOVERNMENT
[00:58:09] SUPPORTS? WHAT DO YOU THINK THE NUMBER
[00:58:11] ONE LEGISLATIVE PRIORITY OUT TO BE FOR
[00:58:13] THE PORT OF SEATTLE, EITHER AT THE STATE
[00:58:14] OR FEDERAL LEVEL? THAT'S A GOOD
[00:58:17] QUESTION. I WILL HAVE TO DEFER THAT TO
[00:58:19] MY GOVERNMENT AFFAIRS TEAM. THEY HAVE
[00:58:20] THE INS AND OUTS OF THAT. THAT'S JUST
[00:58:23] NOT IN MY WHEEL HOUSE. I'M MORE ON A

[00:58:25] FUEL RELATED TRYING TO GET THE FUEL TO
[00:58:26] THE AIRPORT. SO THAT'S CERTAINLY A
[00:58:28] QUESTION I CAN TAKE BACK TO THE
[00:58:30] GOVERNMENT AFFAIRS TEAM AND LET THEM PROVIDE
[00:58:33] A RESPONSE OR FEEDBACK. THANK YOU,
[00:58:35] KEITH. THANK YOU. COMMISSIONER CALKINS,
[00:58:37] COMMISSIONER CHO. I HAD A SIMILAR QUESTION
[00:58:40] TO RYAN. SO I'LL LOOK FORWARD TO THE
[00:58:43] RESPONSE TO A QUESTION. THANK YOU.
[00:58:45] THANK YOU, MR STEINBRUECK,
[00:58:48] TWO QUESTIONS, 1 RELATED TO THE
[00:58:50] PREVIOUS QUESTION REGARDING THE LCFS
[00:58:53] LEGISLATION JUST PASSED. I'D LIKE TO
[00:58:56] HEAR FROM YOU, KEITH, ON WHAT YOU THINK
[00:58:58] IT'S VALUE AND WHAT PURPOSE IT WILL
[00:59:00] SERVE AND HOW MUCH DOES IT FIGURE IN TO
[00:59:05] YOUR FUTURE PLANNING AND STRATEGIES?
[00:59:07] SECOND QUESTION, WHY DID YOU CHOOSE THE
[00:59:10] BIOMASS OVER MUNICIPAL WASTE FOR YOUR
[00:59:13] WASHINGTON STATE PROJECT? THANK YOU. SO
[00:59:15] SOME QUESTIONS. I'LL START WITH THE
[00:59:18] SECOND ONE. FIRST, THE BIOMASS WOODY
[00:59:21] WASTE WAS A PROJECT, A PROCESS THAT
[00:59:23] STARTED WITH NORTHWEST ADVANCED
[00:59:24] BIOFUELS, BASED ON THE STUDIES THAT
[00:59:27] WE'RE DOING IN WASHINGTON BEFORE THE
[00:59:29] NORA HAD SOME STUDIES OUT TO WASHINGTON
[00:59:31] STATE UNIVERSITY, ALSO COLLABORATE ON
[00:59:33] SOME STUDIES. SO THAT WASN'T OF
[00:59:34] NORTHWEST ADVANCED BIOFUELS ROLI IN
[00:59:38] PROCESS BASED ON TECHNOLOGY THAT THEY
[00:59:40] WERE LOOKING AT WITH THE DIFFERENT WELL
[00:59:42] KNOWN TECHNOLOGIES LIKE FISSURETROPES
[00:59:45] AND GASIFICATION. THAT WAS A GOOD FIT
[00:59:47] FOR THE PROCESS. SO THAT WAS THE PURPOSE
[00:59:50] AND REASON REALLY WAS AROUND. NORTHWEST,
[00:59:52] ADVANCED BIOFUELS PUTTING THAT TOGETHER,
[00:59:54] WE TOOK A LOOK AT IT. WE'D LIKE THE
[00:59:56] OPPORTUNITY AND WE WANT TO ENGAGE A LITTLE
[00:59:58] FURTHER TO GET AN UNDERSTANDING OF IT.
[01:00:00] SECONDLY, I THINK A QUESTION WAS AROUND
[01:00:02] THE LCFS. AGAIN,
[01:00:05] FROM OUR PERSPECTIVE, THE INCENTIVE
[01:00:08] THERE DOES HELP. AS MENTIONED BEFORE, I
[01:00:11] THINK BY ONE OF THE MAYBE STEPHANIE OR
[01:00:14] MAYBE ALASKA. I CAN'T REMEMBER WE
[01:00:17] BOUGHT FUEL TRADITIONALLY FROM A NUMBER
[01:00:19] OF DIFFERENT MARKETS. SAF IS NO
[01:00:21] DIFFERENT FROM THAT. SO THE ECONOMICS
[01:00:23] PLAY REALLY HEAVILY INTO THE DECISIONS
[01:00:26] AS WELL AS OPERATIONAL AS WELL AS APPLY
[01:00:29] CONSTRAINTS WITHIN AIRPORTS AND THINGS
[01:00:31] OF THAT NATURE AND LOGISTICS, TOO. SO
[01:00:33] FROM AN ECONOMIC PERSPECTIVE, THAT WAS
[01:00:35] ENHANCES THE SITUATION
[01:00:39] VERSUS HAVING INCENTIVES SIMILAR IN
[01:00:42] OTHER STATES. SO THAT DEFINITELY HELPS
[01:00:45] WE HAVE TO SEE HOW MUCH WHEN THAT
[01:00:47] INCENTIVE BECOMES MORE FLESHED OUT IN
[01:00:50] TERMS OF DEVELOPING A MODEL AND MARKET
[01:00:53] DONE AND ITS MARKET CONSTRAINTS. OKAY,
[01:00:55] GREAT. THANKS VERY MUCH. THANK YOU,
[01:00:59] COMMISSIONER FELLEMAN. THANKS AGAIN,

[01:01:02] KEITH. AND THAT WAS REALLY ENCOURAGING
[01:01:05] TO HEAR THAT WE'RE MAKING PROGRESS HERE
[01:01:08] IN WASHINGTON. IT'S NOW TIME TO HEAR
[01:01:10] FROM TOM MICHAEL, GOVERNMENT RELATIONS
[01:01:12] SENIOR MANAGER WITH UNITED AIRLINES. I
[01:01:15] REALLY APPRECIATE YOU COMING IN TO BE
[01:01:17] ABLE TO MAKE YOUR RECENT ANNOUNCEMENTS
[01:01:20] WITH US AND A SHORT NOTICE AND LET US
[01:01:23] KNOW WHEN YOU'RE READY TO DISPLAY THE
[01:01:25] PRESENTATION, AND THE CLERK WILL ADVANCE
[01:01:27] THE SLIDES WHEN YOU SIGNAL. TOM, YOU'VE GOT THE
[01:01:30] FLOOR. THANKS VERY MUCH. YOU CAN OPEN
[01:01:33] UP THE SLIDES NOW THAT YOU'D LIKE TO DO
[01:01:36] IT. AND WITH APOLOGIES IN ADVANCE,
[01:01:40] I'M PROBABLY GOING TO SKIP AROUND A
[01:01:41] LITTLE BIT ON THIS. I WANT TO KEEP IT AS
[01:01:43] MEATY AS POSSIBLE. AGAIN, MY NAME IS TOM
[01:01:45] MICHAEL. I'M THE DIRECTOR OF GOVERNMENT
[01:01:46] AFFAIRS WITH UNITED AIRLINES. JUST TO
[01:01:49] GIVE YOU A WORD ABOUT MY BACKGROUND,
[01:01:51] I'M BASED IN WASHINGTON, DC. I'M
[01:01:53] PRIMARILY FEDERALLY FOCUSED. I'VE SPENT
[01:01:55] THE LAST 20 YEARS IN THE ENERGY AND
[01:01:57] ENVIRONMENTAL SPACE SO I CAN GET REAL
[01:01:59] DEEP ON FUELS, GET REAL DEEP ON FEDERAL
[01:02:02] POLICY. I PROBABLY CAN'T GET VERY DEEP
[01:02:04] AT ALL ON WASHINGTON STATE SPECIFIC
[01:02:07] ISSUES, ALTHOUGH I DO KNOW A LITTLE BIT
[01:02:08] ABOUT SOME OF THE LOGISTICS ISSUES IN
[01:02:10] THAT SPACE. IF WE
[01:02:14] CAN GO TO THE NEXT SLIDE, I'M GOING TO
[01:02:16] JUST SPEND A MINUTE HERE GOING THROUGH
[01:02:19] SOME OF THE THINGS THAT UNITED IS
[01:02:21] INTERESTED IN.
[01:02:24] WHILE, MANY COMPANIES HAVE PLEDGED TO
[01:02:27] ACHIEVE CARBON NEUTRALITY BY 2040 OR
[01:02:29] 2050. UNITED IS THE ONLY AIRLINE TO HAVE
[01:02:32] COMMITTED TO DOING SO WITHOUT RELYING ON
[01:02:35] TRADITIONAL VOLUNTARY CARBON OFFSETS.
[01:02:38] OUR STRATEGY IS TO REVOLUTIONIZE
[01:02:43] OUR BUSINESS AND TRY TO ATTACK OUR
[01:02:46] EMISSIONS DIRECTLY. AND WE'RE DOING THAT
[01:02:49] BY MAKING EARLY STAGE INVESTMENTS INTO
[01:02:51] INNOVATIVE TECHNOLOGY THAT CAN REDUCE
[01:02:53] CARBON EMISSIONS. WHILE ALSO IMPROVING
[01:02:56] THE CUSTOMER EXPERIENCE AND HOPEFULLY
[01:02:58] EARNING A STRONG FINANCIAL RETURN. TO
[01:03:02] THAT END, UNITED WAS AN EARLY STAGE
[01:03:05] INVESTOR IN FULCRUM BIOENERGY.
[01:03:08] THEY'RE THE PIONEERS IN LOW
[01:03:11] CARBON FUELS WHO ARE BUILDING A PLANT IN
[01:03:15] NEVADA THAT STEPHANIE MENTIONED EARLY
[01:03:17] ON. WE HAVE A 30,000,000 DOLLAR EQUITY
[01:03:20] STAKE IN FULCRUM. WE ARE ALSO ONE OF THE
[01:03:23] BIGGEST OFFTAKERS OF WORLD ENERGY WHO
[01:03:25] HAS GOT THEIR BIOREFINERY IN PARAMOUNT,
[01:03:29] CALIFORNIA, ADJACENT TO LAX. AND WE
[01:03:33] ARE ALSO BRANCHING OUT INTO OTHER
[01:03:36] SPACES, TOO. A KEY PIECE OF OUR STRATEGY
[01:03:39] IS CARBON CAPTURE, AND WE HAVE A
[01:03:43] MULTIMILLION DOLLAR EQUITY STAKE IN THE
[01:03:45] 1 5 PROJECT THEY ARE BUILDING.
[01:03:48] THAT'S A JOINT VENTURE WITH OXY

[01:03:52] AND CARBON ENGINEERING THAT IS BUILDING
[01:03:55] THE LARGEST DIRECT AIR CAPTURE FACILITY
[01:03:58] IN THE WORLD IN SOUTH TEXAS. RIGHT NOW,
[01:04:01] AIR CAPTURE ACTUALLY SUCKS CARBON
[01:04:04] DIOXIDE FROM THE AIR AND INJECTS IT DEEP
[01:04:06] UNDERGROUND IN THE SALINE AQUIFERS AND
[01:04:09] YOU CAN THINK OF IT THIS WAY. IT'S
[01:04:13] BASICALLY POST COMBUSTION CAPTURE FOR
[01:04:16] AVIATION. WE CAN PUT SCRUBBERS ON THE
[01:04:19] END OF OUR JET TURBINES THERE, BUT WE
[01:04:22] CAN TAKE THE CARBON OUT OF THE GROUND.
[01:04:25] AND SO DOING THAT, AND INVESTING IN THE
[01:04:27] DIRECT AIR CAPTURE IS A KEY PIECE OF OUR
[01:04:31] CARBON REMOVAL STRATEGY.
[01:04:34] ANOTHER INTERESTING INVESTMENT WE
[01:04:38] ANNOUNCED RECENTLY IS INTO ARCHER
[01:04:40] AVIATION. THEY ARE A LEADER IN CARBON
[01:04:43] FREE ELECTRIC SHORT HAUL FLIGHT.
[01:04:46] THESE ARE BASICALLY AIR TAXIES THAT WOULD
[01:04:49] GET YOU FROM YOUR HOUSE TO THE AIRPORT.
[01:04:51] SO IT'S NOT REALLY GOING INTO
[01:04:54] COMPETITION WITH OUR REGIONAL OR
[01:04:58] LONG HAUL BUSINESS. AND WE DON'T REALLY
[01:05:00] SEE ELECTRIC AIRCRAFT PLAYING A ROLE IN
[01:05:03] THAT IN THE FORESEEABLE FUTURE. BUT WE
[01:05:05] DO THINK THAT THESE SMALLER SHORT HOP
[01:05:09] AIRCRAFT HAVE A REAL FUTURE. AND WE'VE
[01:05:12] GOT ABOUT 300 NEW AIRCRAFT ON ORDER WITH
[01:05:15] ARCHER AVIATION. AND THAT COULD HAVE A
[01:05:18] BIG DIFFERENCE ON ALL SORTS OF THINGS
[01:05:21] FROM THE LOCAL AIR QUALITY AND A LOT OF
[01:05:24] THE CONGESTED CITIES WHERE WE OPERATE
[01:05:26] OUR HUBS, AS WELL AS TRAFFIC
[01:05:29] MINIMIZATION. SO WE THINK THERE THERE'S
[01:05:31] A LOT OF PROMISE THERE. JUST TWO WEEKS
[01:05:35] AGO, THOUGH, WE HAD A BIG ANNOUNCEMENT
[01:05:37] IN SUSTAINABLE AVIATION FUELS OR ANOTHER
[01:05:39] BIG ANNOUNCEMENT, WE LAUNCHED OUR ECO
[01:05:42] SKIES ALLIANCE. AND WE BELIEVE
[01:05:45] THE ECO SKIES ALLIANCE IS THE MOST
[01:05:48] IMPACTFUL MULTI COMPANY EFFORT TO
[01:05:50] DECARBONIZE AVIATION OF ITS KIND TO
[01:05:53] DATE. MORE THAN A DOZEN COMPANIES JOIN
[01:05:55] ECO SKIES ALLIANCE, AND WHAT THEY
[01:05:59] HAVE AGREED TO DO AS A MEMBER OF THE ECO
[01:06:02] SKIES ALLIANCE IS TO PAY THE GREEN
[01:06:04] PREMIUM ASSOCIATED WITH OUR USAGE OF
[01:06:07] SUSTAINABLE AVIATION FUELS ON THEIR
[01:06:10] FLIGHTS. SO THIS IS THE DELTA BETWEEN
[01:06:12] CONVENTIONAL JET FUEL AND SAF, WHICH
[01:06:15] HAS STEPHANIE MENTIONED CAN BE QUITE
[01:06:18] SIGNIFICANT. AND COVERING THAT DELTA IS
[01:06:21] A BIG IMPEDIMENT TO US BEING ABLE TO USE
[01:06:24] IT. AND THESE COMPANIES,
[01:06:27] SOME OF OUR LARGEST CORPORATE CUSTOMERS,
[01:06:29] STEPPED UP TO HELP US FINANCE THE COST
[01:06:32] OF USING SAF AND THOSE FLIGHTS. AND IN
[01:06:34] EXCHANGE, THOSE COMPANIES ARE ABLE TO
[01:06:36] REDUCE THE CARBON FOOTPRINT ASSOCIATED
[01:06:39] WITH THEIR CORPORATE TRAVEL.
[01:06:43] THE INAUGURAL PARTICIPANTS OF THE ECO
[01:06:47] SKIES ALLIANCE HAVE COMMITTED TO FUND
[01:06:49] ENOUGH SAF USAGE ON UNITED FLIGHTS

