

1 ALASKA PERMANENT FUND CORPORATION
2 QUARTERLY MEETING OF THE BOARD OF TRUSTEES

3 Held at:

4 Michael J. Burns Building
5 David Rose Board Room (3rd Floor)
6 801 West 10th Street
7 Juneau, Alaska 99801

8 December 7, 2022

9 8:30 a.m.

10 Trustees Present:

11 Ethan Schutt (virtual) Steve Rieger, Chair
12 Craig Richards Gabrielle Rubenstein
13 Jason Brune Adam Crum

14 APFC Staff Present:

15 Deven Mitchell Marcus Frampton
16 Val Mertz Chad Brown
17 Sebastian Vadakumcherry Chris Poag
18 Paulyn Swanson Jennifer Loesch
19 Jim Parise Logan Rahn
20 Steve Adams Tim Andreyka
21 Shawn Calhoon Scott Balovich
22 Rachel Zepp Jacki Mallinger
23 James Wilkey Tom O'Day
24 Sang Won Song Maria Skuratovskaya
25 Valeria Buschfort Nellie Metcalfe
Cody Graves Larissa Murray
Christopher Cummins Rachel Price
Matthew Olmsted Julia Mesdag
Lacey Sanders Jordyn Ellie
Fawad Razaque Joe Shinn
Sarah Clark Adam Kane
Ross Alexander Lara Pollock
Catherine Hatch Norix Mangual
Chirag Shah Allen Waldrop
Rafa Ramirez Lacey Sanders
Brittney Ortega

Investment Advisors:

John Skjervem Ken Frier (virtual)

Callan:

Greg Allen Steve Center

Presenters:

Jack Howell, Stonepeak Partners

1 Presenters (continued):
Brenden Woods, Stonepeak Partners
2 Charles Bauer, EnCap
Morriss Hurt, EnCap
3 Tim Reborn, EnCap

4

Also Present:

5 Vince O'Shea	James Brooks
James Simard	Elaine Schroeder
6 John Hudson	Richard Farnell
Seanna O'Sullivan	Charla Brown
7 Joe Ebisa	Cecilia Galliani
Suzanne Cunningham	James Brookes
8 Matthew Benson	Michael Bloom
John Springsteen	Jessica Walton
9 Steve Moseley	Conor Bell
John Mancuso	Brian Fechter
10 Lauren Albanese	Ben Hofmeister
Gregg Gethard	Kenisha Paliwal
11 Sterling Gallagher	Deborah Brollini
Lyndsey Brollini	

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1 PROCEEDINGS

2 CHAIR SCHUTT: Good morning,
3 everyone. It is 8:30, and we'll go ahead and call
4 the meeting to order.

5 If we could do the roll call, Jennifer,
6 please.

7 MS. LOESCH: Trustee Richards?

8 MR. RICHARDS: Present.

9 MS. LOESCH: Trustee Rieger?

10 MR. RIEGER: Here.

11 MS. LOESCH: Trustee Rubenstein?

12 MS. RUBENSTEIN: Present.

13 MS. LOESCH: Trustee Crum?

14 MR. CRUM: Here.

15 MS. LOESCH: Trustee Brune?

16 MR. BRUNE: Here.

17 MS. LOESCH: Chair Schutt?

18 CHAIR SCHUTT: Here.

19 MS. LOESCH: You have a quorum.

20 MR. SCHUTT: All right.

21 Thank you, all.

22 Due to work commitments here, I can't be
23 there in person until tomorrow. And because it's
24 awkward to chair a meeting from afar when everyone
25 else is there in the room, I've asked Vice Chair

1 Rieger if he could go ahead and -- and chair the
2 balance of the meeting for today.

3 So, I'll turn that over to Vice Chair
4 Rieger, and I will be here online.

5 CHAIR RIEGER: Okay. Thank you,
6 Chair Schutt.

7 So, first item of business is the approval
8 of the agenda for the Wednesday, December 7th, and
9 Thursday, December 8th, quarterly meeting of the
10 board of trustees.

11 Is there any objection to the agenda as
12 presented?

13 If there's no objection, the agenda's
14 approved.

15 Next item is the approval of the minutes
16 of the budget work session of September 1st, 2022;
17 the annual meetings, September 21st and 22nd of
18 2022; and the special meeting on October 3rd,
19 2022.

20 Is there a motion to approve the minutes?

21 MS. RUBENSTEIN: Motion.

22 CHAIR RIEGER: Is there a second?

23 MR. BRUNE: Second.

24 CHAIR RIEGER: It's been moved and
25 seconded.

1 Is there any objection to the minutes as
2 presented?

3 Hearing none, I'll consider the minutes of
4 those three meetings approved.

5 That brings us to scheduled appearances
6 and public participation.

7 I believe there are at least four people
8 who have signed up to give public testimony. I
9 would ask the members of the public and the
10 presenters to please limit their comments to three
11 minutes.

12 And I believe the first person on my list
13 is Elaine Schroeder.

14 MS. SCHROEDER: Would you like me
15 just to stand?

16 CHAIR RIEGER: Sure.

17 Could you please come up to the table
18 since you're here in person?

19 MS. SCHROEDER: Thank you.

20 Thank you for providing the time for
21 public testimony. And I'm so glad to be here in
22 person and to see you all.

23 My name is Elaine Schroeder, and I've
24 lived in Juneau for 40 years.

25 I wish to address the president -- the

1 presentation given on September 22nd at a previous
2 meeting by your advisor, Mr. Skjervem -- who I
3 understand is in the room.

4 Hi, there.

5 And he -- he presented on November 14th
6 [sic].

7 And the board of 350Juneau, on
8 November 14th -- he presented in September, but on
9 November 14th, we submitted a response to his
10 presentation to all the trustees.

11 We believe that Mr. Skjervem presented a
12 biased view of fossil fuel divestment that wrongly
13 minimizes the board's fiduciary duty to the Funds
14 and beneficiaries.

15 Today, three board members of 350Juneau --
16 and I would like to summarize our response.

17 There's two overriding concerns to bring
18 to your attention. No. 1, the economic and social
19 cost of not transitioning rapidly to renewable
20 energy sources far surpasses the cost of
21 transitioning, some of which were discussed by
22 Mr. Skjervem as reasons not to divest.

23 The cost of not transitioning should be a
24 major fiduciary concern of the board.

25 No. 2, the science is absolutely clear

1 that the majority of known fossil fuel reserves
2 should be left in the ground if we're to avoid the
3 worst impacts of global warming. Impacts that
4 include tremendous economic and social costs.

5 That means, as the International Energy
6 Agency has found, that fossil fuel companies
7 shouldn't be developing any new reserves. There's
8 no room for that in our climate budget.

9 While Mr. Skjervem acknowledged the
10 reality and seriousness of climate change, as well
11 as the need to transition from fossil fuels, he
12 also admitted that his presentation was based, in
13 part, on the recent annual energy paper produced
14 by JPMorgan, a report titled The Elephant in the
15 Room.

16 It's worth noting that JPMorgan Chase,
17 through its banking services, is the largest
18 financier of fossil fueling -- of the fossil fuel
19 industry among global banks.

20 It's no surprise that this report would
21 focus on problems with transitioning away from the
22 fossil fuel industry, an industry that is a
23 significant source of Chase's income.

24 My colleagues' testimonies will address
25 the primary conclusions of Mr. Skjervem's

1 presentation and suggest to you that his arguments
2 are, essentially, what the fossil fuel industry
3 would like you to believe.

4 Thank you all for the work you do to
5 protect our Permanent Fund for all Alaskans, now
6 and into the future.

7 CHAIR RIEGER: Okay. Thank you,
8 Ms. Schroeder.

9 The next person to testify is Richard
10 Farnell.

11 MR. FARNELL: Good morning.

12 My name is Richard Farnell. I'm a
13 resident of Juneau and a board member of 350 --
14 350Juneau Climate Action for Alaska.

15 I'd like to comment further on
16 Mr. Skjervem's presentation. Mr. Skjervem, citing
17 the CalSTRS' study, implied that divestment from
18 fossil fuel investments would lose money.

19 But, to the contrary, published analysis
20 by BlackRock, commissioned by New York City
21 pension funds, found that, No. 1, divestment is
22 prudent.

23 No investors found significant negative
24 performance from divestment but rather have
25 reported neutral deposit results.

1 This seems in stark contrast to the
2 CalSTRS study quoted by Mr. Skjervem. The
3 Permanent Fund may want to research this apparent
4 contradiction.

5 No. 2, divestment is practical to
6 implement. In all scenarios analyzed for the
7 Fund, BlackRock found nothing to suggest outsized
8 implementation fees, little risk to
9 diversification prospects, and minimal impacts on
10 cost and fracking error.

11 No. 3, failure to divest means significant
12 potential peril. "The potential transition to a
13 low-carbon economy presents investment risk" --
14 notice it didn't say "climate risk" -- "to fossil
15 fuel reserve owners, raising the possibility that
16 fossil fuel reserves -- which may be unusable in
17 low carbon scenarios -- will face precipitous
18 devaluation or become stranded assets."

19 Investment house Meketa independently
20 reached similar conclusions in a parallel study,
21 also commissioned by the New York City pension
22 funds.

23 Mr. Skjervem's presentation spent
24 considerable time attempting to justify that
25 divesting doesn't work. But strangely, he

1 immediately turns around the tells the board that,
2 instead, "Cousins of divesting do work," refuse --
3 referring to cousins as villain -- "vilification
4 of traditional energy sources and political
5 pressure on investors, like the Permanent Fund."

6 It really is hard for me to see how
7 cousins of divestment are any different than
8 divestment itself, since the product of the
9 cousins are, in fact, divestment.

10 More importantly, Mr. Skjervem's own
11 continuing testimony that the actions by the
12 cousins -- i.e., demands to divest -- have
13 resulted in -- Mr. Skjervem's words -- "a
14 precipitous fall in the amount of capital that has
15 been invested in hydrocarbons in the last few
16 years."

17 So, it appears that Mr. Skjervem was
18 trying to confuse the board by thinking into
19 that dive -- that divestment doesn't work, but
20 something that produces the exact same results
21 does work.

22 So, if you can look past the camouflage in
23 words, Mr. Skjervem's presentation showed you that
24 divestment in the traditional energy sectors has
25 resulted in significant weakening of these

1 sectors, to the point where prudent investors --
2 i.e., those carrying out their full fiduciary
3 responsibility -- should avoid placing investments
4 in this sinking sector.

5 And, finally, if divesting in fossil fuels
6 is "a tax on the poor," as stated by Mr. Skjervem,
7 why has the price of gasoline recently rebounded
8 from \$5 a gallon to \$3 a gallon in the face of the
9 significant -- significant decline in energy
10 sector investments produced by divesting?

11 The answer is that a tradition --
12 transition to the future energy economy will be
13 complicated with many moving parts and players and
14 cannot be explained by simplistic examples
15 provided by Mr. Skjervem.

16 That concludes my testimony.

17 CHAIR RIEGER: Okay.

18 Thank you, Mr. Farnell.

19 Next on my list is James Simard.

20 MR. SIMARD: Good morning.

21 VICE CHAIR RIEGER: Good morning.

22 MR. SIMARD: I'm Jim Simard. I
23 live in Juneau. I'm a -- I'm a librarian retired
24 from the State of Alaska. I'm a member of
25 350Juneau, and I'm a concerned grandfather.

1 The fossil fuel industry does face an
2 uncertain future. For such an important player of
3 the global economy, this uncertainty poses a -- a
4 significant risk to invest -- investors.

5 It is not clear whether the APFC has
6 acknowledged or acted on this risk, but to ignore
7 the risk would be a breach of fiduciary
8 responsibility as found in legal precedent of Chow
9 vs. Moreno. Once a fiduciary's aware of a risk,
10 action must be taken.

11 Just before Mr. Skjervem's talk, Richard
12 Ashley gave an excellent presentation on fiduciary
13 responsibility, in which he made it clear that the
14 fiduciary responsibility of the board, based on
15 State statute, was to all generations of Alaskans.

16 We believe it would be shortsighted to
17 limit the bounds of fiduciary duty to only the
18 near-term protection of the principal and maximize
19 the returns.

20 Instead, we expect the APFC to address the
21 risk of continued investment in the traditional
22 energy sector, in light of the economic and
23 societal upheaval that is forecasted to be the
24 reality of climate chaos for our younger and
25 future generations.

1 Adding to this risk, as 350Juneau has
2 previously testified, major oil producers continue
3 to be the target of lawsuits brought by cities,
4 states, and other nations, seeking huge
5 settlements to help pay for damage attributable to
6 climate disruption and traceable to the long-term
7 burning of fossil fuels.