[01:06:52] OVER THE NEXT YEAR TO ELIMINATE
[01:06:54] APPROXIMATELY 31,000 METRIC TONS OF
[01:06:58] GREENHOUSE GASES. THAT EQUATES TO ABOUT
[01:07:01] 3.4 MILLION GALLONS OF SAF.
[01:07:04] AND PUT ANOTHER WAY, THAT'S ENOUGH SAF
[01:07:08] TO FLY PASSENGERS OVER 220,000,000
[01:07:11] MILES. IT SOUNDS LIKE A LOT, AND IT IS A
[01:07:14] LOT RELATIVE TO THE OVERALL SCALE OF
[01:07:17] SAF USAGE. BUT WHEN YOU THINK OF THE
[01:07:19] FACT THAT THE GLOBAL INDUSTRY IS
[01:07:21] CONSUMING NORTH OF 20,000,000,000
[01:07:24] GALLONS OF JET FUEL A YEAR, YOU REALIZE
[01:07:27] THAT THESE ARE THESE ARE SMALL
[01:07:30] INCREMENTS. WE HAVE A LONG, LONG WAY TO
[01:07:32] GO TO REALLY MAKE A DENT IN THIS. AND
[01:07:34] ONE OTHER THING, JUST TO PUT THINGS I
[01:07:37] HEAR FOLKS TALKING ABOUT APU, AND
[01:07:40] THERE'S LOTS OF STUFF THAT WE'RE
[01:07:42] INTERESTED IN DOING AROUND OUR OUR
[01:07:45] CARBON FOOTPRINT FROM ELECTRIFYING OUR
[01:07:47] GROUND SUPPORT VEHICLES AND EVERYTHING
[01:07:50] ELSE. BUT SOMETHING TO KEEP IN MIND IS
[01:07:52] THAT FOR UNITED, 99% OF
[01:07:55] OUR CARBON FOOTPRINT IS OUR JET
[01:07:59] FUEL CONSUMPTION. 99% EVERYTHING ELSE.
[01:08:03] ALL THE EQUIPMENT YOU SEE ON THE GROUND,
[01:08:04] YOU'RE AT THE AIRPORT, THERE'S FUNNY
[01:08:06] LITTLE TUBS DRIVING AROUND. AND ALL THE
[01:08:08] PEOPLE THAT ARE 20,000 EMPLOYEES IN THE
[01:08:11] WILLIS TOWER IN CHICAGO ARE 15,000
[01:08:14] EMPLOYEES IN CALIFORNIA. ALL OF
[01:08:17] THOSE EMISSIONS ASSOCIATED WITH HOUSING
[01:08:20] AND THOSE PEOPLE AND TRANSPORTING THEM,
[01:08:23] MOVING THEM, THAT EQUALS 1% REST IS JET
[01:08:26] FUEL BURN. SO THAT GIVES YOU A SENSE OF
[01:08:29] THE IMPORTANCE OF SAF. AND AS STEPHANIE
[01:08:32] MENTIONED SAF IS REALLY THE RELEASE
[01:08:37] VALVE. IT IS THE WAY TO REDUCE OUR
[01:08:40] CARBON EMISSIONS QUICKLY. WE CAN DO IT
[01:08:42] TODAY. IT DOES TAKE INVESTMENTS. AND
[01:08:45] RIGHT NOW THERE ARE SOME REAL
[01:08:47] SIGNIFICANT DELTAS BETWEEN WHERE THE
[01:08:50] INCENTIVES ARE AROUND ON-ROAD FUELS,
[01:08:53] SUCH AS RENEWABLE DIESEL VERSUS SAF,
[01:08:55] WHICH IS PRIMARILY IF YOU HAVE A
[01:08:57] RENEWABLE DIESEL PLANT, YOU PROBABLY
[01:08:58] COULD PRODUCE SAF FROM IT TODAY. BUT
[01:09:01] YOU WOULDN'T DO THAT GENERALLY, UNLESS
[01:09:04] YOU HAVE OF AN OFF TAKER LIKE UNITED TO
[01:09:07] BUY THAT FUEL, BECAUSE THE INCENTIVES
[01:09:10] ARE SUCH THAT IT JUST WOULD BE
[01:09:13] ECONOMICALLY IRRATIONAL TO DO SO. AND
[01:09:16] I'M SPENDING ABOUT 90% OF MY TIME IN
[01:09:18] WASHINGTON WORKING ON THE SAF LENDERS
[01:09:22] TAX CREDIT IN PARTNERSHIP WITH OUR
[01:09:25] FRIENDS HERE THAT ARE ON THE CALL. AND
[01:09:26] ERIC SEINFELD HAS BEEN GREAT TO WORK
[01:09:29] WITH. WE ARE PUSHING HARD FOR THAT. THE
[01:09:32] BIDEN ADMINISTRATION HAS ENDORSED THIS
[01:09:34] SAF SPECIFIC BLENDERS TAX CREDIT, AND
[01:09:37] IT'S MADE IN AMERICA TAX PLAN. THAT WAS
[01:09:39] A HUGE, HUGE PLUS ON OUR SIDE OF
[01:09:42] THE LEDGER. SO I'VE GOT A REAL SENSE OF

[01:09:45] OPTIMISM ABOUT WHERE THAT'S GOING, AND
[01:09:46] WE CAN TALK ABOUT THAT A LITTLE BIT
[01:09:48] LATER IF WE COULD SKIP AHEAD.
[01:09:51] I THINK IT'S TO SLIDE SEVEN NEXT
[01:09:56] TO ME RIGHT HERE. I JUST WANT TO FINISH
[01:10:00] OFF ON THE ECO SKIES ALLIANCE PROGRAM.
[01:10:03] THIS IS JUST SOME OF THE CUSTOMERS THAT
[01:10:05] TOOK PART IN THAT. NOT ALL OF THEM. BUT
[01:10:10] I DON'T WANT TO UNDERSTATE
[01:10:13] THIS OR UNDERSELL IT. IT'S A BIG DEAL.
[01:10:15] WE BELIEVE IT'S ONLY THE FIRST STEP. WE
[01:10:18] EXPECT TO SIGN UP A LOT MORE CUSTOMERS
[01:10:20] IN THE DAYS AND MONTHS TO COME. WE'RE
[01:10:23] ALSO HOPEFUL THAT WE COULD BASICALLY GET
[01:10:25] THE FEDERAL GOVERNMENT TO JOIN IN THE
[01:10:27] ECO SKIES ALLIANCE. WITH THE BIDEN
[01:10:29] ADMINISTRATION COMING IN, WE EXPECT TO
[01:10:31] SEE NEW RULES AND THE SOCIAL COST OF
[01:10:33] CARBON TO BE ISSUED. AND WE THINK THAT
[01:10:36] COULD AFFECT THINGS LIKE FEDERAL
[01:10:37] PROCUREMENT CONTRACTS. UNITED CARRIES A
[01:10:39] LOT OF MAIL FOR THE US POSTAL SERVICE.
[01:10:42] WE HAVE CONTRACTS TO CARRY SERVICEMEN
[01:10:44] WITH THE DEPARTMENT OF DEFENSE. IF YOU
[01:10:48] BUILD INTO THOSE PROCUREMENT BIDS THE
[01:10:52] COST OF CARBON, THEN YOU COULD BASICALLY
[01:10:54] HAVE THE FEDERAL GOVERNMENT HELPING TO
[01:10:56] FINANCE THE USAGE OF SAF ON THOSE
[01:10:58] FLIGHTS TO REDUCE THE WRONG CARBON FRONT
[01:11:01] FOOTPRINT, WHICH IS A BIG PRIORITY
[01:11:05] FOR THE BIDEN ADMINISTRATION. SO WE'RE
[01:11:07] REAL HOPEFUL THAT BETWEEN A NEW TAX
[01:11:09] CREDIT, WHICH WE HOPE WILL BE TAKEN UP
[01:11:12] IN THE CONTEXT OF THE INFRASTRUCTURE
[01:11:14] BILL, WITH SOME NEW STRATEGIES FROM THE
[01:11:16] ADMINISTRATION, THEY COULD TAKE
[01:11:18] EXECUTIVE ACTION ON AND WITH GREAT STEPS
[01:11:21] FORWARD AT THE STATE LEVEL IN WASHINGTON
[01:11:23] STATE, IN CALIFORNIA AND ELSEWHERE THAT
[01:11:25] WE CAN SEE SOME BIG, BIG CHANGES THAT
[01:11:27] COULD REALLY START TO SCALE UP SAF WHERE
[01:11:30] IT NEEDS TO BE. I WANT TO MAKE ONE MORE
[01:11:33] POINT ABOUT WHAT WE'RE DOING WITH OUR
[01:11:34] ECO SKIES ALLIANCE AS WELL. THIS IS
[01:11:38] NOT JUST SOMETHING WITH OUR CORPORATE
[01:11:40] CUSTOMERS. WE'RE ALSO OFFERING OUR
[01:11:42] INDIVIDUAL CUSTOMERS THE OPPORTUNITY TO
[01:11:45] CONTRIBUTE TO THE COST OF STAFF ON THEIR
[01:11:48] OWN FLIGHTS. WE STILL
[01:11:52] DO OFFER OUR CUSTOMERS
[01:11:55] THE OPPORTUNITY TO PURCHASE CARBON
[01:11:57] OFFSETS THROUGH CONSERVATION
[01:11:59] INTERNATIONAL. BUT, FRANKLY, WE HAVE A
[01:12:02] LOT OF SKEPTICISM ABOUT THE USE OF
[01:12:04] CARBON OFFSETS, ABOUT THEIR INTEGRITY, THEIR
[01:12:08] VERACITY AND THE MARKET THAT IS GOING TO
[01:12:10] BE USED TO DO THEM. SO WE REALLY DO
[01:12:11] PREFER TO DIRECTLY INVEST IN TECHNOLOGY
[01:12:16] THAT AFFECTS OUR EMISSIONS. AND I WAS
[01:12:19] SURPRISED, FRANKLY, THAT WE HAVE ALREADY
[01:12:21] SEEN A PRETTY SIGNIFICANT OUTPOURING
[01:12:23] FROM INDIVIDUAL CUSTOMERS WHO WANT TO
[01:12:25] PURCHASE SAF TO HELP PRODUCE THEIR

[01:12:28] OWN CARBON FOOTPRINT. AND WE ALSO UNITED
[01:12:32] AND AIRLINES IN GENERAL HAVE THE
[01:12:35] OPPORTUNITY TO COMMUNICATE WITH OUR
[01:12:37] CUSTOMERS IN A WAY THAT A FEW COMPANIES
[01:12:40] CAN. WE'VE GOT THEM ON A PLANE THERE.
[01:12:42] WE COMMUNICATE WITH THEM AS THEY BUY
[01:12:45] THEIR TICKET IN ADVANCE, AND THEY TRAVEL
[01:12:48] IN THE DAY OF SO WE ARE LEVERAGING
[01:12:51] THAT ABILITY TO TRY AND HELP BUILD
[01:12:54] POLITICAL SUPPORT FOR BOLD CLIMATE
[01:12:56] ACTION. AND WE ARE GIVING OUR CUSTOMERS
[01:12:59] WHEN WE ANNOUNCED THE ECO SKIES ALLIANCE
[01:13:00] PROGRAM, WE ALSO GAVE OUR CUSTOMERS THE
[01:13:03] ABILITY TO QUICKLY AND EASILY SEND
[01:13:05] LETTERS TO THEIR ELECTED OFFICIALS
[01:13:07] URGING THEM TO SUPPORT BOLD AND
[01:13:09] MEANINGFUL CLIMATE POLICY SOLUTIONS.
[01:13:12] AND AGAIN, I WAS SOMEWHAT SURPRISED,
[01:13:15] FRANKLY, AT THE LEVEL OF ENGAGEMENT THAT
[01:13:19] WE'VE SEEN JUST IN THE PAST TWO WEEKS.
[01:13:21] ABOUT 2,000 OF OUR CUSTOMERS
[01:13:24] HAVE SENT THESE LETTERS TO THEIR ELECTED
[01:13:27] OFFICIALS AT THE FEDERAL LEVEL AND THEIR
[01:13:29] GOVERNORS. AND, YOU KNOW, THAT REALLY,
[01:13:31] WE BELIEVE, DOES HELP TO MAKE A
[01:13:34] DIFFERENCE. AND HOPEFULLY, AS MORE
[01:13:37] LEGISLATORS HEAR FROM OUR CUSTOMERS AND
[01:13:39] HEAR FROM OTHERS, THERE WILL BE A
[01:13:41] GROUNDSWELL, THIS IS NOT SOMETHING THAT
[01:13:43] WE CAN SIT IN OUR HANDS ON ANY LONGER.
[01:13:46] SO I'D
[01:13:50] LIKE TO TURN THIS INTO A CONVERSATIONAL
[01:13:53] THING. MORE THAN ANYTHING, I CAN GO
[01:13:55] THROUGH SOME OF THE OTHER SLIDES IF
[01:13:57] YOU'RE INTERESTED IN SO DOING. I GUESS
[01:14:01] MY KEY MESSAGE TO YOU IS THAT UNITED
[01:14:05] IS INVESTING MILLIONS IN CARBON
[01:14:07] REDUCTION IN CARBON REMOVAL. AND WITH
[01:14:08] THIS ANNOUNCEMENT, WE'RE ENLISTING OUR
[01:14:10] CORPORATE CUSTOMERS IN THAT EFFORT AS
[01:14:12] WELL, THROUGH THIS INNOVATIVE FINANCING
[01:14:15] MECHANISM FOR LOW CARBON FUEL
[01:14:16] DEPLOYMENT. BUT WE WILL NEED STATE AND
[01:14:19] FEDERAL POLICY SUPPORT TO REALLY SCALE
[01:14:22] THE INDUSTRY TO WHERE IT NEEDS TO BE IN
[01:14:23] ORDER TO COMBAT TO CLIMATE CRISIS.
[01:14:26] WASHINGTON STATE TOOK A HUGE STEP
[01:14:28] FORWARD, AND I'D LOVE TO TALK ABOUT WAYS
[01:14:32] THAT WE CAN LEVERAGE THAT. ONE THING I
[01:14:35] WOULD MENTION TODAY IS THAT ALL SAF
[01:14:38] THAT IS GOING TO BE SOLD IN THE UNITED
[01:14:40] STATES TODAY IS GOING TO BE SOLD INTO
[01:14:42] THE STATE OF CALIFORNIA BECAUSE YOU
[01:14:44] WOULD BE A FOOL TO SELL IT ANYWHERE
[01:14:46] ELSE, BECAUSE THE POWER OF THE
[01:14:48] CALIFORNIA LOW CARBON FUEL STANDARD
[01:14:51] LAYERED WITH THE RENEWABLE FUEL
[01:14:53] STANDARDS, THOSE STACKABLE
[01:14:57] INCENTIVES WOULD MAKE IT YOU WOULD BE
[01:15:00] SILLY TO SELL IT ANYWHERE ELSE, REALLY.
[01:15:02] AND SO IF ANY SAF IS GOING TO BE USED IN
[01:15:05] THE UNITED STATES TODAY, IT'S GOING TO
[01:15:07] BE USED IN CALIFORNIA WASHINGTON STATE.

[01:15:10] LCFS, I THINK WILL CHANGE THAT. I HAVE
[01:15:12] NOT YET HAD THE CHANCE TO GO THROUGH
[01:15:15] WHAT YOU WERE ABLE TO PASS THIS WEEKEND,
[01:15:18] BUT I KNOW IT WILL BE A MEANINGFUL STEP
[01:15:21] IN THE RIGHT DIRECTION, BUT I
[01:15:24] DON'T EXPECT ALL OF THAT SAF TO BE
[01:15:27] PRODUCED IN CALIFORNIA. THERE ARE LOTS
[01:15:29] OF REASONS YOU MIGHT WANT TO PRODUCE
[01:15:31] YOUR FUEL ELSEWHERE AND USE IT IN
[01:15:34] CALIFORNIA OR HOPEFULLY SOON USE IT IN
[01:15:36] WASHINGTON STATE AS WELL. BUT THOSE ARE
[01:15:39] THOSE ARE SOME OF THE POLICY QUESTIONS.
[01:15:41] AND AT SOME POINT CALIFORNIA IS GOING TO
[01:15:43] BASICALLY FILL UP WITH SAF. YOU CAN ONLY
[01:15:46] USE SO MUCH FROM OUR HUBS IN LOS ANGELES
[01:15:50] AND SAN FRANCISCO. WE NEED TO HAVE THAT
[01:15:53] SPREAD AROUND THE COUNTRY. MY HOPE IS
[01:15:55] THAT THE FEDERAL SAF TAX CREDIT CAN
[01:15:57] HELP. THAT COUPLED WITH THE
[01:15:59] TRANSPORTATION COSTS OF MOVING SOUTH TO
[01:16:02] CALIFORNIA, THERE ARE GOOD REASONS WHY
[01:16:05] THE PACIFIC NORTHWEST MAKES SENSE TO
[01:16:08] SITE THE PRODUCTION AND USAGE
[01:16:13] OF SAF FACILITIES. I THINK WITH THAT,
[01:16:16] I'LL CONCLUDE MY PRESENTATION AND JUST
[01:16:19] SAY THANK YOU SO MUCH FOR HAVING US
[01:16:21] REALLY APPRECIATE IT. THANK YOU, TOM.
[01:16:24] IT WAS REALLY AN INSPIRATIONAL
[01:16:26] PRESENTATION, AND WE HAD MET WITH FORMER
[01:16:29] SECRETARY MAYBE WE DID A FORUM WITH HIM,
[01:16:31] AND HE REALLY GOT THE DOD EXCITED ABOUT
[01:16:35] UTILIZING THAT TO CREATE THAT DEMAND.
[01:16:37] AND I JUST SPOKE WITH CONGRESSMAN
[01:16:40] LARSON'S OFFICE, WHO HAS THE WEEPY NAVAL
[01:16:42] AIR STATION THAT WE COULD MAYBE LEVERAGE
[01:16:45] THAT ONCE AGAIN. AND WE ALSO HAVE A
[01:16:47] RESPONSIBLE TRAVELER PROGRAM AT SEATAC
[01:16:50] WHERE PEOPLE CAN MAKE A DONATION TO
[01:16:52] REDUCE THEIR GREEN CONTRIBUTION. AND
[01:16:55] IT'S ONE OF THE BEST KEPT SECRETS. I
[01:16:57] THINK WE CAN REALLY ELEVATE THE PROFILE
[01:16:59] OF THAT AND SPECIFICALLY USE IT TOWARDS
[01:17:01] SAF. AND I'M REALLY LOOKING FORWARD TO
[01:17:03] HAVING THAT CONVERSATION. THE NEXT TWO
[01:17:06] SPEAKERS, WILL ALSO VERY MUCH EXCITED
[01:17:07] TO SEE THE CORPORATE I MAKE
[01:17:11] THESE COMMITMENTS AS WELL. WE ARE
[01:17:14] RUNNING CURRENTLY EIGHT MINUTES LATE,
[01:17:15] SO I WOULD LIKE THE CLERK TO ASK MY
[01:17:18] COLLEAGUES TO PROVIDE SOME QUESTIONS AND
[01:17:22] TO PLEASE KEEP IT BRIEF. I JUST WANT TO
[01:17:25] MAKE SURE THAT THE OTHER SPEAKERS OR THE
[01:17:27] NEXT FEW SPEAKERS I DON'T WANT TO
[01:17:28] CURTAIL THERE. I DO APPRECIATE, TOM FOR
[01:17:31] YOUR QUICKNESS, BUT THIS IS WHO WE'RE
[01:17:33] HERE FOR. IF WE HAVE TO CUT BACK, WE
[01:17:35] WILL CUT BACK FROM COMMISSIONS, PORT
[01:17:38] STAFF, BUT WE ALSO HAVE A LITTLE BIT
[01:17:40] MORE TIME WITH THE EXECUTIVE SESSION.
[01:17:41] SO PLEASE, WITHOUT FURTHER ADO, PLEASE
[01:17:43] CALL THE ROLL. THANK YOU, COMMISSIONER
[01:17:47] BOWMAN. THANK YOU. I'LL BE VERY BRIEF,
[01:17:49] TOM. I JUST WANT TO SAY THANK YOU TO