8 Legal argument relies heavily on evidence
9 that the industry itself was aware decades ago of
10 the environmental damage that would be caused over
11 time by burning carbon-based fuels.

12 And yet, for subsequent decades, major oil
13 companies have spent millions of dollars on a
14 multi-pronged misinformation campaign intended to
15 deprive the public of this essential information.

16 As the climate crisis deepens in courts
17 around the world, suits similar to these maintain
18 that the oil producers have criminally profited by
19 knowingly developing and marketing products that
20 are leading to the degradation of the earth's
21 ability to sustain human social structures as they
22 exist today.

23 It's impossible to see how these credible
24 legal actions against the fossil fuel producers do
25 not constitute a substantial investment risk.

1 So, I thank you sincerely for your service
2 to the Permanent Fund and for your attention to
3 these critically important issues.

4 VICE CHAIR RIEGER: Okay.

5 Thank you, Mr. Simard.

6 Next on my list is John Hudson. I'm not
7 sure if he's -- yes.

8 Okay.

9 MR. HUDSON: Good morning, and
10 thank you for this opportunity to testify this
11 morning.

12 My name is John Hudson. I'm a member of
13 350Juneau Climate Action for Alaska.

14 Over 1500 institutions have pledged to
15 divest more than \$40 trillion from fossil fuels, a
16 75,000 percent increase in committed assets since
17 2014.

18 Many of these institutions are committed
19 to investing in climate solutions. Is such a
20 shift risky or rewarding?

21 A March 2021 report jointly produced by
22 the International Energy Agency and The Center For
23 Climate Finance and Investment answers the
24 question.

25 The authors compared historical financial

1 performance of fossil fuel and renewable power
2 companies around the world. Total return was
3 calculated for four portfolios between 2011 and
4 2020.

5 Renewable power generated higher returns
6 than fossil fuel in all portfolios during the
7 10-year period.

8 In the global market's portfolio, total
9 returns for renewable energy were 423 percent,
10 compared to 59 percent for fossil fuel, a
11 sevenfold difference.

12 Findings like these are revealed by other
13 studies, indicating a shift to renewable energy
14 investments can bring substantial financial
15 regards.

16 In closing, 350Juneau would appreciate
17 your response to our letter and the points we have
18 raised today. We would like to know how you're
19 addressing the financial risk of climate change
20 and the urgent and inevitable transition to
21 renewable energy.

22 Specifically, we would like to know if and
23 how you are conducting a climate risk assessment
24 to protect our Fund for now and in the future.

25 Thank you.

1 CHAIR RIEGER: Thank you,
2 Mr. Hudson.

3 That is all that I have on my list.

4 Is there anybody else, Jennifer, who
5 has --

6 MS. LOESCH: There --

7 CHAIR RIEGER: -- called in?

8 MS. LOESCH: -- is not.

9 Unless there is someone in the audience
10 that didn't sign up, I think we're done.

11 CHAIR RIEGER: Okay.

12 Is there anyone else who wishes to
13 testify?

14 If not, thank you all for your testimony.

15 We'll move to the next item on the agenda,
16 which is the committee reports.

17 And first up, is -- I think it's me. And
18 that's the Governance Committee.

19 The -- the Governance Committee met
20 earlier this week. There was -- and we took up
21 two matters.

22 One of them was consideration of whether
23 or not to re -- just do a complete review of
24 the -- the charters of the corporation and the
25 various operating rules that we've adopted.

1 And what we've decided to do there is to
2 issue an RFP. That process is just in the
3 incipient stages of getting launched.

4 But we would like to find an outside
5 consultant who has familiarity with the various
6 charters and rules that other similarly situated
7 funds are using and just give us any feedback that
8 they have on where we might have -- get some
9 useful input and -- just to help us do --

10 But we are going to go through our --
11 our -- all of our charters. This is something
12 that, by the way, is actually called for in the
13 charters as well. So, that, we -- we have to
14 periodically do this under our own rules. The --
15 so, that process is just being launched.

16 The second thing is, again, part of the
17 annual executive director review process. There
18 are some stages of that process that involve the
19 Governance Committee. Primarily involves
20 reviewing and compiling the survey results of --
21 of feedback as part of -- of the executive
22 director's performance review and making sure that
23 that feedback gets to the executive director and
24 having feed -- having responses back and providing
25 that all to the board as part of its consideration

1 in the December meeting -- which we were just
2 going to take up later this meeting -- of the
3 annual performance review.

4 So, that part is -- is routine. It
5 happens every year.

6 And that's -- that was basically a summary
7 of what we did in the Governance Committee.

8 Jason?

9 MR. BRUNE: Mr. Chair, question --
10 and this might be for Chris.

11 In light of our request for that
12 procurement, is that necessary for the full board
13 to take action on that?

14 Or is the Governance Committee sufficient
15 to make that recommendation?

16 CHAIR RIEGER: Chris, would you
17 mind coming up and providing a response?

18 MR. POAG: Good morning.

19 For the record, Chris Poag.

20 The governance charter requires a
21 Governance Committee to institute every three
22 years a global review of the governance policies.

23 And so in the initial instance as much as
24 they did, they hired a consultant.

25 So, I believe the Governance Committee has

1 the authority to direct staff to procure a general
2 consultant in that area.

3 Since that meeting, I've left a message
4 with a law firm inquiring about consultants in
5 this space. And I've left a message with Steve
6 Center as well.

7 So, we're working on trying to find that
8 category of consultants that have expertise in
9 governance.

10 And from there, if the members of the
11 Governance Committee wish to participate in the
12 scoring, they're able to do so.

13 If not, staff will conduct the
14 procurement, which we believe will be small
15 procurement, in the 0- to hopefully \$25,000
16 category.

17 So...

18 MR. BRUNE: Perfect.

19 Thank you, Mr. Chair.

20 Thank you, Chris.

21 MR. RICHARDS: Mr. Chair, I had a
22 comment as well.

23 CHAIR RIEGER: Yeah.

24 MR. RICHARDS: So, on that
25 procurement, we -- we talked about -- and I'm all

1 for -- to me, the real critical thing is that we
2 figure out a way to be able to do these reviews in
3 a confidential manner. That, to me, is
4 underlined, circled, starred.

5 We can't have a situation like we've had
6 in the past where we do these reviews, and people
7 have access to confidential files and all of that.

8 So, I don't know the solution, but I just
9 hope that that's one of the things that the
10 consultants working with staff are really focused
11 on.

12 CHAIR RIEGER: Duly noted.

13 And I think -- I think that would be --
14 well, I think it's important to take that subject
15 up and try to get a resolution.

16 It sounds like Chris has a comment on
17 that, too.

18 So, please...

19 MR. POAG: I apologize.

20 Again, Chris Poag for the record.

21 I probably shouldn't volunteer and just
22 jump up here. So, just tell me to stop doing that
23 in the future if you would like me to.

24 But I think Chair Richards [sic] is
25 referring to the personnel files of the executive

1 director and the evaluation process by the board.

2 And while I agree with him 100 percent, I
3 believe that change is a legislative change and
4 not one within our control.

5 MS. RUBENSTEIN: Interesting.

6 MR. RICHARDS: Partly. Partly.

7 So, we have a system that was designed
8 with an assumption of confidentiality, I think.

9 MR. POAG: Correct.

10 MR. RICHARDS: And that assumption
11 turned out not to be true.

12 So, we need to just redesign the system to
13 do what we can within the laws.

14 Right?

15 MR. POAG: Correct.

16 MR. RICHARDS: So, for instance, we
17 can rely less on written product and more on oral
18 feedback. We could have a mechanism where the
19 feedback comes in a form that is thought out so if
20 it does become public, it's not quite so in your
21 face as some of the stuff that's been produced.

22 So, I think there's a lot of different
23 ways that you can confidentially gather the
24 information and then produce it in a way that goes
25 to the file that doesn't kind of have a lot of the

1 negativity that may be in some of the other stuff.

2 MS. RUBENSTEIN: Mr. Chair?

3 CHAIR RIEGER: Yes.

4 MS. RUBENSTEIN: So, I've looked
5 into this as a member of the Governance Committee.

6 Happy to work with you on this.

7 There is a very specific firm that does
8 exist. It's a niche industry where they work with
9 public pension funds on this exact issue. And I
10 think that was what it was designed for.

11 I can't speak to the Alaska specific
12 statutes on this, but that is exactly what it was
13 for was governance committees and public pension
14 funds.

15 I've handed Steve the name. Steve has
16 looked into it as well.

17 And, again, it's a small almost cottage
18 industry of looking into this. It's not, you
19 know, a Callan level of consultant of what you're
20 talking to.

21 So, they -- they do exist.

22 And to our former attorney general's
23 point, I think the reason why the Governance
24 Committee said we should probably look into an RFP
25 was we thought the processes -- that predates half

1 the board -- were confidential, and it turns out
2 they're not.

3 MR. POAG: Can I ask a question on
4 your comment?

5 MR. RUBENSTEIN: Uh-huh.

6 MR. POAG: Are you referring to a
7 specialist for executive director evaluation --

8 MS. RUBENSTEIN: Yes.

9 MR. POAG: -- or of governance
10 generally?

11 Oh. Executive --

12 MS. RUBENSTEIN: Yes. Which --

13 MR. POAG: Okay.

14 MS. RUBENSTEIN: -- falls under --

15 MR. POAG: Perfect.

16 MS. RUBENSTEIN: -- public pension
17 governance committee structures.

18 MR. POAG: The consultant that I
19 think we're looking to hire for the governance
20 overview --

21 MS. RUBENSTEIN: Yeah.

22 MR. POAG: -- is a governance
23 consultant. They exist a lot because they're part
24 of external audits.

25 MS. RUBENSTEIN: Yeah.

1 MR. POAG: But we can certainly see
2 if we can drill into this expertise for the
3 specific issue that --

4 MS. RUBENSTEIN: What I --

5 MR. POAG: -- Trustee Richards --

6 MS. RUBENSTEIN: -- found
7 interesting when I -- Steve and I talked to them
8 is the public pensions that didn't go forth with
9 the recommendation of them being the consultant
10 were the ones that got into issues that were
11 perhaps in front of us this year.

12 So, they do exist. And I think it's not
13 something you would even go look to do until you
14 need to do it.

15 MR. POAG: So, just to sort of
16 leave with one more comment.

17 I think we probably need to proceed on a
18 two-pronged approach.

19 MS. RUBENSTEIN: Yeah.

20 MR. POAG: One is if -- as if there
21 is going to be legislation that solves the Rubik's
22 Cube so that we don't have this problem going
23 forward.

24 Essentially that personnel files are, in
25 fact, confidential under State law.

1 MS. RUBENSTEIN: Yeah.

2 MR. POAG: The irony isn't lost on
3 me that we meet in executive session to talk about
4 an executive director's performance because a
5 public discussion could be harmful to their
6 reputation and character.

7 But then the files under State law become
8 public records. So, there is an ambiguity, I
9 believe, in the law that could be fixed by the
10 legislature.

11 And so if it is, that solves the problem
12 more completely. If it is not, then we can try
13 and cater the evaluation process for the executive
14 director around a more public process so that we
15 don't find ourselves in harm's way as
16 Trustee Richards was indicating.

17 I think that's appropriate. And we can --
18 if that's -- if I'm reciting what you're looking
19 for, that's the path we'll go down.

20 MR. RICHARDS: Yeah.

21 And -- and Steve and I talked about this
22 as well.

23 So, when we hire a consultant, we kind of
24 almost, like -- it got pitched -- or not
25 pitched -- we talked about it little bit in a

1 generic sense of an overhaul of all of the board
2 policies.

3 But I think a majority of the concern is
4 around the executive director piece.

5 So --

6 MR. POAG: Yeah.

7 MR. RICHARDS: -- when we hire the
8 consultants, let's just make sure that they
9 understand that this is a critical part of it.

10 MS. RUBENSTEIN: And --

11 MR. RICHARDS: It's not just a
12 generic review of --

13 MS. RUBENSTEIN: -- one more
14 thing -- back to your point.

15 It was more to derisk the board and the
16 corporation when you're communicating with the
17 legislature knowing what the -- you know, just
18 came out of the investigation was to say, "We have
19 strengthened the process."

20 It's hard to do that as just a board
21 versus if you derisk it, like how the corporation
22 works with other consultants.

23 That was the main concern of wanting to do
24 this.

25 MR. POAG: What I'll say -- what

1 I -- what I hear is: I hear two trustees really
2 focused on the executive director evaluation, and
3 then I heard from the committee sort of a more
4 governance best practice --

5 MS. RUBENSTEIN: Yes.

6 MR. POAG: -- for corporate
7 affairs.

8 I think those are probably slightly
9 different experts, but I think we can still
10 accommodate the request.

11 I think probably there are a lot of people
12 out there that are specifically good at "How do
13 you evaluate -- how does a board evaluate its
14 No. 1 employee in a productive way and do so" --
15 publicly traded companies probably have to do some
16 of this publicly as well.