[01:17:51] UNITED FOR YOUR LEADERSHIP IN SAF.
[01:17:53] YOU'VE BEEN A VERY EARLY LEADER IN THIS
[01:17:55] AND REALLY APPRECIATE IT. MY QUESTION OR
[01:17:58] MAYBE SUGGESTION. I'D LOVE TO BE ABLE TO
[01:17:59] TALK WITH YOU AND THE OTHER AIRLINES
[01:18:01] ABOUT ANOTHER WAY TO INCENTIVIZE FUNDS
[01:18:04] FOR SAF, WHICH WOULD BE AN INCREASE IN
[01:18:06] THE PASSENGER FACILITY CHARGE IF IT WERE
[01:18:09] DEDICATED TO INVESTING IN PRODUCTION
[01:18:11] FACILITIES. AND I KNOW IT'S BEEN A
[01:18:13] CONTENTIOUS ISSUE WITH THE AIRLINES FOR MANY
[01:18:15] YEARS. I REALLY APPRECIATE THE VOLUNTARY
[01:18:17] NATURE OF THE PROGRAMS FOR INDIVIDUALS
[01:18:20] TO VOLUNTARILY CONTRIBUTE, BUT I THINK
[01:18:24] THAT ANOTHER WAY THEY CAN CONTRIBUTE IS
[01:18:25] WITH A VERY SMALL PORTION OF AN INCREASE
[01:18:27] IN THE PASSENGER FACILITY CHARGE. AND SO
[01:18:29] WE LOOK FORWARD TO TALKING WITH ALL OF
[01:18:31] YOU ABOUT THAT LATER. THANK YOU. THANK
[01:18:33] YOU, COMMISSIONER BOWMAN. COMMISSIONER
[01:18:35] CALKINS, YEAH. THANK YOU, TOM. I HAVE
[01:18:38] ALSO ADMIRER THE WORK THAT UNITED IS
[01:18:40] DONE AS A TRAILBLAZER IN THIS AREA. AND
[01:18:43] YOUR COMMENT TODAY ABOUT THE FEDERAL
[01:18:49] GOVERNMENT'S ROLE IN BUYING TICKETS AND
[01:18:51] SPACE IN THE BELLY CARGO, YOUR PLANES
[01:18:54] AND IF WE CAN GET THEM TO REALLY FACTOR
[01:18:57] IN THE REAL COST, THE NEGATIVE
[01:18:59] EXTERNALITIES, BUT FOR SO LONG HAVE BEEN
[01:19:01] IGNORED IN AVIATION. THAT WOULD BE A
[01:19:03] HUGE STEP FORWARD IN
[01:19:07] GETTING THESE BLENDS INTO YOUR PLANES.
[01:19:10] AND PARTICULARLY FOR WASHINGTON STATE,
[01:19:12] WE ARE A VERY HIGH PER
[01:19:16] CAPITA STATE IN TERMS OF SERVICE
[01:19:20] MEMBERS AS PART OF THE POPULATION. AND I
[01:19:23] KNOW THAT WE HAVE A LOT OF SERVICE
[01:19:25] MEMBERS FLYING THROUGH SEATAC REGULARLY,
[01:19:27] SO I THINK THAT'S A REALLY INTERESTING
[01:19:29] PART OF THE CONVERSATION. I'LL MAKE SURE
[01:19:31] THAT WE HAVE THAT CONVERSATION WITH
[01:19:33] CHINTEL ABOUT GETTING IT ON TO OUR FEDERAL
[01:19:35] AGENDA. THANK YOU, COMMISSIONER CALKINS.
[01:19:38] COMMISSIONER TOO, I JUST WANT TO ECHO
[01:19:41] THE SENTIMENTS OF MY COLLEAGUE ON THE
[01:19:43] GREAT WORK THE UNITED IS DOING. AN
[01:19:46] INTEREST OF TIME. I WILL HOLD ON MY
[01:19:48] QUESTIONS AND FOLLOW UP AT THE LATER
[01:19:51] DAY, BUT THANK YOU SO MUCH FOR BEING
[01:19:52] DONE. THANK YOU, COMMISSIONER CHO
[01:19:54] COMMISSIONER STEINBEUCK. YEAH. I ALSO
[01:19:57] WILL PILE ON AND EXPRESSING
[01:19:59] APPRECIATION, PARTICULARLY FOR YOUR ECO
[01:20:02] SKIES ALLIANCE. I THINK THAT'S REALLY
[01:20:06] BEING A TRENDSETTER THERE AND LOOKING TO
[01:20:08] OTHER WAYS BESIDES CARBON OFFSETS. AND
[01:20:11] IF BUSINESS TRAVELERS FLY COACH
[01:20:13] INSTEAD OF BUSINESS CLASS, THEY PROBABLY
[01:20:15] COULD COVER EASILY PREMIUM COST OF SAF.
[01:20:20] I DON'T WANT TO ENCOURAGE THAT, BUT I
[01:20:23] PROBABLY NOT. BUT I REALLY LIKE YOUR
[01:20:25] COMPREHENSIVE APPROACH. THAT DOESN'T
[01:20:27] INCLUDE MAKING IT UP WITH CARBON OFFSETS

[01:20:30] AND OTHER TECHNOLOGIES ARE INTRIGUING.
[01:20:33] LOCAL ELECTED LOCAL.
[01:20:37] WHAT DO THEY CALL CONNECTOR FLIGHTS THAT
[01:20:42] HAVE SHORT RUNS USING ELECTRIC? I THINK
[01:20:44] THERE'S A BIG FUTURE, AN ELECTRIC ENERGY
[01:20:47] OR POWER FOR THE SHORT FLIGHTS AS WELL.
[01:20:50] JUST FROM WHAT I'VE READ. AND I KNOW WE
[01:20:53] HAVE A GREAT START UP HERE IN THE REGION
[01:20:55] RIGHT NOW THAT'S DEVELOPING THAT
[01:20:57] TECHNOLOGY. SO I JUST WANTED TO SAY
[01:21:00] THANKS, INSIGHTFUL, KEEP UP THE GREAT
[01:21:02] WORK. THANK YOU ALL. REALLY APPRECIATE
[01:21:06] IT. COMMISSIONER FELLEMAN. THANKS AGAIN, TOM.
[01:21:09] AND TO ALL THE AIRLINE PARTICIPANTS
[01:21:12] TODAY. CLEARLY THERE'S A LOT MORE TO
[01:21:14] DISCUSS AND REALLY LOOK FORWARD TO
[01:21:16] PARTNERING WITH YOU AS WE MOVE TO OUR
[01:21:18] SUCCESS AT THE STATE LEGISLATIVE LEVEL
[01:21:20] TO THE FEDERAL SO THAT WE CAN MAKE THIS
[01:21:23] A NATIONWIDE SUCCESS STORY.
[01:21:26] REALLY. THANKS SO MUCH FOR YOU GUYS.
[01:21:28] MAKING THE TIME. IT'S REALLY EXCITING
[01:21:30] AND ENCOURAGING. WE'LL NOW MOVE TO OUR
[01:21:32] PRIVATE SECTOR SAF PRESENTATIONS. WE'LL
[01:21:34] HEAR FROM MICROSOFT AND FROM BIO
[01:21:36] BREAKTHROUGH ENERGY, AND WE HAVE 10
[01:21:38] MINUTES FOR EACH PRESENTATION WITH FIVE
[01:21:41] MINUTES FOR QUESTIONS AFTERWARDS. AND
[01:21:44] WE'RE JUST A LITTLE BIT LATE HERE.
[01:21:47] WE'RE JUST LIKE 10 MINUTES OVER 12
[01:21:49] MINUTES, SO WE'RE DOING FINE. LIKE I
[01:21:51] SAID, PLEASE TAKE YOUR TIME TO MAKE YOUR
[01:21:54] PRESENTATION. THANK YOU. SO FIRST UP,
[01:21:58] WE HAVE JULIA FIDDLER, SENIOR
[01:22:01] SUSTAINABILITY PROGRAM MANAGER WITH
[01:22:03] MICROSOFT. WELCOME, JULIA, AND PLEASE
[01:22:06] LET US KNOW WHEN YOU'RE READY TO DISPLAY
[01:22:07] THE PRESENTATION AND THE CLERK WILL
[01:22:09] ADVANCE THE SLIDES AS YOU CALLED.
[01:22:11] JULIA, YOU HAVE THE FLOOR. THANK YOU FOR
[01:22:14] THE INTRODUCTION. HAPPY TO GO STRAIGHT
[01:22:16] TO THE SLIDES. SO THANK
[01:22:22] YOU FOR INVITING ME TO JOIN THE
[01:22:24] PRESENTATION TODAY. AS DESCRIBED. MY
[01:22:26] NAME IS JULIA FIDDLER AND I'M A
[01:22:27] SUSTAINABILITY PROGRAM MANAGER HERE AT
[01:22:29] MICROSOFT. IF WE CAN MOVE TO THE FIRST
[01:22:32] SLIDE, I WANTED JUST TO START WITH A
[01:22:35] LITTLE BIT OF BACKGROUND ABOUT THE WORK
[01:22:38] MICROSOFT IS DOING IN THE SPACE OF
[01:22:39] SUSTAINABILITY SO THAT I CAN RELATE IT
[01:22:41] TO THE WORK WE'RE DOING AROUND
[01:22:43] SUSTAINABLE AVIATION, FUEL. AND SO
[01:22:46] DESCRIBING OUR COMMITMENT TO
[01:22:48] SUSTAINABILITY, WE ARE COMMITTED TO
[01:22:51] PLAYING A POSITIVE ROLE. NOT ONLY IS IT
[01:22:53] THE RIGHT THING FOR US TO DO, BUT IT'S
[01:22:55] COMPLETELY CORE TO OUR BUSINESS. AT
[01:22:56] MICROSOFT, WE ARE, AS EXPECTED, AND KNOWN
[01:23:00] GROWING CONSUMER OF ENERGY AND WATER.
[01:23:02] BUT THE THEREFORE WE HAVE A
[01:23:04] RESPONSIBILITY TO BE PART OF THE
[01:23:05] SOLUTION. AND WE'RE REALLY COMMITTED TO

[01:23:07] HARNESSING THE POWER OF TECHNOLOGY TO
[01:23:09] HELP EVERYONE EVERYWHERE, TO BUILD A
[01:23:11] MORE SUSTAINABLE FUTURE. AND IT'S
[01:23:13] POWERFUL TO ME THAT THESE WORDS FROM OUR
[01:23:15] LEADERSHIP THAT I HAVE ON THIS SLIDE
[01:23:16] HERE TRANSLATE TO ACTION AT EVERY LEVEL.
[01:23:19] SO THE ABILITY FOR OUR LEADERSHIP TO
[01:23:21] STATE LARGE, BOLD COMMITMENTS THEN
[01:23:23] REALLY DRIVES CHANGE AT AN OPERATIONAL
[01:23:27] LEVEL WHERE I CAN SAY MY OWN ROLE IS
[01:23:28] OPERATING. AND FROM THIS STATEMENT TO
[01:23:31] OUR 2020 ANNOUNCEMENT TO BECOME CARBON
[01:23:34] NEGATIVE BY 2030 AND HOW THAT THEN
[01:23:36] FILTERS DOWN TO THE EMISSIONS
[01:23:38] CATEGORIES, INCLUDING THAT OF AVIATION
[01:23:40] I'LL COVER IN THESE COMING SLIDES. NEXT
[01:23:43] SLIDE, PLEASE. SO TO
[01:23:48] COVER THE VERY LATEST AMBITIONS IN MORE
[01:23:51] DETAIL, WE'VE MADE COMMITMENTS TOWARDS
[01:23:53] WATER, WASTE AND ECOSYSTEMS, BUT FOR
[01:23:55] THIS SPECIFIC PURPOSE, I'LL COVER MORE
[01:23:58] DETAILS ABOUT OUR CARBON COMMITMENTS.
[01:23:59] BY 2025. WE'RE AIMING TO HAVE NEARLY
[01:24:03] ELIMINATED OUR DIRECT EMISSIONS THROUGH
[01:24:05] ENERGY EFFICIENCY. WORK BY 2030 WILL
[01:24:08] HAVE REDUCED OUR SCOPE THREE EMISSIONS
[01:24:10] BY HALF. AND THIS IS WHERE THE MAJORITY
[01:24:12] OF OUR MISSIONS RELATED TO AIR TRAVEL
[01:24:14] ARE ATTRIBUTED. TODAY BY 2050, WE AIM
[01:24:17] TO HAVE REMOVED ALL OF OUR HISTORICAL
[01:24:19] EMISSIONS. CARBON NEUTRAL IS NO LONGER
[01:24:22] ENOUGH. AND BEHIND EACH OF THESE
[01:24:24] COMMITMENTS, THE TEAMS OF PEOPLE LIKE
[01:24:26] MYSELF WORKING TOGETHER TO SOLVE THE
[01:24:28] CHALLENGES THAT TOGETHER WE NEED TO
[01:24:30] OVERCOME. NEXT SLIDE, PLEASE. SO MOVING
[01:24:35] FORWARD TO DESCRIBE MORE SPECIFICALLY
[01:24:37] HOW THIS RELATES TO HOW WE VIEW
[01:24:40] SUSTAINABILITY WITHIN THE TRAVEL
[01:24:42] CATEGORY AT MICROSOFT. OUR WORK STARTED
[01:24:44] IN COLLABORATION WITH THE CARBON TEAM AT
[01:24:46] MICROSOFT A COUPLE OF YEARS AGO, AND AS
[01:24:48] WE WORK TOGETHER TO INTRODUCE THE
[01:24:50] PROGRAM INTENDED TO EMPOWER OUR
[01:24:52] EMPLOYEES INITIALLY THROUGH EDUCATION
[01:24:54] AND AWARENESS AROUND THE IMPACT OF
[01:24:56] TRAVEL ON THE ENVIRONMENT, WE THEN
[01:24:59] LOOKED AT HOW WE COULD ALIGN ALL OF OUR
[01:25:01] SUSTAINABILITY AMBITIONS FOR TRAVEL
[01:25:03] TRAVEL WITH OUR ALL UP CARBON EMISSIONS
[01:25:05] AT GOALS WHICH ARE REDUCE, REPLACE AND
[01:25:08] REMOVE. AND SO WE HAD STARTED WITH THE
[01:25:11] REDUCTION OF TRIPS AND LOOKING AT
[01:25:14] OPTIMIZING TRAVEL AND THEN REALLY
[01:25:17] CONSIDERED HOW WE COULD LOOK TO SUPPORT
[01:25:19] THE OPPORTUNITY TO REPLACE THE USE OF
[01:25:21] FOSSIL FUELS WITH SUSTAINABLE
[01:25:23] ALTERNATIVES. I CAN SAY THAT AT THE TIME
[01:25:25] WHEN WE STARTED THE PROGRAM, WE REALLY
[01:25:26] DIDN'T HAVE A DEPTH OF UNDERSTANDING OF
[01:25:28] SUSTAINABLE AVIATION FUEL AND WE'RE A
[01:25:30] TECHNOLOGY COMPANY. SO ESSENTIALLY WHY
[01:25:32] WOULD WE BUT WE WERE ABLE TO WORK WITH