17 So, we can probably focus on that
18 component at the same time we're looking at
19 overhaul of all of the governance charters.
20 There's a number of governance charters.

21 What is the executive director's
22 responsibilities? What is the Governance
23 Committee's responsibilities? What is the Audit
24 Committee's responsibilities? What is the
25 communication protocols for the board?

1 There's a lot to unpack in the governance
2 policies alone.

3 So, I think we can -- like -- like, we can
4 go down both paths as well. But I think we will
5 find the expert you're referring to is more nichey
6 than the general consultant expert that probably
7 Steve Center and some of the law firms will steer
8 me towards.

9 But we can -- I understand the direction,
10 so I can certainly work with -- I think I plan to
11 work with the CFO on trying to find these
12 consultants in this space.

13 So, I appreciate the feedback.

14 CHAIR RIEGER: Thank you.

15 MR. BRUNE: Mr. Chair?

16 CHAIR RIEGER: Oh. Jason.

17 MR. BRUNE: Thanks.

18 Chris -- Thank you, Mr. Chair.

19 Chris -- or maybe for our executive
20 director -- do we have legislation -- draft
21 legislation ready to go for fixing the statutory
22 issue that we came at -- across over this last
23 year, and have we discovered a friendly legislator
24 and/or have the governor introduce said
25 legislation?

1 Because I'd be willing to have that
2 conversation with the governor if -- if you'd like
3 me to and/or if you have a friendly -- sounds like
4 we need to contemplate that.

5 MR. POAG: To answer your question,
6 we don't have draft legislation. I can go craft
7 it for you. It'll take 10 minutes.

8 But it will apply to the entire state.
9 And so we need to -- I think our first -- I
10 recommend our first step would be for the
11 executive director to reach out to the governor's
12 legislative director and sit down and talk about
13 the issue.

14 Because a carveout for us is different
15 than the entire exempt --

16 MS. RUBENSTEIN: Interesting.

17 MR. POAG: -- employee base for the
18 State of Alaska.

19 So, I think we need to figure out whether
20 or not it's a change in State law for all exempt
21 employees or a change in State law for APFC exempt
22 employees, and whether or not there's support at
23 the governor's office level for that legislation.

24 So, that would be my first recommendation.

25 But I have heard that there is some

1 interest in this issue by the administration. So,
2 I don't know what that means. That's what I heard
3 through our lawyer, who's a contact at the
4 Department of Law.

5 So, I -- I think probably Deven and I can,
6 after this, sort of reach out to the lawyer at the
7 Department of Law, as well as the governor's
8 legislative director, and talk about first steps.

9 CHAIR RIEGER: Okay.

10 MR. RICHARDS: Through the Chair.

11 When I testified in January, I had two
12 different senators come up and talk to me
13 afterwards about the need to make this change.

14 So, I don't think it's going to be -- you
15 know, and it may not be on folks's radar, but I
16 think at least there will be some positive
17 reception.

18 CHAIR RIEGER: Okay.

19 MR. POAG: And -- and I -- I want
20 to just leave with one last comment.

21 At the end of the day, it may be that
22 there's a policy call here which is it -- should
23 the evaluation process for the executive director
24 of an \$80 billion corporation have some
25 transparency to it?

1 The answer is yes. How much transparency
2 is really the question.

3 As you move down the staffs level, there's
4 probably more of a privacy interest and less of a
5 public interest.

6 But I -- I think the legislature and the
7 administration probably will struggle a little bit
8 with how much of the evaluation for Mr. Mitchell
9 should be in public because he's your No. 1
10 employee managing an \$80 billion corporation.

11 So --

12 MR. RICHARDS: Yeah.

13 MR. POAG: -- there will be some
14 policy components to this.

15 But I think there was -- Trustee Richards,
16 I think there was an assumption that exempt
17 employees' personnel files had some
18 confidentiality under State law.

19 And when I read some of the statutes, I
20 was -- I was led to that belief as well.

21 MS. RUBENSTEIN: Wow.

22 MR. POAG: So, we're learning from
23 things that have happened and we now know there's
24 probably a need to fix.

25 And I -- I'm glad to hear legislatures are

1 also interested in a cure here.

2 MR. RICHARDS: And -- and the final
3 thing, and then I'll be done.

4 The -- the issue is not just that it's
5 unseemly and unfair to have people's personnel
6 files go public.

7 It's that the person doing the review is
8 not going to give honest feedback if they know
9 their review is going to go into the public
10 record.

11 I mean, you're not going to -- so, Deven's
12 a wonderful guy. So, you know, month one, we're
13 not going to ding him, right?

14 But if he wasn't a wonderful guy and
15 people are unhappy with his performance and you
16 want to write negative comments, your ability to
17 candidly do that just goes out the door as soon as
18 you know all these forms are just going to get
19 released to the media.

20 MR. POAG: Yeah. Trustee Richards,
21 you're spot on.

22 In fact, we have since ceased doing peer
23 reviews of each other because nobody wants to
24 provide feedback --

25 MR. RICHARDS: Yeah.

1 MR. POAG: -- that's just going to
2 be on the front page of the newspaper.

3 So, we lose a valuable tool. And it's
4 inadvertent, but we lose a valuable tool to
5 transparency that could be helpful to the
6 corporation rather than harmful.

7 CHAIR RIEGER: Jason?

8 MR. BRUNE: Mr. Chair, as a
9 follow-up -- and I'm sorry I'm beating this dead
10 horse.

11 But whose interpretation was it that made
12 us release these documents?

13 Having not been a trustee at the time, you
14 said, as a lawyer, that you read it and you felt
15 it was confidential.

16 Who made that decision?

17 MR. POAG: So, to be clear, I read
18 a case and I read a statute and I thought there
19 was coverage.

20 Department of Law read the statute and
21 read another case -- and I read the other case.

22 And I agreed with their final decision
23 that we had to err on the side of disclosing the
24 file because there was a very similar factual
25 scenario that the Alaska Supreme Court had weighed

1 in on, and I don't know that we had much choice.
2 Precedent was binding, and the facts were very
3 close.

4 But when the statute was drafted, it
5 created ambiguity. And the Court case that I read
6 was before the later case.

7 And so sometimes there are not -- there is
8 not perfection between -- statutes will say one
9 thing and another thing elsewhere and they create
10 an ambiguity and the courts touch them at
11 different points in time.