[01:25:34] PARTNERS TO REALLY LEARN AND UNDERSTAND
[01:25:36] WHAT WAS FEASIBLE TODAY AND WHAT WAS THE
[01:25:38] PROJECTION IN THE NEXT COMING YEARS?
[01:25:41] HOW SPECIFICALLY COULD MICROSOFT SUPPORT
[01:25:43] WITH THE FURTHER PRODUCTION AND
[01:25:45] DEVELOPMENT OF THIS SAF MARKET?
[01:25:48] SO MOVING TO THE NEXT SLIDE.
[01:25:52] THIS IS AN EXAMPLE OF A SLIDE THAT I
[01:25:55] USED INTERNALLY FOR STAKEHOLDER
[01:25:57] ENGAGEMENT ON THIS TOPIC, WHICH WAS
[01:25:59] REALLY IMPORTANT THAT WE ENGAGED SENIOR
[01:26:01] LEADERSHIP TO UNDERSTAND THE VISION AND
[01:26:03] TO ULTIMATELY GAIN FUNDING FOR OUR FIRST
[01:26:06] PILOT PROJECT, WHICH WAS ENABLED DUE TO
[01:26:08] THE CARBON FEE THAT WE'VE HAD IN PLACE
[01:26:10] FOR A NUMBER OF YEARS AT MICROSOFT. SO
[01:26:12] THE INTERNAL CARBON FEE SUPPORTS ON A
[01:26:15] NUMBER OF DIFFERENT SUSTAINABILITY
[01:26:17] INITIATIVES, AND WE WERE ABLE TO
[01:26:18] DESCRIBE WHY SUSTAINABLE AVIATION FUEL
[01:26:20] WAS REALLY IMPORTANT TO ALIGN WITH OUR
[01:26:22] AMBITIONS AT MICROSOFT FOR CARBON
[01:26:24] REDUCTION. WE DESCRIBED HOW EARLY
[01:26:28] INVESTMENT FROM MICROSOFT IN SUSTAINABLE
[01:26:29] AVIATION FUEL COULD DIRECTLY HELP TO
[01:26:32] GENERATE INDUSTRY MOMENTUM, WHICH WAS
[01:26:34] VERY MUCH NEEDED. YOU'VE HEARD EARLIER
[01:26:36] IN THE SLIDES AND PRESENTATION HOW
[01:26:37] LIMITED THAT SAF PRODUCTION IS TODAY
[01:26:40] TO JUST TWO PRODUCTION FACILITIES
[01:26:42] GLOBALLY OF ANY SIZE. THERE ARE OTHERS,
[01:26:45] BUT WE REALLY NEEDED MORE PRODUCTION AS
[01:26:47] HIGH QUALITY SAF TO BE ABLE TO ACHIEVE
[01:26:49] OUR AMBITIONS AND USE SAF AS A
[01:26:52] MECHANISM TO ENABLE TRAVEL IN LINE WITH
[01:26:54] OUR AMBITIONS TO REDUCE USE CARBON. SO
[01:26:57] WE TALKED ABOUT HOW SAF OFFERS A REALLY
[01:27:00] CREDIBLE ALTERNATIVE TO OFFSETTING WE
[01:27:02] SOMETIMES DESCRIBED AS IN SETTING, SO
[01:27:04] BETTER ENABLING BOTH MITIGATION AND
[01:27:06] INNOVATION IN THE TRAVEL SPACE. WE
[01:27:09] TALKED ABOUT HOW THE COST OF SAF IS
[01:27:11] DEFINITELY AT A PREMIUM. YOU'VE HEARD
[01:27:13] THAT AS WELL TODAY COMPARED WITH FOSSIL
[01:27:15] FUELS, BUT THAT THE ECONOMICS ARE
[01:27:17] IMPROVING AS AN INVESTMENT FROM THE
[01:27:19] CORPORATE SECTOR REALLY HAVE THE
[01:27:20] POSSIBILITY TO DEMONSTRATE CONFIDENCE TO
[01:27:23] THOSE EXTERNAL INVESTORS THAT ARE REALLY
[01:27:25] CRITICAL TO ENSURING NEW PRODUCTION
[01:27:28] CAPACITY AT SCALE IN THE NEAR TERM.
[01:27:31] AND THEN I EXPLAINED TO EXECUTIVES HOW
[01:27:34] IT WAS IMPORTANT THAT AS A MAJOR
[01:27:35] CONSUMER AND CUSTOMER OF THE AIRLINES,
[01:27:39] WE SHOULD SHARE OUR EXPECTATIONS AND
[01:27:41] REQUIREMENTS NOW SO THAT AIRLINES REALLY
[01:27:43] PURCHASE SAF THAT MEET THE HIGHEST
[01:27:45] POSSIBLE SUSTAINABILITY STANDARDS. WE
[01:27:48] REALLY DON'T WANT A RACE TO THE BOTTOM
[01:27:50] TO THE LOWEST POSSIBLE COST AND ALSO THE
[01:27:53] LOWEST POSSIBLE STANDARDS. WE WANT TO
[01:27:55] BALANCE THOSE TWO AND MAKE IT
[01:27:56] ECONOMICALLY VIABLE. BUT ALSO

[01:27:58] ULTIMATELY, THIS IS ABOUT MAKING THE
[01:27:59] MOST POSITIVE IMPACT ON THE ENVIRONMENT.
[01:28:02] AND LASTLY, WHILE DIRECTLY REDUCING
[01:28:05] CARBON EMISSIONS ON A SMALLER SCALE
[01:28:07] TODAY. THIS WORK ENGAGES BUSINESS GROUPS
[01:28:09] INTERNALLY IN MICROSOFT AND INDIVIDUALS,
[01:28:12] EMPLOYEES THAT ARE REALLY PASSIONATE
[01:28:13] ABOUT THIS TOPIC OR THOSE THAT JUST WANT
[01:28:15] TO LEARN MORE WITH A POSITIVE APPROACH
[01:28:17] TO CARBON REDUCTION RELATED TO TRAVEL.
[01:28:19] WHILE STILL SUPPORTING EDUCATION ABOUT
[01:28:21] THE ADDITIONAL AND IMMEDIATE
[01:28:22] OPPORTUNITIES TO REDUCE CARBON, FOR
[01:28:24] EXAMPLE, TRIP REDUCTION AND OTHER
[01:28:26] RESPONSIBLE TRAVEL TO YOUR CHOICES THAT
[01:28:28] WE COMBINE. THIS SLIDE THAT YOU HAVE
[01:28:31] HERE IS JUST ANOTHER EXAMPLE OF
[01:28:33] EDUCATION THAT WE USED IN THE
[01:28:35] DISCUSSIONS WE HAD WITH SUPPLIERS TO
[01:28:37] TALK ABOUT WHAT WAS IMPORTANT TO
[01:28:38] MICROSOFT. THIS IS NOT ABOUT US JUST
[01:28:40] MAKING AN EASY TRANSITION ACROSS TO OUR
[01:28:43] SUPPLIERS OF OUR RESPONSIBILITIES.
[01:28:45] WE'VE INVESTED TIME AND EFFORT TO LEARN
[01:28:47] ABOUT THE MARKET TO LEARN ABOUT THE
[01:28:49] SUSTAINABILITY IMPLICATION AND THE RISKS
[01:28:51] ASSOCIATED WITH PURCHASING SAF. AND SO
[01:28:54] THESE FIVE AREAS ARE ONES THAT WE REFER
[01:28:56] TO ON A REGULAR BASIS WHERE WE TALK
[01:28:58] ABOUT FEEDSTOCK. IF WE'RE GOING TO
[01:29:00] INVEST AND SUPPORT THAT ADDITIONAL COST
[01:29:02] OF SAF, WE WANT TO KNOW WHAT WE'RE
[01:29:03] PURCHASING. WE WANT TO KNOW HOW IT WAS
[01:29:05] MADE, WHAT FEEDSTOCK WAS USED, WHAT
[01:29:07] TECHNOLOGY WAS USED. WE WANT TO
[01:29:09] UNDERSTAND WHAT THE FUTURE PATHWAY IS TO
[01:29:11] SCALE THE LAND USE, THE CONSIDERATION OF
[01:29:14] THAT IMPACT ON THE ENVIRONMENT.
[01:29:15] TRANSPARENCY. I'LL TALK ABOUT THAT LATER
[01:29:17] AS WELL. THE CRITICALITY OF US REALLY
[01:29:19] UNDERSTANDING THE TRANSPARENCY OF THE
[01:29:21] SUPPLY CHAIN, THE DOUBLE COUNTING ISSUES
[01:29:23] THAT EXIST WHEN WE THINK ABOUT HOW IKO
[01:29:26] AND CORSIE IS APPROACHING STAFF, AND
[01:29:28] THEN WE TALK ABOUT ADDITIONALITY THAT
[01:29:29] REALLY IF OUR DOLLAR IS GOING TO SUPPORT
[01:29:31] THE EXTRA COST, IS IT GOING TO PUSH
[01:29:33] ABOVE AND BEYOND USING THAT SAME
[01:29:35] METHODOLOGY THAT WE APPLY TO PURCHASING
[01:29:38] CARBON REMOVAL TODAY. NEXT SLIDE.
[01:29:42] SO THIS IS JUST A TIMELINE OF THE MAJOR
[01:29:46] COMMITMENTS THAT MICROSOFT HAS MADE
[01:29:47] MOVING FROM OUR FIRST PURCHASE TOGETHER
[01:29:50] WITH KLM BACK IN OCTOBER 2019, WHICH
[01:29:53] ALLOWED US TO REALLY LEARN AND EXPLORE
[01:29:55] HOW SAF COULD BE APPLIED TO HELP US
[01:29:57] REDUCE EMISSIONS RELATED TO BUSINESS
[01:29:59] TRAVEL. AND REALLY PRACTICALLY, HOW
[01:30:01] WOULD WE APPROACH IT FROM A CONTRACT
[01:30:02] PERSPECTIVE? HOW CAN WE GAIN FUNDING FOR
[01:30:04] IT? HOW CAN WE USE THE FIRST PROJECT TO
[01:30:07] SUPPORT ON EDUCATION? TO THE SECOND
[01:30:09] PARTNERSHIP, WHICH KIRK HAS TALKED ABOUT

[01:30:11] IN MORE DETAIL TODAY, TOGETHER WITH
[01:30:13] ALASKA AIRLINES AND SKY ENERGY, IT WAS
[01:30:15] REALLY IMPORTANT THAT WE WORK TOGETHER
[01:30:17] WITH PARTNERS THAT WERE ALIGNED WITH OUR
[01:30:19] AMBITION AND PRODUCTION OF SAF IN THE
[01:30:22] PACIFIC NORTHWEST IS ABSOLUTELY A
[01:30:23] PRIORITY FOR US. AND THEN TO THE MORE
[01:30:26] LATEST ANNOUNCEMENT, WHICH IS THAT
[01:30:28] MICROSOFT IS A FOUNDING MEMBER OF
[01:30:30] SABA, THE SUSTAINABLE AVIATION FUEL
[01:30:32] BUYERS ASSOCIATION ALLIANCE. APOLOGIES.
[01:30:35] AND THAT'S VERY MUCH ABOUT DRIVING FOR
[01:30:37] TRANSPARENCY AND SUPPORTING THE WORK
[01:30:39] THAT NEEDS TO HAPPEN AROUND CARBON
[01:30:40] ACCOUNTING IN THE FIRST PHASE. SO IT'S
[01:30:43] REALLY IMPORTANT THAT WHEN MICROSOFT OR
[01:30:44] OTHER COMPANIES INVEST AND SUPPORT THAT
[01:30:46] EXTRA COST THAT WE HAVE APPROPRIATE AND
[01:30:49] ACCEPTED STANDARDS AROUND CARBON
[01:30:51] ACCOUNTING, HOW CAN WE CLAIM FOR THE
[01:30:53] BENEFITS APPROPRIATELY ENSURE THERE'S NO
[01:30:56] DOUBLE COUNTING? THAT'S REALLY THE ASSET
[01:30:58] THAT WE'RE PURCHASING IS THAT CARBON
[01:31:02] ACCOUNTING ELEMENTS. AND SO IT'S REALLY
[01:31:04] IMPORTANT THAT WE WORK TOGETHER WITH
[01:31:05] PARTNERS LIKE RMI ROCKY MOUNTAIN
[01:31:07] INSTITUTE, AN EDF TO HELP TO ACHIEVE
[01:31:11] THOSE STANDARDS, AND THEN THAT MAKES IT
[01:31:13] REALLY SCALABLE FOR OTHER CORPORATES TO
[01:31:15] WORK IN THIS SPACE AS WELL, WHERE THEY
[01:31:17] MAY NOT HAVE THE RESOURCES TO DEDICATE
[01:31:19] TIME AS WE HAVE TO LEARN ABOUT THE
[01:31:21] STANDARDS AND TO SUPPORT THE SUSTAINABLE
[01:31:23] AMBITIONS. SO I
[01:31:28] JUST I THINK THAT MAYBE MY LAST SLIDE.
[01:31:31] I WANT TO JUST SAY THAT OUR MAIN FOCUS
[01:31:33] REMAINS AT THIS TIME TO PROVIDE A STRONG
[01:31:35] DEMAND SIGNAL. WE WANT TO SUPPORT
[01:31:38] INCREASED PRODUCTION, AND WE HOPE THAT
[01:31:40] THE PACIFIC NORTHWEST CAN REALLY WORK
[01:31:43] TOGETHER TO ENABLE A FUTURE OF SAF.
[01:31:47] AND THANK YOU FOR ALLOWING ME THIS TIME
[01:31:48] TODAY AND THE OPPORTUNITY TO PRESENT
[01:31:50] CONGRATULATIONS ON THE GREAT REGIONAL
[01:31:52] PROGRESS THAT'S BEEN MADE AS WELL.
[01:31:54] JULIA, THANK YOU SO MUCH FOR MICROSOFT
[01:31:58] INTERNATIONAL LEADERSHIP IN THIS
[01:32:00] ENVIRONMENT AND YOUR COMMITMENT TO
[01:32:02] TECHNOLOGICALLY ROUTE AND TRANSPARENT
[01:32:06] PROCESS. IT'S SETTING THE BAR AS YOU
[01:32:08] ALWAYS DO. AND I'M PROUD TO HAVE YOU AS
[01:32:11] A HOME THROWN COMPANY. WE ARE REALLY
[01:32:13] RUNNING TIGHT, SO I WOULD LIKE VERY MUCH
[01:32:16] WE'RE RUNNING BEHIND, SO I REALLY MUCH
[01:32:18] APPRECIATE IT FOR MY COLLEAGUES. CAN
[01:32:20] KEEP THE QUESTIONS TO A MINIMUM AND
[01:32:22] SHORT AND NO DOUBLE DIPPING. SO ANYWAY.
[01:32:25] CLERK, PLEASE CALL THE ROLL.
[01:32:27] COMMISSIONER BOWMAN, I'LL PASS IN ANY
[01:32:30] QUESTIONS. THANK YOU, JULIA, FOR
[01:32:32] MICROSOFT LEADERSHIP. COMMISSIONER
[01:32:35] CALKINS, I JUST HAVE FIVE OR 6, SO I'LL
[01:32:38] GO, REALLY? I'M JUST KIDDING. I'LL PASS.