12 But that later precedent did lead, I
13 think, to the accurate conclusion that, as the
14 Court interpreted, our personnel files -- at least
15 at the executive director level -- had to be
16 public.

17 The only things that would remain private
18 would be the things protected by the Alaska
19 constitution, which are email addresses, phone
20 numbers, private addresses, those sorts of things.

21 And the legislature then needs to come in
22 and say, "No. We intend for there to be more
23 protection."

24 Because they drafted a carveout for exempt
25 and partially exempt, that the Court read to mean

1 was intentional by the Alaska legislature.

2 MS. RUBENSTEIN: If you --

3 MR. BRUNE: So, as a follow-up,

4 Mr. Chair?

5 CHAIR RIEGER: Yes. Go ahead.

6 MR. BRUNE: What you're saying is
7 any news organization could FOIA -- assuming Adam
8 and I ever got evaluations -- but could FOIA every
9 single exempt employee's evaluations and receive
10 them?

11 MR. RICHARDS: Yeah.

12 MR. POAG: I'm not going to say
13 that. I'm only going to say in these particular
14 facts for the executive director position.

15 The advice I got was for the executive
16 director position because it was a balancing test
17 of the public's right to know versus the privacy
18 interest of the individual involved.

19 MR. BRUNE: Thank you.

20 Thank you, Mr. Chair.

21 MS. RUBENSTEIN: Have you --

22 CHAIR RIEGER: Ellie and then --

23 MS. RUBENSTEIN: -- had -- have you
24 had a public information records request since our
25 Governance Committee meeting on Monday for

1 evaluating Val?

2 MR. POAG: Not yet.

3 MR. CRUM: Thank you, Mr. Chair.

4 As the new trustee here, it would actually
5 be very helpful if the -- the statute that you're
6 referencing and the two court cases --

7 MR. POAG: Yeah.

8 MR. CRUM: -- and/or an opinion
9 from the AAG -- if you could share that with the
10 board.

11 MR. POAG: Sure.

12 MR. CRUM: Just so we can have that
13 going into context for the legislative session
14 about what are some of the fixes we possibly do
15 need.

16 So, if we do have conversations with
17 legislators or the governor's office, we can help
18 kind of explain what the need is.

19 MR. POAG: Yeah. Certainly.

20 And as you probably know, the Department
21 of Law would probably be advocating for the legal
22 ambiguity --

23 MR. CRUM: Yeah.

24 MR. POAG: -- and the fix as well.

25 And they'd be there to support that.

1 So -- but yes. We certainly can do that.

2 MR. CRUM: Thank you.

3 CHAIR RIEGER: Okay.

4 MR. POAG: We say enough?

5 VICE CHAIR RIEGER: So, that's --
6 yeah.

7 Moving forward. Next on the agenda, is
8 the Chief Executive Officer Reports.

9 Deven?

10 MR. MITCHELL: Thanks.

11 And, again, good morning.

12 I have been here just under a month now.
13 Since November 8th when I came over. I have
14 Valerie sitting next to me, who I am very grateful
15 for.

16 And, again, want to -- I know the board is
17 going to talk about Val tomorrow -- but
18 reemphasize the importance of Val to the
19 organization and her ability to carry the
20 organization through a very difficult time over
21 the past year. And it's at -- at times, a
22 thankless undertaking. And so I am very thankful,
23 from outside the organization and now within the
24 organization.

25 There's a few things in your packet that I

1 was going to touch on, and I was also going to
2 give Val an opportunity to expand or if there were
3 questions on any of those.

4 As far as the outstanding board matters,
5 we really just have the one at this point. The
6 other two are both being addressed at this
7 meeting. And that was the government shutdown
8 critical employee issue.

9 And Sebastian's team is going to be
10 working on establishing the criteria here within
11 our organization so in the event that happens
12 again in the future that there's a delayed budget
13 or failed budget, that we won't be at risk of not
14 having critical -- or essential, I guess the right
15 word is -- staff coming in and performing their
16 duties and -- and in the office.

17 And our target at this point, is the --
18 May 2023 for that undertaking.

19 There's a number of transitions within the
20 organization. We have some new hires with our
21 procurement specialist, Jedediah Smith, coming on
22 board; and then the director of private equity,
23 Allen Waldrop, who's sitting right there
24 (indicating); and we have additionally -- had a
25 couple of additional hires where folks aren't here

1 yet. I believe there's three of them at this
2 point that are onboarding.

3 And so positions are being filled as --
4 over the course of the last several months.

5 One of the positions that was fairly
6 recently filled -- which is, again, in Chad's
7 report -- but sorry to -- to have to say, is
8 Director Sanders -- Lacey Sanders is returning to
9 the Department of Education in her former role as
10 deputy commissioner of that department.

11 And so we're looking at the position that
12 she's leaving and considering alternatives to just
13 refilling that job as it exists at this point.

14 There's some flexibility within the
15 organization to, I believe, shuffle the
16 responsibilities and duties of that position to
17 potentially make it more of an opportunity for
18 somebody like Lacey who's -- who's a hard charger
19 and wants challenge. And I don't know that there
20 was enough for her in the way that it was
21 structured previously.

22 And so rather than having somebody else
23 come in and decide that they weren't being
24 challenged, we'll try to restructure things just a
25 little bit.

1 So, we have a meeting on Friday to -- to
2 further discuss how we might proceed with that.
3 Talked with a variety of -- really all of the
4 direct reports, and there's a variety of opinions.
5 One for each direct report, of course.

6 Not -- it's -- it's similar to any
7 process. There's -- there's a lot of opinions
8 that -- and -- but a convergence across them that
9 I expect that we'll be able to come up with a good
10 strategy for the future.

11 One of the things that Val pointed out
12 that I wanted to make sure to mention was on
13 page 60. The -- of the financial reports in the
14 packet.

15 The -- the bottom chart there, the
16 dedicated mineral revenues for fiscal years 2020
17 through 2023, you'll see in the green line the
18 fairly significant uptick in August from just over
19 100 million to under 400 million.

20 And that was a result of the appropriation
21 of prior years' statutory royalty -- mineral
22 royalty revenue into the Permanent Fund.

23 So, the State -- as trustees, I believe,
24 know -- has an obligation under the constitution
25 to provide 25 percent of certain mineral

1 royalties.

2 And in addition to that, there's certain
3 statutory contributions as well. And the statute
4 contributions were avoided during some of the
5 extraordinarily low budget years -- revenue years,
6 I should say, at the State of Alaska.

7 And so this was a -- a make whole for
8 that -- that prior failure.

9 MR. RICHARDS: I'll just say in
10 there -- and congratulations to staff.

11 This was -- so, '17, '18, and '19, we
12 weren't paid what we were owed basically is what
13 it came down to. And we didn't let it go. We
14 were pit bulls on it, and we stuck to it.

15 And years later, we got what the Fund was
16 owed. So -- and -- and it was all because staff
17 focused on it for years.

18 MR. MITCHELL: Thanks.

19 MS. RUBENSTEIN: Mr. Chair?

20 CHAIR RIEGER: Yeah.

21 MS. RUBENSTEIN: Can I have --
22 backtrack to something?

23 On the head count on page 46. I was
24 surprised to see that the amount of vacancies on
25 the investments team is now larger than the ops

1 team.

2 In the short time I've been on the board,
3 that has been the opposite.

4 So, have you done something since you've
5 been in your role to recruit more on the ops team,
6 and are we having a problem filling on the
7 investment side?

8 MR. MITCHELL: I think it's a
9 combination of things.

10 And so I think that -- that Val and the
11 operations team was actively recruiting, I think,
12 in -- I know Chad was very complimentary here in
13 his report that my selection may have created a
14 calming influence that resulted in some ability to
15 attract employees on the ops side that might have
16 otherwise been more difficult.

17 MS. RUBENSTEIN: Okay.

18 MR. MITCHELL: But I think it was
19 a -- that -- it was a concerted effort from a
20 variety of fronts that resulted in positions being
21 filled.

22 And we're continuing in that effort.

23 On -- on the investment side staff, there
24 are some additional challenges just because of the
25 type of staff that we're seeking.

1 And, obviously, Marcus could speak to that
2 more directly than -- than I.

3 MS. RUBENSTEIN: Okay.

4 MR. MITCHELL: But there's active
5 recruitments on the investment side as well and --

6 MS. RUBENSTEIN: Uh-huh.

7 MR. MITCHELL: -- and work being
8 done within the team to determine how to best
9 proceed with the vacancies that -- that exist
10 otherwise.

11 And everything's really on the table, from
12 my perspective, that -- even to the point of
13 are -- are we in a strategy where these positions
14 continue to be in the best interest of the
15 organization or were they -- were they envisioned
16 for something that might not be as tangible as we
17 thought it was?

18 And so that'll be an ongoing discussion --
19 discussion that we have. And as we develop
20 that -- those positions, I anticipate filling
21 that -- we'll either be filling them or if -- if
22 we're not going to fill them that -- oh. And
23 Chad's online if you have questions for him.

24 I should have said that right up front.
25 So, if you wanted to get Chad's explanation --

1 MS. RUBENSTEIN: No. I was just
2 wondering.

3 It's the first time I've seen that in a
4 board memo.

5 MR. MITCHELL: Oh.

6 MR. FRAMPTON: Yeah.

7 I mean, I'm aware of six vacancies in
8 investments. We've got -- you know, in fixed
9 income, we got a new credit analyst approved in
10 the budget this year. It's been posted this
11 entire time, and the response hasn't been as good
12 as what we expected. And so we're just, like,
13 holding a high bar on that one position.

14 There's two investment officer positions
15 on Allen's team in private equity that we
16 requested in the budget last year that -- I mean,
17 like Deven, Allen's relatively new to his role.

18 It's -- I would say it's not clear when we
19 think those -- to fill those positions. But we
20 may want to.

21 Like, he's -- there's a balance between
22 external resources and internal. You get the
23 right person, you definitely want to fill it.
24 But, like, we are able to operate with those
25 positions vacant.

1 He may want to do something with them, but
2 I'm not going to force him to do it.

3 Okay. So, that's three.

4 And then we have three vacancies on the
5 real estate team. Similar story to what I just
6 said on credit analyst.

7 Like, these have been posted in the past.
8 Underwhelming response. We reposted two to three
9 right now.

10 So, I -- I'm missing -- I need to go back
11 and reconcile the eight. But, I mean, that --
12 that's the story from my perspective.

13 I mean, like, we're operating fine in
14 investments. If we could get the right people,
15 we'd fill six positions. But we don't have to.

16 CHAIR RIEGER: So, just to make
17 sure --

18 MR. FRAMPTON: Yeah.

19 CHAIR RIEGER: -- I -- sorry to cut
20 in front of you, Jason.

21 But the -- where it says "hold," that's
22 not quite accurate.

23 MR. FRAMPTON: Yeah. Those two
24 that say hold --

25 MR. RICHARDS: Four.

1 MR. FRAMPTON: Or the --

2 MR. RICHARDS: Four.

3 MR. FRAMPTON: Okay.

4 Where are we on that?

5 Let's see.

6 MS. RUBENSTEIN: Real estate,

7 investment ops.

8 That's what I was --

9 MR. FRAMPTON: Okay.

10 The first -- we're -- I'm missing

11 something on the real estate --

12 Tim, can you come up and comment?

13 I mean, the -- the first one, Asset

14 Manager Real Estate, that was an employee that we

15 hired. Didn't work out. Left after, like, six

16 months.

17 We haven't been active trying to recruit

18 that one.

19 We have two analyst positions -- which you

20 see in the first section -- which were posted for

21 a long time. Not a good response. Reposted.

22 I don't know -- okay.

23 The -- the two holds underneath the Real

24 Estate Asset Manager, those are the Allen Waldrop

25 ones.