[01:32:39] THANK YOU, JULIA. GREAT PRESENTATION.
[01:32:41] THANK ROUTE. I'LL DO THE
[01:32:45] SAME. THANK YOU SO MUCH FOR YOUR
[01:32:46] PRESENTATION TODAY, COMMISSIONERS. TIME
[01:32:49] FOR NO QUESTIONS. THANKS, COMMISSIONER
[01:32:53] FELLEMAN. WELL, THANKS AGAIN. AND JULIA,
[01:32:55] KNOW YOU HAVE A GREAT CHAMPION IN
[01:32:58] COURTNEY GREGOIRE, WHO BEFORE SHE LEFT THE
[01:33:00] COMMISSION, WAS ALWAYS TALKING ABOUT
[01:33:02] MICROSOFT'S LEADERSHIP. AND SO THANK YOU
[01:33:05] AGAIN. AND DON'T THINK OUR LACK OF
[01:33:07] QUESTIONS AS ANY REFLECTION OF OUR LACK
[01:33:09] OF INTEREST, WE KNOW WHERE TO FIND YOU.
[01:33:11] SO THANKS, A REALLY APPRECIATE YOUR
[01:33:14] TIME. SO NOW WE WILL HEAR FROM
[01:33:17] JAY DESI, STRATEGY AND OPERATIONS MANAGER
[01:33:20] WITH BREAKTHROUGH ENERGY. LET KNOW WHEN
[01:33:23] YOU'RE READY, AND WE'LL DISPLAY YOUR
[01:33:25] PRESENTATION, AND THE CLERK, HART WILL
[01:33:28] ADVANCE THE SLIDES AT YOUR
[01:33:30] INDICATION. GREAT. WELL, THANK YOU ALL
[01:33:33] FOR HAVING ME EXCITED TO BE HERE AND
[01:33:35] REALLY LEARN FROM A LOT OF YOU ALL ABOUT
[01:33:37] THE GREAT WORK THAT'S BEING DONE. SO YOU
[01:33:39] CAN PULL UP THE SLIDES NOW. AND I'M
[01:33:41] HAPPY TO TELL YOU A LITTLE BIT ABOUT OUR
[01:33:43] WORK AT BREAKTHROUGH ENERGY AND
[01:33:45] SPECIFICALLY THE CATALYST PROGRAM THAT
[01:33:47] WE'RE LAUNCHING TO FUND EMERGING CLIMATE
[01:33:49] TECHNOLOGIES, INCLUDING SUSTAINABLE
[01:33:51] AVIATION FUEL. SO IF YOU GO TO THE NEXT
[01:33:53] SLIDE, JUST TO GIVE A BIT OF CONTEXT ON
[01:33:55] WHO WE ARE, BREAKTHROUGH ENERGY, WE ARE
[01:33:59] A NETWORK OF ENTITIES THAT WAS FOUNDED
[01:34:01] BY BILL GATES BACK IN 2015 THAT
[01:34:04] SUPPORTS COMMERCIALIZATION OF CLEAN
[01:34:07] ENERGY AND CLIMATE TECHNOLOGIES ON THE
[01:34:09] PATH TO NET YOUR EMISSIONS BY 2050. SO
[01:34:11] WE DO A COUPLE OF DIFFERENT THINGS
[01:34:14] ACROSS THE LANDSCAPE OF INNOVATION ALL
[01:34:17] THE WAY FROM R&D THROUGH LARGE
[01:34:19] SCALE DEPLOYMENT. WE'RE MOST WELL KNOWN
[01:34:22] THUS FAR FOR OUR VENTURE CAPITAL FUND
[01:34:23] CALLED BREAKTHROUGH ENERGY VENTURES,
[01:34:25] WHICH INVESTS IN EARLY STAGE
[01:34:26] TECHNOLOGIES ALL THE WAY FROM THE SEED
[01:34:29] STAGE THROUGH SERIES C AND D. WE JUST
[01:34:32] LAUNCHED A SECOND FUND THAT CLOSED THE
[01:34:34] BEGINNING OF THIS YEAR AND HAVE OVER
[01:34:36] 2,000,000,000 DOLLARS THAT WE'RE
[01:34:37] INVESTING IN EARLY STAGE STARTUPS.
[01:34:40] WE'RE NOW BUILDING A BROADER NETWORK,
[01:34:41] AS I MENTIONED, AND IN PARTICULAR, WHAT
[01:34:45] I AM HERE TO TALK ABOUT AND THE PROGRAM
[01:34:47] I WORK ON IS CALLED BREAKTHROUGH ENERGY
[01:34:48] CATALYST, WHICH IS REALLY ABOUT HOW WE
[01:34:50] CAN DEPLOY NEW TECHNOLOGIES IN
[01:34:54] DEMONSTRATIONS AND COMMERCIAL STAGE
[01:34:56] APPLICATIONS WITH THE GOAL OF DRIVING
[01:34:59] DOWN COSTS AND INCREASING PRODUCT
[01:35:01] AVAILABILITY. AND SO WE'RE EXCITED TO BE
[01:35:04] IN THIS CONTEXT OF THE BROADER
[01:35:07] COMMERCIALIZATION CHALLENGE AND THINK

[01:35:09] THAT WE CAN HELP SOLVE SOME OF THE KEY
[01:35:11] GAPS WHEN IT COMES TO SCALING UP. SO IF
[01:35:13] YOU GO TO THE NEXT SLIDE, BREAKTHROUGH
[01:35:16] ENERGY IN GENERAL, AGAIN, IS ABOUT HOW
[01:35:18] WE COMMERCIALIZE THE SET OF TECHNOLOGIES
[01:35:20] WE NEED THAT REALLY INCLUDES A
[01:35:23] BROAD SET OF SOLUTIONS. AND WE KIND OF
[01:35:25] THINK ABOUT THOSE SOLUTIONS IN TWO KEY
[01:35:27] BUCKETS. THERE'S THINGS THAT FACE THE
[01:35:30] IMPLEMENTATION CHALLENGE, WHERE THEY'VE
[01:35:32] ALREADY COME DOWN AND COST
[01:35:34] SIGNIFICANTLY. AND REALLY WHAT WE NEED
[01:35:35] TO DO IS HELP THEM GET TO SCALE. AND
[01:35:37] THEN THERE'S TECHNOLOGIES THAT FALL IN
[01:35:39] THE INNOVATION CHALLENGE BUCKET WHERE WE
[01:35:41] NEED TO DRIVE DOWN COSTS AGAIN THROUGH
[01:35:43] REALLY DEPLOYMENT AND THROUGH INVESTMENT
[01:35:46] THAT CAN HELP THEM SUCCEED. AND SO WHEN
[01:35:49] WE THINK ABOUT SUSTAINABLE AVIATION FUEL
[01:35:51] AND OTHER TECHNOLOGIES. WE REALLY SEE
[01:35:54] THAT RIGHT NOW AS AN INNOVATION
[01:35:55] CHALLENGE WHERE WE NEED TO FIGURE OUT
[01:35:57] HOW WE CAN CREATE THE RIGHT MARKET
[01:35:59] ECOSYSTEM AND SUFFICIENT INVESTMENT IN
[01:36:01] ORDER TO HELP THESE TECHNOLOGIES COMPETE
[01:36:03] WITH FOSSIL FUEL INCUMBENTS. IF YOU GO
[01:36:06] TO THE NEXT SLIDE, AS WE LOOK AT THE
[01:36:09] LANDSCAPE OF THE ACTIONS NEEDED TO GET
[01:36:12] TO ZERO AGAIN ACROSS THESE TWO BUCKETS,
[01:36:15] WE THINK THAT THE IMPLEMENTATION
[01:36:16] CHALLENGE IS WELL COVERED IN MANY WAYS
[01:36:20] BY THE EXISTING SYSTEMS FOR REPORTING
[01:36:23] AND QUANTIFICATION AND RECOGNITION.
[01:36:24] SOME OF THE THINGS THAT OTHERS HAVE
[01:36:26] TALKED ABOUT, LIKE CARBON OFFSETS OR
[01:36:30] CORPORATE REPORTING MECHANISMS LIKE
[01:36:31] SCIENCE BASED TARGETS, HAVE REALLY MADE
[01:36:34] A LOT OF REMARKABLE PROGRESS OVER THE
[01:36:35] LAST SEVERAL YEARS. BUT FROM OUR
[01:36:37] PERSPECTIVE, WHEN IT COMES TO THE
[01:36:39] INNOVATION CHALLENGE, THERE IS NOT
[01:36:41] SUFFICIENT RECOGNITION AND NOT
[01:36:42] SUFFICIENT PRODUCTS IN PLACE TO HELP
[01:36:44] CATALYZE INVEST INTO THINGS LIKE SAF AND
[01:36:47] OTHER TECHNOLOGIES AT A SIMILAR STAGE,
[01:36:50] LIKE DIRECT AIR CAPTURE, WHICH SOME OF
[01:36:52] THE FOLKS EARLIER MENTIONED GREEN
[01:36:54] HYDROGEN PRODUCTION AS WELL AS LAND
[01:36:56] RATION ENERGY STORAGE. AND SO WHAT WE'RE
[01:36:58] TRYING TO DO WITH THE BREAKTHROUGH ENTRY
[01:36:59] CATALYST PROGRAM IS REALLY INCENTIVIZED
[01:37:02] INVESTMENT INTO THESE TECHNOLOGIES AT A
[01:37:05] SCALE THAT'S WELL BEYOND WHAT'S
[01:37:09] AVAILABLE IN MANY CASES TODAY. SO IF YOU
[01:37:11] GO TO THE NEXT SLIDE, WE THINK
[01:37:16] GENERALLY ABOUT THIS CONCEPT OF THE
[01:37:18] GREEN PREMIUM THAT OTHERS HAVE MENTIONED
[01:37:20] AND REALLY WHERE WE WANT TO PRIORITIZE
[01:37:24] OUR EFFORT ARE IN PLACES WHERE THERE'S A
[01:37:26] HIGH GREEN PREMIUM RIGHT NOW AND NOT
[01:37:28] NECESSARILY A COORDINATED EFFORT TO
[01:37:29] ADDRESS THEM. AND SO WE SHOW TWO
[01:37:31] EXAMPLES HERE, ONE AROUND ELECTRIC

[01:37:33] VEHICLES, WHERE THERE IS STILL A GREEN
[01:37:36] PREMIUM, BUT IT'S RELATIVELY SMALL. AND
[01:37:38] WE THINK THAT OVER THE NEXT SEVERAL
[01:37:39] YEARS, THE GREEN PREMIUM MAY EVEN GO TO
[01:37:42] ZERO OR BE NEGATIVE FOR ELECTRIC
[01:37:45] VEHICLES RELATIVE TO INTERNAL COMBUSTION
[01:37:47] ENGINE VEHICLES. AND THEN WHEN YOU LOOK
[01:37:49] AT SUSTAINABLE AVIATION FUEL, OBVIOUSLY
[01:37:51] THERE ARE MANY DIFFERENT TYPES OF WAYS
[01:37:52] TO MAKE SAF, BUT RIGHT NOW PRICES ARE
[01:37:55] JUST TOO HIGH, AND THEY'RE OFTEN 2 OR
[01:37:58] 3 TIMES MORE EXPENSIVE, DEPENDING ON THE
[01:37:59] TECHNOLOGY USED TO DEVELOP THEM. AND SO
[01:38:02] THAT'S WHERE THE CAPITALIST PROGRAM
[01:38:04] COMES IN. IF YOU GO TO THE NEXT SLIDE,
[01:38:05] WE TELL YOU A LITTLE BIT ABOUT WHAT THE
[01:38:08] PROGRAM IS WORKING ON. OUR GOAL IS TO
[01:38:11] BUILD A COALITION AND PARTNERSHIP ACROSS
[01:38:13] A BROAD SET OF STAKEHOLDERS THAT INCLUDE
[01:38:16] AIRPORTS, AIRLINES, OTHER VALUE CHAIN
[01:38:20] PARTNERS ULTIMATELY RAISE CAPITAL FROM A
[01:38:23] BROAD SET OF CONTRIBUTORS THAT INCLUDE
[01:38:25] PHILANTHROPISTS, GOVERNMENTS AND
[01:38:26] COMPANIES, AND THEN DEPLOY THAT CAPITAL
[01:38:28] TOWARD PROJECTS THAT CAN DRIVE DOWN
[01:38:31] COSTS. SO WE THINK THAT THIS TYPE
[01:38:34] OF A MODEL CAN BE REALLY HELPFUL IN
[01:38:37] TERMS OF INCREASING SUPPLY OF THESE NEW
[01:38:39] TECHNOLOGIES, BECAUSE WE'LL FUND UPFRONT
[01:38:41] CAPEX CONSTRUCTION OF THINGS LIKE
[01:38:43] SUSTAINABLE AVIATION FUEL REFINERIES OR
[01:38:46] GREEN HYDROGEN ELECTROLYZERS OR
[01:38:48] LONGDURATION BATTERY STORAGE
[01:38:49] APPLICATIONS WILL THEN WORK WITH BUYERS
[01:38:52] AROUND CREATING DEMAND AND COMMITTING TO
[01:38:55] LONGER TERM OFF TAKE AGREEMENTS TO
[01:38:57] ENSURE THESE PRODUCTS HAVE A MARKET.
[01:38:59] AND THEN WE WANT TO REPORT ON THAT AND
[01:39:01] RECOGNIZE CLIMATE LEADERSHIP. AND WE'RE
[01:39:03] DEVELOPING A NEW SYSTEM CALLED THE
[01:39:04] CATALYZED EMISSIONS REDUCTION FRAMEWORK,
[01:39:07] WHICH WILL RECOGNIZE THE CONTRIBUTORS TO
[01:39:08] CATALYST BASED ON ON A METHODOLOGY WE'RE
[01:39:11] DEVELOPING WITH THE CARBON DISCLOSURE
[01:39:13] PROJECT, A UK BASED NONPROFIT. SO IF YOU
[01:39:16] GO TO THE NEXT SLIDE, WERE,
[01:39:20] AS I MENTIONED, FOCUSED ON A FEW
[01:39:22] DIFFERENT TECHNOLOGIES, WHICH INCLUDES
[01:39:24] SUSTAINABLE AVIATION FUEL AND THE OTHERS
[01:39:26] I MENTIONED. AND WE PRIORITIZE THESE
[01:39:28] BECAUSE WE THINK THAT THEY WILL PLAY A
[01:39:30] CRITICAL ROLE IN A NET ZERO FUTURE.
[01:39:33] AND BECAUSE WITH A RELATIVELY MODEST
[01:39:35] AMOUNT OF FUNDING, WE THINK WE CAN HAVE
[01:39:37] SIGNIFICANT IMPACT DRIVING DOWN COST.
[01:39:39] AND SO WE'RE LOOKING TO BUILD CATALYSTS
[01:39:41] AS A 7-10 BILLION DOLLAR FUND
[01:39:44] THAT WILL DEPLOY CAPITAL TOWARD
[01:39:46] DEMONSTRATION PROJECTS ACROSS THESE
[01:39:49] AREAS AND REALLY BUILD A PORTFOLIO OF
[01:39:52] SOMEWHERE BETWEEN 30 TO 40 PROJECTS THAT
[01:39:56] DEMONSTRATE THE CAPACITY OF THESE
[01:39:58] TECHNOLOGIES. SO ON THE NEXT SLIDE,

[01:40:01] WE SHOW A LITTLE BIT ABOUT HOW THIS WILL
[01:40:04] WORK. I THINK THIS IS THE LAST SLIDE I
[01:40:05] HAVE IN HERE. AND THEN HAPPY TO TAKE
[01:40:07] SOME QUESTIONS. BUT WHAT WE'RE TRYING TO
[01:40:09] DO IS POOL CAPITAL. AND RIGHT
[01:40:12] NOW TALKING TO A LOT OF DIFFERENT
[01:40:14] PARTNERS ABOUT HOW WE CAN ACTUALLY GET
[01:40:16] INVESTMENT INTO THE FUND OR CAPITAL
[01:40:18] COMMITTED TO THE PROGRAM. AND THEN WE'LL
[01:40:20] IDENTIFY BEST IN CLASS PROJECT
[01:40:22] DEVELOPERS ACROSS THESE TECHNOLOGY
[01:40:24] AREAS. AND WE PLAN TO RUN A REQUEST FOR
[01:40:26] PROPOSAL PROCESS WHERE WE IDENTIFY THESE
[01:40:28] PROJECT DEVELOPERS AND GO THROUGH A SET
[01:40:31] OF SELECTION CRITERIA TO ULTIMATELY
[01:40:33] ARRIVE AT THE ONES THAT WILL FUND. AND
[01:40:35] THEN WE'LL INVEST TO HELP BUILD THESE
[01:40:37] PROJECTS AND AGAIN, INTEGRATE THEM INTO
[01:40:40] MARKETS. AND SO YOU CAN SEE AN EXAMPLE,
[01:40:43] AN ILLUSTRATIVE EXAMPLE HERE, WHERE
[01:40:45] WE'RE SHOWING WHAT A SUSTAINABLE
[01:40:47] AVIATION FUEL FACILITY IN THE PACIFIC
[01:40:49] NORTHWEST MIGHT LOOK LIKE. WE'RE
[01:40:52] OBVIOUSLY REALLY INTERESTED, GIVEN BILL
[01:40:56] CASES PRESENCE IN THE PACIFIC NORTHWEST,
[01:40:59] OF THINKING ABOUT HOW WE CAN CREATE A
[01:41:02] REGIONAL ECOSYSTEM THERE AND IN
[01:41:03] PARTICULAR, INVEST IN SOME OF THESE NEW
[01:41:05] PRODUCTION FACILITIES AND ARE TALKING TO
[01:41:07] PRODUCT DEVELOPERS ABOUT HOW WE CAN
[01:41:09] INCREASE THAT CAPACITY. AND SO
[01:41:11] ULTIMATELY, WHAT WE WANT TO DO IS HELP
[01:41:12] COVER THAT GREEN PREMIUM BOTH ON THE
[01:41:14] CAPEX SIDE AND ON THE OFF TAKE AGREEMENT
[01:41:17] SIDE SO THAT WE CAN GET MORE INVESTMENT
[01:41:19] AND FACILITIES BUILT. SO THAT'S LARGELY
[01:41:22] AN OVERVIEW OF THE PROGRAM. AND AGAIN,
[01:41:26] HAPPY TO TAKE QUESTIONS AND APPRECIATE
[01:41:28] YOU ALL TAKING THE TIME TO RUN THIS
[01:41:32] WORKSHOP. AND IT'S BEEN REALLY
[01:41:33] INFORMATIVE FOR ME. THANK YOU SO MUCH.
[01:41:36] AND I'M REALLY GLAD TO HEAR I HEAR AN
[01:41:39] ECHO. PLEASE. SOMEBODY TURN OFF THEIR
[01:41:42] MICROPHONE. BUT IT'S REALLY GREAT TO
[01:41:44] HEAR YOU SAYING THAT IT'S A RELATIVELY
[01:41:46] SMALL INVESTMENT TO BRING SAF TO
[01:41:48] MARKET, AND IT'S VERY MATURE FIELD. SO I
[01:41:52] APPRECIATE YOUR SENTIMENT OF THAT. I
[01:41:54] LOOK FORWARD TO TALKING TO YOU ABOUT
[01:41:55] REDUCING CAL METHANE WITH KELP, BUT
[01:41:57] THAT'S ANOTHER CONVERSATION ALTOGETHER.
[01:42:00] MY COLLEAGUES, IF YOU, CLERK WOULD CALL
[01:42:02] THE ROLL, WE'RE ABOUT 15 MINUTES LATE,
[01:42:06] BUT WE'RE DOING WELL, SO LET
[01:42:12] PLEASE PROCEED, BEGINNING WITH
[01:42:14] COMMISSIONER BOWMAN FOR QUESTIONS.
[01:42:16] THANK YOU, JAY. EVERYTHING YOU'VE SAID
[01:42:18] SPEAK TO MY HEART. I'M ALL ABOUT THE
[01:42:21] PRODUCTION. I KNOW THAT THERE IS THE
[01:42:22] EAGERNESS TO DO THIS, BUT IT'S
[01:42:24] PRODUCTION AT THE END OF THE DAY,
[01:42:25] RIGHT? IS REALLY THE KEY COMPONENT TO
[01:42:27] MAKING THIS WORK. SO I GUESS I DON'T

[01:42:29] HAVE ANY QUESTIONS, BUT I WOULD LOVE TO
[01:42:31] TALK WITH YOU AS WELL ABOUT ELECTRIC
[01:42:34] ZERO MISSION DRAYAGE TRUCKS. THERE'S A
[01:42:37] LOT GOING ON IN THAT. THAT'S SOMETHING
[01:42:38] THAT I'M PRETTY PASSIONATE ABOUT THESE
[01:42:40] DAYS, SO THAT COULD HAVE A SIGNIFICANT
[01:42:42] IMPACT ON OUR MARINE TERMINAL AND OUR
[01:42:44] LOCAL AIR SHED. BUT THANK YOU FOR YOUR
[01:42:46] WORK. AND LET'S TALK OFFLINE. I JUST
[01:42:47] HAVE TOO MANY QUESTIONS THAT PROBABLY
[01:42:49] CAN'T GET ANSWERED TODAY, BUT I
[01:42:50] APPRECIATE YOU BEING HERE. THANK YOU.
[01:42:52] YEAH, THAT SOUNDS GREAT. I'D LOVE TO
[01:42:54] HAVE A FOLLOW UP CONVERSATION. OKAY.
[01:42:56] THANK YOU. COMMISSIONER BOWMAN.
[01:42:57] COMMISSIONER CALKINS, IS THERE ANYTHING
[01:43:02] ABOUT THE PROPOSALS I'M SURE YOU'VE SEEN
[01:43:05] AROUND IN TERMS OF FEEDSTOCKS FOR
[01:43:07] SUSTAINABLE AVIATION FUELS AND BIOFUELS,
[01:43:10] THAT GIVES YOU HEARTBURN. WAKE UP AT
[01:43:12] THREE IN THE MORNING. IS THIS REALISTIC?
[01:43:15] YEAH. I MEAN, I THINK WE'RE STILL
[01:43:19] EVALUATING EXACTLY WHAT OUR TECHNOLOGY
[01:43:21] STRATEGY WILL BE. WE WANT TO MAKE SURE
[01:43:23] THAT ALL THE FEEDSTOCKS WE USE HAVE
[01:43:25] ENVIRONMENTAL INTEGRITY AND DON'T
[01:43:28] CAUSE UNNECESSARY SUPPLY CHAIN IMPACTS
[01:43:31] TO LAND USE. WE'RE PARTICULARLY
[01:43:34] SENSITIVE TO PALM OIL DERIVATIVES AND
[01:43:35] FUEL AND WANT TO MAKE SURE THAT AS
[01:43:39] WE LOOK TOWARD THE FUTURE THAT WE'RE
[01:43:41] THINKING ABOUT SCALABLE FEEDSTOCKS LIKE
[01:43:43] MUNICIPAL SOLID WASTE OR WOODY BIOMASS,
[01:43:47] I THINK THERE'S LOTS OF OPPORTUNITIES
[01:43:51] FOR US TO HELP SCALE SOME OF THOSE NEW
[01:43:54] TECHNOLOGIES AND NEW FEEDSTOCKS.
[01:43:57] WE KNOW THAT THAT'S A LOT OF THE WORK
[01:43:59] THAT THE COMMISSION IS DONE TO DATE HAS
[01:44:01] REALLY PIONEERED THAT, INCLUDING THE
[01:44:02] REPORT THAT YOU GUYS PUT OUT LAST YEAR
[01:44:05] TO IDENTIFY SOME OF THOSE FEEDSTOCK
[01:44:07] OPPORTUNITIES.
[01:44:14] CLERK HART, THANK YOU. COMMISSIONER
[01:44:18] STEINBRUECK, NO QUESTIONS. JUST VERY
[01:44:21] IMPRESSED. JAY, THANKS FOR THE
[01:44:23] PRESENTATION. THANK YOU.
[01:44:26] THANK YOU. COMMISSIONER CHO, DID I MISS
[01:44:29] YOU? I APOLOGIZE. OKAY. JAY,
[01:44:32] THANKS FOR BEING HERE. REALLY EXCITED
[01:44:34] ABOUT ALL THE WORK THAT BREAKTHROUGH
[01:44:35] ENERGY IS DOING. I'M CURIOUS TO GET YOUR
[01:44:38] THOUGHTS ON WHAT ARE SOME OF THE
[01:44:40] INFRASTRUCTURE BARRIERS YOU SEE TO US
[01:44:43] ADOPTING NOT JUST SUSTAINABLE
[01:44:47] AVIATION TOOLS, BUT JUST GENERAL
[01:44:49] ELECTRIFICATION AND OTHER SUSTAINABLE
[01:44:52] ENERGY SOURCES?
[01:44:54] YEAH, IT'S A GREAT QUESTION. AND AS I
[01:44:58] MENTIONED IN THE PRESENTATION, A LOT OF
[01:45:00] THE CATALYST PROGRAM IS FOCUSED ON
[01:45:02] PRODUCTION. BUT, OF COURSE, THERE'S A
[01:45:05] WHOLE SUPPLY CHAIN AND LOGISTICS
[01:45:07] INFRASTRUCTURE THAT NEEDS TO BE IN

[01:45:09] PLACE. I THINK SOME
[01:45:15] OF THE KEY THINGS THAT WE SEE ARE
[01:45:16] CERTAINLY ON THE ELECTRIFICATION FRONT,
[01:45:18] MAKING SURE THAT WE HAVE RENEWABLE
[01:45:20] CAPACITY AND SIGNIFICANT ABILITY TO
[01:45:24] HAVE DISPATCHABLE POWER. AND SO WHETHER
[01:45:27] THAT'S FROM A FIRM
[01:45:30] ELECTRICITY SOURCE OR USING SOME STORAGE
[01:45:32] APPLICATION, I THINK THAT WILL BE
[01:45:33] INCREASINGLY CRITICAL. AND WE SEE POWER
[01:45:36] TO LIQUID FUELS DOWN THE LINE AS
[01:45:38] SOMETHING THAT POTENTIALLY WE'RE EAGER
[01:45:40] TO INVEST IN SO OBVIOUSLY, THAT REQUIRES
[01:45:43] A LOT OF GREAT INFRASTRUCTURE THAT WE
[01:45:46] DON'T CURRENTLY HAVE. SO THAT'S ONE
[01:45:48] THING THAT I THINK WE'RE CERTAINLY
[01:45:51] WORKING ON FROM A POLICY STANDPOINT AND
[01:45:53] THINKING ABOUT TRANSMISSION NETWORKS AND
[01:45:55] OTHER WAYS TO HELP INCENTIVIZE THAT I
[01:45:58] THINK ON THE FUEL SIDE,
[01:46:01] CERTAINLY THAT THE US HAS A ROBUST
[01:46:04] PIPELINE INFRASTRUCTURE, BUT THERE'S
[01:46:06] OFTEN MORE WORK THAT NEEDS TO BE DONE IN
[01:46:08] BUILDING THAT OUT AND MAKING SURE THAT
[01:46:10] WE CAN GET FUEL FROM PRODUCTION TO THE
[01:46:13] WING OF A PLANE. AND SO A LOT OF OUR
[01:46:16] POLICY EFFORT AS WELL IS FOCUSED ON HOW
[01:46:18] WE CAN ADVOCATE FOR THE INFRASTRUCTURE
[01:46:20] INVESTMENT THAT'S REQUIRED TO MAKE THAT
[01:46:22] HAPPEN. IT'S REALLY EXCELLENT. THANK YOU,
[01:46:24] JAY. REALLY APPRECIATE IT. YEAH. THANK
[01:46:26] YOU, COMMISSIONER. THE COMMISSIONER
[01:46:28] FELLEMAN, WELL, WE ARE VERY FORTUNATE TO
[01:46:31] HAVE THE INNOVATION AND TALENT OF OUR
[01:46:35] ORGANIZATION AND COMBINATION WITH
[01:46:37] MICROSOFT. AND SO THANK YOU SO MUCH FOR
[01:46:40] OUR PRIVATE SECTOR PRESENTERS.
[01:46:42] ULTIMATELY, IF THE DEMAND ISN'T THERE,
[01:46:45] WE'RE NOT GOING TO BE ABLE TO HAVE THE
[01:46:46] PRODUCTION. AND IF THE PRODUCTION
[01:46:48] TECHNOLOGY ISN'T THERE, WE CAN'T MEET
[01:46:50] THE DEMAND. SO REALLY APPRECIATE THE
[01:46:53] TIME. AND WE ARE GOING TO NOW SPEAK TO
[01:46:55] ONE OF THE REALLY KEY SOURCES OF
[01:46:57] SUSTAINABLE FUEL STOCKS THAT
[01:47:00] UNFORTUNATELY, WE'RE VERY GOOD AT
[01:47:02] PRODUCING, WHICH IS A MUNICIPAL SOLID
[01:47:05] WASTE. AND WE'LL NOW TURN BACK TO OUR
[01:47:08] PORT SENIOR ENVIRONMENTAL MANAGER,
[01:47:09] STEPHANIE MEYN, TO UPDATE US ON THE USE
[01:47:12] OF MUNICIPAL SOLID WASTE AS A FEEDSTOCK,
[01:47:17] INCLUDING THIS COLLABORATIVE STUDY WE'RE
[01:47:19] DOING WITH KING COUNTY. AND PLEASE TAKE
[01:47:21] IT AWAY. STEPHANIE, GREAT. THANK YOU SO
[01:47:24] MUCH. AND IN THE INTEREST OF TIME, I
[01:47:26] KNOW COMMISSIONERS HAVE ACCESS TO ME
[01:47:30] MORE OFTEN AND HAVE HEARD SOME OF THE
[01:47:33] OUTCOMES OF THE MSW OR THE FEEDSTOCK
[01:47:38] STUDY IN THE PAST. SO I WILL TRY TO SKIP
[01:47:40] SOME SLIDES IN THE INTEREST OF TIME AND
[01:47:42] KIND OF GET TO THE END OF THIS WHERE THE
[01:47:45] BULK OF THE INFORMATION ABOUT WHERE
[01:47:47] WE'RE HEADED IS COMING. SO NEXT SLIDE.

[01:47:50] SO JUST AS A VERY QUICK OVERVIEW,
[01:47:54] THE FEEDSTOCK STUDY THAT YOU'VE HEARD
[01:47:56] MENTIONED THAT WSU OR WASHINGTON STATE
[01:47:58] UNIVERSITY DID FOR THE PORT EXAMINED THE
[01:48:02] POTENTIAL OF NORTHWEST FEEDSTOCKS,
[01:48:04] INCLUDING LIPIDS, FOREST RESIDUAL AND
[01:48:07] MUNICIPAL SOLID WASTE, TO MEET THE PORT
[01:48:09] 10% SOFT GOAL. NEXT SLIDE. SO THOSE
[01:48:17] FEEDSTOCKS WERE EXAMINED, AND WHAT I
[01:48:20] WANT TO POINT OUT IS THAT WHILE LIPIDS
[01:48:23] ARE THE MOST COMMON CHOICE THAT IS BEING
[01:48:26] MADE AT WORLD ENERGY. THE SUPPLY OF
[01:48:29] LIPIDS IS BASICALLY ALREADY KIND OF
[01:48:31] TAKEN UP BY THE BIOFUEL INDUSTRY IN THE
[01:48:34] STATE. SO THERE REALLY ISN'T AN
[01:48:36] OPPORTUNITY THERE. SO WE REALLY FOCUSED
[01:48:38] A LITTLE BIT MORE ON FORCED RESIDUALS
[01:48:40] AND MSW AS PART OF TO STUDY. AND I'M
[01:48:42] GOING TO SKIP KIND OF TO THE MAIN POINT,
[01:48:45] THOUGH. NEXT SLIDE. THIS IS A PRETTY
[01:48:48] BUSY SLIDE, BUT THE BULK OR I GUESS THE
[01:48:51] KEY INFORMATION TO TAKE AWAY FROM THIS
[01:48:53] IS THAT THESE ARE GRAPHS OF THE PRICE OF
[01:48:58] THE SUSTAINABLE AVIATION FUEL WITH
[01:49:00] INCREASING AMOUNTS OF FEEDSTOCK AND WHAT
[01:49:03] YOU SEE IS THAT AS YOU INCREASE THE
[01:49:04] FEEDSTOCK, THE PRICE GOES DOWN AND THE
[01:49:07] BANDS OF THE PRICE ARE RELATED TO REALLY
[01:49:12] LARGELY THE CAPITAL COST AND WHETHER
[01:49:14] IT'S A PIONEER FACILITY, WHICH IS THE
[01:49:16] HIGH END OF THE BAND, OR IF IT'S AN
[01:49:17] ESTABLISHED IT'S THE THIRD OR FOURTH OF
[01:49:19] ITS KIND TECHNOLOGY, AND THAT'S SORT OF
[01:49:21] THE LOWER END OF THE BAND. AND WHAT YOU
[01:49:23] SEE, THE TOP IS LIPIDS, THE CENTER IS
[01:49:26] FORCED RESIDUALS, AND THE BOTTOM IS
[01:49:27] MUNICIPAL SOLID WASTE. BUT WHAT YOU SEE
[01:49:30] IS THAT MUNICIPAL SOLID WASTE STARTS TO
[01:49:32] GET INTO A PRICING CATEGORY THAT LOOKS
[01:49:36] PRETTY COMPETITIVE WITH LIPIDS AND ALSO
[01:49:39] EVEN COMPETITIVE WITH CONVENTIONAL JET
[01:49:40] FUEL IF YOU CAN MAKE IT TO SCALE NEXT
[01:49:43] SLIDE. SO THIS
[01:49:47] IS SORT OF THE BOTTOM LINE. IT'S A LOT
[01:49:49] OF INFORMATION. THIS IS A SUMMARY OF THE
[01:49:51] DIFFERENT TYPES OF TECHNOLOGIES,
[01:49:52] CONVERSION TECHNOLOGIES, AND THE TYPES
[01:49:55] OF FEEDSTOCKS THAT YOU COULD COMBINE
[01:49:57] USING ALL OF THE WASTE IN THE PACIFIC
[01:49:59] NORTHWEST OR WASTE SOURCES. AND THEN
[01:50:01] WHAT THE TOTAL INVESTMENT COST WOULD BE
[01:50:04] TO UTILIZE ALL OF THAT FEED STOCK AND
[01:50:08] WHAT THE MULTIPLIER TO PETROLEUM JET IS.
[01:50:11] AND WHAT WE MEAN BY THAT IS HOW MANY
[01:50:12] TIMES MORE EXPENSIVE IS THIS FINISHED
[01:50:16] COST OF FUEL COMPARED TO CONVENTIONAL?
[01:50:17] AND WHAT REALLY STOOD OUT TO US IN THE
[01:50:20] CONCLUSION OF THIS IS THAT WHEN YOU LOOK
[01:50:22] AT OVER ON THE RIGHT HAND SIDE FOR
[01:50:24] MUNICIPAL SOLID WASTE, THE MULTIPLIER
[01:50:27] WAS 1.5 TO 3. AND AGAIN, THAT
[01:50:29] DEPENDS ON THE SCALE AND THE TECHNOLOGY
[01:50:31] USE. BUT THAT PUTS IT AS COMPETITIVE AS

[01:50:34] SOME OF THE LIPIDS AND EVEN GETS CLOSE
[01:50:36] TO THE KIND OF PRICING WE'RE LOOKING AT
[01:50:38] THAT ONCE YOU LAYER IN THE FEDERAL AND
[01:50:40] STATE INCENTIVES, YOU CAN START GETTING
[01:50:42] A PRICE THAT LOOKS PRETTY DARN
[01:50:44] COMPETITIVE WITH CONVENTIONAL FUEL. SO
[01:50:46] THAT REALLY HAD US AT THE PORT REALLY
[01:50:49] INTRIGUED FOR OPPORTUNITIES THAT WE
[01:50:51] COULD LOOK FOR,
[01:50:54] EXPAND ON THAT. SO LET'S DIG INTO THAT
[01:50:57] SOME MORE. THIS WAS MY FINAL SLIDE. SO
[01:51:04] AN OPPORTUNITY AROSE WITH KING COUNTY,
[01:51:08] WHO ARE REACHING THE LIMITS OF THE CEDAR
[01:51:10] HILL LANDFILL, AND THEY'RE LOOKING FOR
[01:51:11] SOLUTIONS FOR THE FUTURE WASTE IN THIS
[01:51:13] REGION. AND THEY HAVE LOOKED AT EXPORT
[01:51:16] BY RAIL AND WASTE TO ENERGY FACILITIES
[01:51:18] IN THE PAST. BUT THEY NEVER EXPLORED A
[01:51:21] WASTE TO LIQUID FUELS FACILITIES USING
[01:51:23] THE TYPES OF TECHNOLOGIES THAT WERE
[01:51:25] EXPLORED IN THE WSU STUDY. AND SO THANKS
[01:51:28] TO COMMISSIONER FELLEMAN'S PARTNERSHIP
[01:51:30] DEVELOPMENT WITH THE KING COUNTY
[01:51:31] COUNCIL, WE HAVE AGREED TO COFUND AND
[01:51:34] WORK COLLABORATIVELY TO EVALUATE THE
[01:51:36] OPPORTUNITY TO CONVERT THE REGION'S
[01:51:39] WASTE TO LIQUID FUELS. AND WE EXPECT WE
[01:51:41] MAY BRING OTHER PARTNERS IN, LIKE THE
[01:51:43] CITY OF SEATTLE, INTO THAT FEASIBILITY
[01:51:45] STUDY BECAUSE OF THE LARGE AMOUNTS OF
[01:51:47] WASTE THAT THEY PRODUCE IN THAT
[01:51:48] JURISDICTION. AND WHILE, THE SCOPE OF
[01:51:51] THE STUDY IS STILL IN DEVELOPMENT WITH
[01:51:53] OUR KING COUNTY PARTNERS. I WANTED TO
[01:51:55] GIVE THE COMMISSIONERS A BETTER SENSE OF
[01:51:57] THE TYPES OF THINGS WE EXPECT TO COVER
[01:51:59] IN THE STUDY AND WHAT KINDS OF QUESTIONS
[01:52:01] WE HOPE TO ANSWER. THIS IS REALLY MEANT
[01:52:04] TO BE BOTH A TECHNICAL AND AN ECONOMIC
[01:52:06] AND A FEASIBILITY STUDY THAT COVERS A
[01:52:10] LOT OF THE ASPECTS. SO WE WANT TO
[01:52:11] UNDERSTAND HOW WE MAINTAIN OR TWEAK THE
[01:52:15] ECONOMICS OF WASTE COLLECTION AND
[01:52:17] DISPOSAL TO INCENTIVIZE FUEL PRODUCTION
[01:52:19] AS AN END USE FOR THAT. WE ALSO ARE VERY
[01:52:22] AWARE WE KNOW WHAT HAPPENED IN THE IN
[01:52:25] THE RECYCLING INDUSTRY THAT KIND OF
[01:52:27] UPENDED THINGS COMPLETELY FOR THE
[01:52:30] COUNTRY. AND SO WE REALLY WANT TO
[01:52:31] UNDERSTAND WHICH SPECIFIC WASTE STREAMS
[01:52:33] CAN BE USED FOR DIFFERENT FUEL
[01:52:35] CONVERSION TECHNOLOGIES. AND WHAT IS THE
[01:52:38] FORECAST FOR THOSE TYPES OF WASTE
[01:52:40] STREAMS IN THE FUTURE? AND IMPORTANTLY,
[01:52:43] HOW DO YOU AVOID PERVERSE INCENTIVES TO
[01:52:46] CREATE MORE WASTE? BECAUSE WE HAVE VERY
[01:52:48] IMPORTANT GOALS FOR WASTE REDUCTION.
[01:52:50] AND SO WE WANT TO UNDERSTAND THAT
[01:52:53] BETTER. AND WE NOW HAVE SEEN ON THE
[01:52:55] HORIZON OTHER TECHNOLOGIES TO CONVERT
[01:52:57] EVEN WET ORGANICS TO LIQUID FUELS. AND
[01:53:00] THAT'S A REALLY EXCITING THING BECAUSE
[01:53:02] THERE'LL BE NO SHORTAGE OF YARD WASTE IN

[01:53:06] SEATTLE FUTURE FOR THE LONG RUN.
[01:53:09] SO WE ALSO JUST WANT TO MAKE SURE THAT
[01:53:12] WE UNDERSTAND WHAT OTHER ISSUES MIGHT
[01:53:14] ARISE WITH COMPETING INTERESTS FOR WASTE
[01:53:17] RECYCLING AND COMPOSTING, BECAUSE WE'VE
[01:53:20] ALSO SEEN THE RISKS OF BEING A PRIMARY
[01:53:22] EXAMPLE THAT IT IS NOW SO COMPETITIVE TO
[01:53:24] USE WASTE COOKING OIL THAT THOSE PRICES
[01:53:28] HAVE REALLY RISEN. SO YOU HAVE TO REALLY
[01:53:30] UNDERSTAND THE LANDSCAPE BEFORE SAYING,
[01:53:31] OKAY, IT MAKES SENSE TO INVEST IN THAT
[01:53:33] IN THIS REGION. SO THE STUDY WILL KICK
[01:53:35] OFF THIS YEAR, AND WE EXPECTED TO BE
[01:53:38] CONCLUDED IN THE FIRST HALF OF 2022.
[01:53:40] AND IN FACT, THE PROVISION FROM KING
[01:53:42] COUNTY REQUIRES IT TO BE DONE BY JUNE
[01:53:44] 2022. BUT WE HOPE TO HAVE THAT DONE
[01:53:46] BEFORE THEN. AND WITH THAT, I'D BE HAPPY
[01:53:48] TO TAKE ANY QUESTIONS FROM
[01:53:50] COMMISSIONERS. WELL, THANKS AGAIN,
[01:53:52] STEPHANIE. AND IT SHOULD BE OBVIOUS TO
[01:53:54] ALL IN ATTENDANCE HOW VERY LUCKY WE ARE
[01:53:56] TO HAVE YOU AT THE PORT. THEN AGAIN, WE
[01:53:59] DO HAVE YOU AT THE PORT. SO I'M GOING TO
[01:54:02] NOW TURN TO DIRECTOR OF GOVERNMENTAL
[01:54:05] AFFAIRS FOR EXTERNAL RELATIONS NATE
[01:54:07] CCAMINOS, WHO CAN GIVE US A BRIEF UPDATE
[01:54:09] ON WHAT THE STATE LEGISLATION, HOW WE
[01:54:13] MOVE FORWARD FROM THE SUCCESS OF THAT
[01:54:17] REALLY MONUMENTAL SESSION. AND WE'RE
[01:54:20] GOING TO RUN 5, 10 MINUTES LATE,
[01:54:22] HOPEFULLY, THAT YOU FOLKS CAN HANG IN
[01:54:24] THERE WITH US. BUT I THOUGHT IT'S REALLY
[01:54:26] IMPORTANT THAT WE SEE HOW THERE'S
[01:54:29] STILL A PROCESS IN FRONT OF US BEFORE WE
[01:54:32] CAN REALLY CLAIM TO A LOW CARBON FUEL
[01:54:35] STANDARD. TAKE IT AWAY NATE. THANK YOU,
[01:54:38] COMMISSIONER FELEMAN, AND GOOD MORNING,
[01:54:39] COMMISSIONERS. MY NAME IS NATE CAMINOS
[01:54:41] AND I'M THE DIRECTOR OF GOVERNMENT
[01:54:42] RELATIONS HERE AT THE PORT OF SEATTLE.
[01:54:44] ALSO JOINING ME AS DENNIS MCCLARE IN OUR
[01:54:46] ENVIRONMENTAL POLICY CONSULTANT,
[01:54:48] BUILDING OFF THE WORK WE'RE DOING
[01:54:50] LOCALLY WITH KING COUNTY, I'M MUNICIPAL
[01:54:52] SOLID WASTE THAT STEPHANIE JUST SPOKE
[01:54:54] TO. WE'RE HERE TODAY TO GIVE YOU A RECAP
[01:54:56] ON THE LOW CARBON FUEL STANDARD BILL
[01:54:58] THAT JUST PASSED OLYMPIA THIS WEEKEND.
[01:55:00] AND A BRIEF OVERVIEW OF OUR EFFORTS ON
[01:55:02] THE FEDERAL LEVEL IN WASHINGTON, DC.
[01:55:04] JUST TWO DAYS AGO, ON FINAL DAY OF
[01:55:06] SESSION THIS PAST SUNDAY, THE STATE
[01:55:07] HOUSE AND SENATE AGREED TO THE
[01:55:09] CONFERENCE REPORT ON REPRESENTATIVE AT
[01:55:12] KEVIN'S LOW CARBON FUEL STANDARD HOUSE
[01:55:13] BILL 1091. THIS WAS THE FIFTH SESSION
[01:55:16] THAT REPRESENTED FITZGIBBON HAD
[01:55:18] ATTEMPTED TO MOVE THE BILL, WHICH WAS
[01:55:20] ALSO A SIGNATURE PRIORITY FOR GOVERNOR
[01:55:22] INSLEE AND THE HOUSE AND SENATE
[01:55:24] DEMOCRATIC CAUCUSES. THE PORT ADOPTED
[01:55:26] THIS AS OUR TOP LEGISLATIVE PRIORITIES

[01:55:28] SINCE 2018 LEGISLATIVE SESSION,
[01:55:31] BASED PRIMARILY ON THE ADVICE FROM OUR
[01:55:33] ENVIRONMENTAL TEAM THAT WAS SEEKING TO
[01:55:35] IMPLEMENT THE COMMISSION'S VISION ON
[01:55:37] SUSTAINABLE AVIATION FUELS, THE POLICY
[01:55:40] PUT IN PLACE BY HOUSE BILL 1091 IS
[01:55:42] RELATIVELY SIMPLE. IT REQUIRES PRODUCERS
[01:55:44] OF TRANSPORTATION FUELS TO MEET A CARBON
[01:55:47] INTENSITY THRESHOLD SET BY THE
[01:55:49] DEPARTMENT OF ECOLOGY. PRODUCERS WHO
[01:55:51] DON'T MEET THAT THRESHOLD GENERATE
[01:55:53] OBLIGATIONS, AND PRODUCERS THAT BLEND IN
[01:55:56] BIOFUELS TO REDUCE THE CARBON INTENSITY
[01:55:59] BELOW THE THRESHOLD GENERATE CREDITS.
[01:56:01] THOSE HAVE VALUE ON THE OPEN MARKET,
[01:56:03] SINCE PRODUCERS THAT GENERATE
[01:56:05] OBLIGATIONS WILL NEED TO PURCHASE THEM
[01:56:07] TO COMPLY WITH THE PROGRAM. FOR US AT
[01:56:10] THE PORT, THE BILL WILL HAVE A
[01:56:11] SIGNIFICANT IMPACT ON OUR WORK TO REDUCE
[01:56:13] THE EMISSIONS FROM OUR OPERATIONS. IT
[01:56:16] WILL MEAN MORE BIOFUELS IN THE MARKET IN
[01:56:18] WASHINGTON, AND IT WILL DRIVE THEM TO
[01:56:20] PRICE PARITY WITH CONVENTIONAL FOSSIL
[01:56:22] FUELS. AND IT WILL MEAN THAT BIOFUELS
[01:56:25] FACILITIES CURRENTLY PRODUCING THESE
[01:56:27] FUELS IN OUR STATE, LIKE RENEWABLE
[01:56:29] ENERGY GROUP IN HOQUIAM WILL SELL
[01:56:31] THEIR PRODUCTS TO WASHINGTON CONSUMERS
[01:56:33] RATHER THAN SHIPPING THEM TO CALIFORNIA.
[01:56:35] SOME OF OUR AIRLINE PARTNERS HERE TODAY
[01:56:38] HAVE BEEN SIGNALLED, AND IT HAD EVEN
[01:56:40] SIGNALLED IT COULD DRIVE THEM PURSUE
[01:56:42] SUSTAINABLE AVIATION FUELS, INCLUDING
[01:56:44] DELTA AND THE ADVANCED BIOFUELS,
[01:56:46] ANNOUNCING A 16,000,000 GALLON OFFTAKE
[01:56:48] AGREEMENT IN THE MIDDLE OF THE LATEST OF
[01:56:51] SESSION. THAT ANNOUNCEMENT AND AIRLINE
[01:56:53] INTEREST IN SUSTAINABLE AVIATION FUELS
[01:56:55] GENERALLY WAS BIG IN MAKING THE CASE TO
[01:56:58] THE LEGISLATURE THAT A CLEAN FUEL
[01:57:00] STANDARD WILL CREATE JOBS FROM
[01:57:01] WASHINGTON IN THE NEAR TERM. SO THE
[01:57:04] PASSAGE OF LCFS WAS A HISTORIC STEP FROM
[01:57:06] WASHINGTON STATE, BUT WE AREN'T QUITE
[01:57:08] THERE YET. INCLUDING IN THE LEGISLATION
[01:57:10] WAS LANGUAGE THAT TIES IT TO ADVANCEMENT
[01:57:12] OF A TRANSPORTATION PACKAGE.
[01:57:14] SPECIFICALLY, IT REQUIRES A LEGISLATURE
[01:57:17] TO PASS A FIVE CENT GAS TAX IN ORDER FOR
[01:57:20] THE DEPARTMENT OF ECOLOGY TO BEGIN
[01:57:22] ISSUING COMPLIANCE OBLIGATIONS UNDER THE
[01:57:24] PROGRAM. FUNCTIONALLY, HOWEVER, THE
[01:57:26] DEPARTMENT OF ECOLOGY CAN BEGIN
[01:57:28] RULEMAKING AND THE BASSANT BEHIND THE
[01:57:30] SCENES WORK THAT IS REQUIRED TO GET THE
[01:57:32] PROGRAM PLACE. THERE ARE THREE MAIN
[01:57:36] TAKEAWAYS FROM OTHER AMENDMENTS MADE TO
[01:57:38] THE BILL AS IT WORKED ITS WAY TO THE
[01:57:39] FINAL CONFERENCE AGREEMENT, THE FIRST
[01:57:42] WHILE REPRESENTATIVE THAT'S GIVEN'S
[01:57:43] PREVIOUS BILL PHASE THE PROGRAM BY
[01:57:45] DIRECTING ECOLOGY TO REQUIRE A 10%

[01:57:48] CARBON INTENSITY REDUCTION BY 2028 AND
[01:57:51] A 20% REDUCTION BY 2035. THE CONFERENCE
[01:57:54] AGREEMENT INSTEAD CAUSE FOR 10% BY 2030
[01:57:58] AND 20% BY 2038. IN ADDITION, FOR
[01:58:01] ECOLOGY TO GO BEYOND A 10% THRESHOLD NOW
[01:58:04] IN 2031 2033, THE JOINT LEGISLATIVE
[01:58:07] AUDIT REVIEW COMMITTEE MUST CONDUCT A
[01:58:09] REVIEW OF THE PROGRAM IMPACTS AND
[01:58:11] FORWARD THAT TO THE LEGISLATURE FOR
[01:58:14] FURTHERMORE, THE 10% THRESHOLD COULD NOT
[01:58:16] BE INCREASED UNTIL AFTER THE 2033
[01:58:19] LEGISLATIVE SESSION. LASTLY, IN ADDITION
[01:58:22] TO THE REQUIREMENT FOR A LEGISLATIVE
[01:58:23] REVIEW WHEN THE CARBON INTENSITY REACHES
[01:58:25] 10% TO GO ABOVE THE REDUCTION AMOUNT,
[01:58:27] THE STATE MUST HAVE DEMONSTRATED A 10%
[01:58:30] INCREASE IN THE BIOFUEL PRODUCTION
[01:58:32] CAPACITY OF THE STATE AND IN THIS USE IN
[01:58:35] THE INSTATE AGRICULTURAL FEEDSTOCKS.
[01:58:37] FURTHER, TO GO BEYOND THE 10%, THERE
[01:58:39] WOULD HAVE TO BE AT LEAST ONE 10,000,000
[01:58:41] GALLON CAPACITY BIOFUEL FACILITY CITED,
[01:58:44] AND THE STATE WOULD NEED TO DEMONSTRATE
[01:58:46] AN ADDITIONAL 60,000,000 GALLON CAPACITY
[01:58:48] FOR BIOFUEL PRODUCTION AS WELL. THAT
[01:58:52] MEANS, AS ALWAYS, THERE IS MORE WORK TO
[01:58:54] BE DONE, BUT HAVING THE PROGRAM IN PLACE
[01:58:56] AND ECOLOGY BEGINS ITS WORK IS CRITICAL
[01:58:59] TO ENSURING WE HAVE THE FOUNDATION ON
[01:59:01] WHICH WE CAN BUILD BEFORE I MOVE ON ON
[01:59:03] THE FEDERAL UPDATE. WE'VE HAD SO MANY
[01:59:04] KUDOS TO SHARE EARLIER IN THE STUDY
[01:59:06] SESSION, BUT I DO WANT TO GIVE A CREDIT
[01:59:07] TO ERIC FISH, OR STATE GOVERNMENT
[01:59:09] RELATIONS MANAGER WHO SPEARHEADED
[01:59:11] THIS EFFORT FOR US THESE PAST FIVE
[01:59:13] YEARS. TO GET US HERE, ERIC WILL COME
[01:59:15] BACK TO PRESENT A FULL RECAP OF THE PORT
[01:59:17] PRIORITIES COMING OUT OF THE 2021
[01:59:20] LEGISLATIVE SESSION AT THE MAY 25 TH
[01:59:22] COMMISSION MEETING NEXT MONTH.
[01:59:23] COMMISSIONERS CHO AND CALKINS BOTH HAD
[01:59:26] QUESTIONS ON OUR FEDERAL EFFORTS HERE,
[01:59:27] AND CRAIG MYERS FROM ALASKA, TOM
[01:59:29] MICHAELS FROM UNITED REFERENCES BRIEFLY,
[01:59:31] BUT AT THE FEDERAL LEVEL, THE PORT IS
[01:59:33] PART OF A DIVERSE COALITION OF AIRLINES,
[01:59:35] AIRPORTS, PRODUCERS, REFINERS AND LARGE
[01:59:38] EMPLOYERS LIKE AMAZON AND SUPPORT A TWO
[01:59:41] DOLLAR PER GALLON SUSTAINABLE AVIATION
[01:59:44] FUELS BLENDEES TAX CREDIT. THERE IS
[01:59:46] BROAD AGREEMENT THAT THIS IS AN
[01:59:47] ACHIEVABLE IMPACTFUL POLICY CHANGE THAT
[01:59:50] WOULD SIGNIFICANTLY HELP SPEED THEN
[01:59:51] BROADER IMPLEMENTATION AND UPTAKE OF
[01:59:54] SUSTAINABLE AVIATION FUELS BY AIRLINES.
[01:59:56] WE ARE WORKING WITH THE COALITION ON TWO
[01:59:59] FRONTS, BOTH TO SUPPORT THE INTRODUCTION
[02:00:01] OF A STANDALONE BILL, WHICH WE EXPECT
[02:00:03] SHORTLY, AND TO SUPPORT THE BLENDEES TAX
[02:00:06] CREDITS INCLUSION IN PRESIDENT BIDEN'S
[02:00:08] AMERICAN JOBS PLAN. ALTHOUGH IT WASN'T
[02:00:11] CALLED OUT IN THE PRESIDENT SUMMARY

[02:00:13] DOCUMENT, A RECENT US TREASURY ANALYSIS
[02:00:15] OF THE AMERICAN JOBS PLAN INDICATED THAT
[02:00:17] THE BLENDED TAX CREDITS ARE PART OF THE
[02:00:19] PROPOSAL LED BY OUR SENIOR MANAGER OF
[02:00:21] FEDERAL AND INTERNATIONAL GOVERNMENT
[02:00:23] RELATIONS, ERIC SEINFELD. WE THE PORT
[02:00:25] OF SEATTLE, ALASKA AIRLINES, AMAZON AND
[02:00:28] WASHINGTON STATE UNIVERSITY, ARE JOINTLY
[02:00:30] MEETING WITH KEY MEMBERS OF OUR
[02:00:31] CONGRESSIONAL DELEGATION TO ADVOCATE FOR
[02:00:34] THIS POLICY. THAT CONCLUDES MY UPDATE
[02:00:36] THIS TIME, AND WE THANK YOU WELL,
[02:00:39] THANK YOU SO MUCH, NATE, FOR THAT QUICK
[02:00:41] UPDATE AND IS CLEARLY WORK FOR US TO DO
[02:00:45] AHEAD. I FAIL TO MENTION THAT WE OWE A
[02:00:47] DEBT OF GRATITUDE ALSO TO KING COUNTY
[02:00:49] COUNCIL MEMBERS GENIE COLE WELLS AND MRS
[02:00:52] BOWSKI, WHO OUR PARTNERS IN LEADERSHIP
[02:00:55] ON THIS MS STUDY. THE ENTIRE COMMISSION
[02:00:58] IS VERY EXCITED ABOUT IT, BUT THE ENERGY
[02:01:00] AND SUSTAINABILITY COMMITTEE, LED BY
[02:01:02] COMMISSIONER BOWMAN AND STEINBREUCK,
[02:01:04] WHO HAD TO JUST LEAVE, ARE GOING TO BE
[02:01:06] FOLLOWING THIS IN THEIR STATUS ON AS
[02:01:09] COMMITTEE CO-CHAIRS. LET'S GO THROUGH
[02:01:12] THE THE ROLL HERE, AND WE STILL JUST
[02:01:16] HAVE SOME CONCLUDING COMMENTS FROM OUR
[02:01:17] EXECUTIVE. SO CLERK HART, PLEASE CALL
[02:01:22] THE ROLL. YES. BEGINNING WITH
[02:01:23] COMMISSIONER BOWMAN, NO QUESTIONS. I
[02:01:26] TO NATE. AND TO THE TEAM, THANK YOU SO
[02:01:29] MUCH FOR ALL OF THE WORK THAT YOU'VE
[02:01:30] DONE. ERIC FITCH, I HOPE HE'S ON
[02:01:33] VACATION TODAY, GIVEN THE LONG HOURS
[02:01:36] THAT HE'S BEEN ON SESSION. GOOD. BUT
[02:01:39] MAYBE HE'LL WATCH US LATER AND KNOW HOW
[02:01:41] GRATEFUL WE ARE FOR ALL THEIR WORK. AND
[02:01:43] ACTUALLY, I WANT TO AS WELL. CAN I CALL
[02:01:44] OUT COMMISSIONER? FELLEMAN, THANK YOU
[02:01:46] FOR YOUR LEADERSHIP. THE MSW STUDY. YOU
[02:01:48] BROUGHT THIS UP A COUPLE OF YEARS AGO.
[02:01:50] YOU CANDIDLY KIND OF SPRUNG IT ON US,
[02:01:53] AND IT WAS BRILLIANT THINKING AS USUAL.
[02:01:55] AND SO I REALLY APPRECIATE YOU PUSHING
[02:01:57] THIS FORWARD IN GREAT PARTNERSHIP WITH
[02:01:59] KING COUNTY OR JUST REALLY EXCITED TO
[02:02:01] MOVE FORWARD ON THIS AT THE END OF THE
[02:02:02] DAY. MY NUMBER ONE GOAL IS PRODUCTION IN
[02:02:04] WASHINGTON STATE FOR ALL OF THIS. IT'S A
[02:02:07] GREAT OPPORTUNITY FOR NEW INDUSTRIES AND
[02:02:09] NEW JOBS, AND THAT'S WHERE WE NEED TO
[02:02:11] GO. SO WHETHER IT'S MUNICIPAL SOLID
[02:02:13] WASTE OR KELP, SAF, LET'S GET IT DONE.
[02:02:16] SO THANK YOU TO NATE AND THE REST OF THE
[02:02:18] TEAM. THANK YOU. COMMISSIONER BOWMAN.
[02:02:21] MOVING TO COMMISSIONER CALKINS, I WANT
[02:02:25] TO ACKNOWLEDGE ONE AREA THAT, AS FRED
[02:02:27] AND I HAVE BEEN WORKING ON THIS
[02:02:28] QUESTION, WHEN WE WERE SERVING ON THE
[02:02:30] ENERGY AND SUSTAINABILITY COMMITTEE, WE
[02:02:33] DID GET VERY THOUGHTFUL PEOPLE FROM THE
[02:02:36] ZERO WASTE MOVEMENT, CAUTIONING US THAT
[02:02:39] WE DON'T WANT TO CREATE A NEW INCENTIVE

[02:02:40] FOR PRODUCING ADDITIONAL MUNICIPAL SOLID
[02:02:43] WASTE. BUT I THINK WE'VE DONE PRETTY
[02:02:45] GOOD DUE DILIGENCE TO DETERMINE THAT
[02:02:47] BOTH THE FUTURE EXPECTED FLOWS, THE
[02:02:50] MUNICIPAL SOLID WASTE, THE EXISTING
[02:02:51] AMOUNTS OF MUNICIPAL SOLID WASTE ARE
[02:02:53] SUCH THAT EVEN A SIGNIFICANT
[02:02:58] REDUCTION IN MUNICIPAL SOLID WASTE OVER
[02:03:00] TIME PER CAPITA IN A GROWING REGION
[02:03:03] WOULD LIKELY MEAN WE STILL HAVE A BIG
[02:03:05] PROBLEM AND WHAT WE'RE GOING TO DO WITH
[02:03:07] ALL THAT GARBAGE. SO I THINK THIS IS A
[02:03:09] VERY CREATIVE RESPONSE THAT CAN
[02:03:12] ESSENTIALLY SERVE TWO PURPOSES
[02:03:16] IN ONE MECHANISM. SO I'M REALLY EXCITED
[02:03:19] FOR THIS STUDY, AND I'M GLAD THAT WE'RE
[02:03:21] BRINGING IT FORWARD.
[02:03:24] THANK YOU, COMMISSIONER CALKINS.
[02:03:26] COMMISSIONER CHO, YEAH. I DON'T HAVE ANY
[02:03:29] QUESTIONS. I JUST WANTED TO TAKE A
[02:03:31] SECOND TO REALLY COMMEND THE WORK OF ALL
[02:03:33] OUR RELATIONS TEAM. THIS IS NOT AN EASY
[02:03:36] LIFT. ALL THAT WE ACCOMPLISHED IN
[02:03:38] OLYMPIA, THIS SESSION HAPPENED IN THE
[02:03:40] MIDST OF A REMOTE SESSION WHERE WE
[02:03:43] DIDN'T GET ANY REAL FACE TIME WITH
[02:03:45] LEGISLATORS IN PERSON. SO I REALLY WANT
[02:03:48] TO COMMEND YOUR TEAM NATE, ERIC FITCH
[02:03:50] AND EVERYONE ELSE WHO WORKED REALLY HARD
[02:03:53] TO MAKE ALL THIS REALITY. SO KUDOS TO
[02:03:55] YOU ALL AND I LOOK FORWARD TO NEXT
[02:03:58] SESSION. WORK NEVER STOPS.
[02:04:02] THANK YOU, COMMISSIONER CHO COMMISSIONER
[02:04:05] STEINBRUECK HAS LEFT THE MEETING.
[02:04:06] COMMISSIONER FELLEMAN, WELL, THANKS
[02:04:09] AGAIN. AND WE'D LOVE TO LOOK AT THAT
[02:04:11] CO-BENEFIT ANALYSIS, MAKE SURE THAT WE
[02:04:13] LOOK AT THE BENEFITS IN THE FORESTRY
[02:04:15] REGION AS WELL AS DIVERTING WASTE FROM
[02:04:18] THE LANDFILL. I HOPE WE CAN LOOK AT
[02:04:20] DIFFERENT CREDITS FROM THAT. BUT THIS
[02:04:22] CONCLUDES OUR PRESENTATION OF THE SAF
[02:04:24] STUDY SESSION, AND THERE'S OBVIOUSLY
[02:04:26] MUCH MORE WE CAN DISCUSS. AND I LOOK
[02:04:29] FORWARD TO CONTINUING THIS CONVERSATION
[02:04:31] TO REDUCE OUR IMPACT ON THE CLIMATE AND
[02:04:33] AIRPORT COMMUNITIES IN THE NEAR FUTURE.
[02:04:35] MANY THANKS AGAIN TO THE STAFF FOR
[02:04:37] PUTTING THE SESSION TOGETHER INTO OUR
[02:04:39] FANTASTIC PRESENTERS FOR JOINING US
[02:04:40] TODAY AND UPDATING US ON THE STATUS OF
[02:04:42] SUSTAINABLE AVIATION FUELS. THE PORT IS
[02:04:45] COMMITTED TO ATTACKING THE HARDEST
[02:04:47] CHALLENGES ASSOCIATED WITH GREENHOUSE
[02:04:48] GAS REDUCTION IN HEAVY ENGINES OF
[02:04:50] AIRPLANES AND TRUCKS. THESE FUELS ARE
[02:04:53] THE WAY TO MAKE THE FASTEST IMPROVEMENT
[02:04:55] ON THAT. AND SO I'D LIKE TO IN CLOSING
[02:04:58] TODAY, GIVES AN EXECUTIVE SESSION SOME
[02:05:00] OPPORTUNITY FOR PROVIDING SOME FINAL
[02:05:03] REMARKS.
[02:05:05] THANKS, PRESIDENT FELLEMAN.
[02:05:07] COMMISSIONERS, THANK YOU FOR SETTING

[02:05:09] ASIDE TIME TODAY FOR THIS TIMELY AND
[02:05:11] IMPORTANT SUBJECT. I WANT TO THANK ALL
[02:05:13] THE FANTASTIC PRESENTERS TODAY,
[02:05:15] ESPECIALLY STEPHANIE MEYN. THE PORT STAFF HAS
[02:05:16] PROVIDED INVALUABLE TECHNICAL AND
[02:05:18] STRATEGIC ADVICE TO US AS WE MOVE
[02:05:20] FORWARD MORE THAN EVER BEFORE. WE HAVE
[02:05:23] REASON TO BE FOR OPTIMISM ABOUT THE
[02:05:24] DEVELOPMENT OF SUSTAINABLE AVIATION
[02:05:27] FUELS. WE'VE HEARD FROM THE INDUSTRY
[02:05:28] LEADERS ABOUT THEIR GOALS FOR PURCHASING
[02:05:30] MORE SAF IN THE FUTURE AND THE POTENTIAL
[02:05:32] FOR CORPORATE PARTNERSHIPS TO INCREASE
[02:05:34] DEMAND FOR SAF PRODUCTION, AS WELL AS
[02:05:37] THE CHALLENGES AHEAD OF US. OF COURSE,
[02:05:39] THIS PAST WEEKEND ACTION BY WASHINGTON
[02:05:41] LEGISLATURE TO PASS THE LOW CARBON FUEL
[02:05:43] STANDARD WAS A CRITICAL STEP TO PUTTING
[02:05:46] IN PLACE THE INCENTIVES NEEDED TO
[02:05:47] SUPPORT SAF PRODUCTION HERE IN
[02:05:49] WASHINGTON, WHICH IS A KEY OBJECTIVE.
[02:05:51] AND WE DEEPLY APPRECIATE THE
[02:05:53] COMMISSION'S LEADERSHIP ON THIS
[02:05:55] IMPORTANT LEGISLATION, BUT IMPORTANT
[02:05:57] LEADERSHIP ON THIS ENTIRE TOPIC. I'M
[02:05:59] ALSO ENCOURAGED BY THE LEADERSHIP OF THE
[02:06:01] BIDEN ADMINISTRATION TO COMBAT CLIMATE
[02:06:03] CHANGE AND TO ACHIEVE A FUTURE WHERE WE
[02:06:06] NO LONGER ARE DEPENDENT ON FOSSIL FUELS.
[02:06:08] AND OF COURSE, AS WE'VE HEARD, WE CAN
[02:06:10] STEP UP OUR EFFORTS AT THE FEDERAL LEVEL
[02:06:12] TO SUPPORT THOSE ACTIONS. WE CAN ALL BE
[02:06:14] PROUD OF THE PORT OF SEATTLE LEADERSHIP
[02:06:16] ON REDUCING HARMFUL EMISSIONS,
[02:06:17] PROTECTING THE ENVIRONMENT, AND CREATING
[02:06:19] CLEAN ENERGY JOBS IN OUR REGION. OF
[02:06:22] COURSE, WE ALSO HAVE HEARD THERE'S A LOT
[02:06:24] OF WORK AHEAD OF US, AND WE LOOK FORWARD
[02:06:26] TO WORKING WITH YOU AND ALL THE
[02:06:28] STAKEHOLDERS ON ADVANCING THIS IMPORTANT
[02:06:30] WORK. SO, COMMISSIONERS, THANK YOU VERY
[02:06:32] MUCH FOR YOUR LEADERSHIP ON THIS
[02:06:33] IMPORTANT ISSUE. AND I WOULD
[02:06:37] LIKE TO CONCUR WITH EXECUTIVE METRICS
[02:06:40] COMMENTS AND REALIZE THE REASON WHY OUR
[02:06:42] STAFF HAVE THE ABILITY TO DO THIS IS
[02:06:45] BECAUSE HE'S GIVING THEM THE LEADERSHIP
[02:06:47] TO ALLOW THEM TO PURSUE THESE THINGS
[02:06:49] FULL THROATED LY AND SO, KNOWING THAT WE
[02:06:52] HAVE AN EXECUTIVE SESSION STARTING IN 25
[02:06:55] OR IN 20 MINUTES, FOLLOWED BY A FULL DAY
[02:06:57] OF COMMISSION MEETING, I WOULD ASSUME
[02:06:59] THAT MY COLLEAGUES WOULD LIKE TO TAKE A
[02:07:02] MOMENT BREAK. BUT IF THERE ARE ANY
[02:07:04] CONCLUDING COMMENTS I WILL BE HAPPY TO
[02:07:06] ENTERTAIN THEM BRIEFLY A CARD,
[02:07:11] PLEASE. AND CHECK IF THAT'S THE CASE.
[02:07:14] CERTAINLY. I DON'T SEE ANY HANDS RAISED.
[02:07:16] COMMISSIONER BOOM AND CLOSING COMMENTS.
[02:07:19] NO, THANK YOU. THANK YOU. TO MR.
[02:07:21] CALKINS. NO, THANK YOU, MISTER TO
[02:07:27] POSITION OF ELEMENTS. I THINK IT'S BACK
[02:07:29] TO YOU, OKAY. HAVING NO FURTHER

[02:07:31] BUSINESS. THE TIME IS CURRENTLY 11:08.
[02:07:35] THANK YOU, EVERYONE. AND WE ARE NOW
[02:07:37] ADJOURNED. WELL DONE. THANK YOU. WELL
[02:07:41] DONE. THANK YOU.

END OF TRANSCRIPT