1 Okay?

2 I don't know what these two holds down in
3 approved positions -- I don't know what those are.

4 I may have called you up for no reason,
5 though.

6 MR. ANDREYKA: Okay.

7 MS. RUBENSTEIN: That's what I was
8 trying to figure out.

9 MR. ANDREYKA: Yeah.

10 MR. FRAMPTON: I -- I'm aware of
11 six --

12 MR. ANDREYKA: We have three, the
13 two analysts and the asset manager position you
14 mentioned. Total of three.

15 MR. FRAMPTON: Three. Okay.

16 I brought you up for no reason.

17 CHAIR RIEGER: The real -- the real
18 question I had is just --

19 MR. FRAMPTON: Ladies and
20 gentlemen, Tim Andreyka.

21 MS. RUBENSTEIN: I'm sorry.

22 CHAIR RIEGER: What I'm focused
23 on --

24 MR. ANDREYKA: It's okay.

25 CHAIR RIEGER: -- this report when

1 I saw it was just where we said "hold" and
2 whether --

3 MS. RUBENSTEIN: I've just never
4 seen that.

5 CHAIR RIEGER: It's one thing to
6 say we can't -- we haven't been able to find
7 someone.

8 But hold, to me, means we aren't --

9 MR. MITCHELL: It's paused.

10 CHAIR RIEGER: And I just wanted to
11 know --

12 MR. FRAMPTON: I think there are
13 two that are held.

14 CHAIR RIEGER: Okay.

15 It's just that --

16 MR. FRAMPTON: Oh, wait.

17 Are these two sections duplicative --

18 MR. BROWN: Yes.

19 MR. FRAMPTON: -- to some extent?

20 Okay.

21 So, two of these holds -- the ones that
22 say Investments Hold --

23 MR. BROWN: The second box is --

24 Sorry. For the record, this is Chad
25 Brown, director of human resources.

1 The second box is just the new positions.
2 I assumed the board would want an update on just
3 the new positions as well, so they are
4 duplicative.

5 So, the first one is all of the openings.

6 MS. RUBENSTEIN: Okay.

7 MR. BROWN: The second one is just
8 an update on the new positions.

9 MS. RUBENSTEIN: Okay.

10 CHAIR RIEGER: Okay.

11 MR. RICHARDS: Oh. I thought it
12 was the same continuing box.

13 MR. BROWN: No. No. It's not --

14 MS. RUBENSTEIN: That's why --

15 (Indiscernible crosstalk.)

16 MR. BROWN: Two separate boxes.

17 MS. RUBENSTEIN: That's --

18 MR. BROWN: My apologies.

19 MS. RUBENSTEIN: That was why I was
20 confused.

21 CHAIR RIEGER: Okay.

22 MS. RUBENSTEIN: Okay.

23 MR. FRAMPTON: Yeah.

24 I knew there was two on hold.

25 MS. RUBENSTEIN: One, two, three --

1 MR. FRAMPTON: Maybe three if you
2 include the real estate asset manager sort of on
3 hold.

4 And then we're actively recruiting to real
5 estate analysts, one credit analyst for fixed
6 income.

7 MS. RUBENSTEIN: Okay.

8 MR. RICHARDS: Mr. Chairman, I --

9 MR. FRAMPTON: Oh. I'm sorry.
10 There's one more.

11 Sorry. Thank you, Craig.

12 We got it approved. Portfolio manager for
13 Ross Alexander's private income team. And an
14 associate on his team, Logan, applied for that
15 position and was hired.

16 MS. RUBENSTEIN: Okay.

17 MR. FRAMPTON: So, in my mind that
18 position was filled.

19 But Logan's old position is now vacant.
20 We just posted that.

21 MS. RUBENSTEIN: Okay. Okay.

22 MR. FRAMPTON: So, that's another
23 position.

24 But that's, like, new -- like, freshly
25 posted. Hopefully we'll get that filled.

1 MS. RUBENSTEIN: Okay.

2 MR. BROWN: For the record, we
3 actually have two interviews scheduled for that
4 already.

5 MS. RUBENSTEIN: Okay.

6 But --

7 CHAIR RIEGER: And --

8 MS. RUBENSTEIN: One more question.

9 CHAIR RIEGER: Okay.

10 MS. RUBENSTEIN: So, the --

11 CHAIR RIEGER: Jason's also --

12 MS. RUBENSTEIN: -- hold means --
13 what are you going to do with it?

14 MR. FRAMPTON: Oh.

15 I'm not -- it's very possible that we'll
16 give those positions back.

17 MR. MITCHELL: I don't know that we
18 want to say that yet.

19 I think we're -- like, I said earlier, I
20 think we're at the point --

21 MR. FRAMPTON: Yeah.

22 MR. MITCHELL: -- that we're
23 looking at all options.

24 MS. RUBENSTEIN: Okay.

25 MR. MITCHELL: Everything's on the

1 table.

2 And there's a discussion that has to --

3 MS. RUBENSTEIN: Okay.

4 MR. MITCHELL: -- happen with the
5 staff that has onboarded to determine what's -- we
6 have a bit of flexibility. We have a bit of time
7 to determine what the best -- best path is.

8 And so that's --

9 MR. FRAMPTON: That's accurate.

10 MS. RUBENSTEIN: Okay.

11 MR. FRAMPTON: That's fair. Yeah.

12 CHAIR RIEGER: Jason had a question
13 and then Craig.

14 MR. BRUNE: So, Deven just nailed
15 it out of the park, in my mind, with what you --
16 what you just said. That was going to be my
17 point.

18 The governor has specifically instructed
19 us if there are positions that are vacant for over
20 a certain amount of time -- I would say six
21 months -- it gives the impression to the public we
22 don't need them.

23 Now, if there are hiring challenges,
24 that's one thing. Be it compensation, be it other
25 issues, be it great resignation and the lack of

1 candidates, people not wanting to move to
2 Juneau -- there's all sorts of those issues.

3 But as positions are continuing to be
4 vacant, you, as executive director, need to
5 evaluate -- and after one month, that's not fair
6 to you to do that -- but to evaluate whether or
7 not those positions are needed, whether they need
8 to be changed.

9 And then we need to make that presentation
10 to us and then ultimately to the legislature
11 indicating whether or not we wish to retain those.

12 That having been said, 7 new positions
13 were created this past year. Which -- I wasn't on
14 the board when that happened. But it's -- it
15 gobsmacks me when we have 14 vacancies and we
16 added 7.

17 What's perplexing to me is of those seven,
18 we've hired two. And four of them haven't even
19 been posted, and we're six months in.

20 When I get new positions, July 1st, if not
21 even before then, they are out on the street.

22 So, it's a bad look for our funding -- for
23 our funders in the legislature when you want seven
24 positions, when you make the case for seven
25 positions, and you don't immediately go out and

1 get those.

2 And, again, I recognize if there are
3 hiring challenges or market issues, you name it.
4 But that -- that doesn't send a great message.

5 Thank you, Mr. Chair.

6 MR. MITCHELL: And -- and,
7 Trustee Brune, I heard you in September, and I
8 hear you today.

9 And -- and that definitely will be part of
10 our dialogue, and we'll be prepared to respond to
11 the board on that.

12 MR. BRUNE: I -- give you time. I
13 mean, you deserve the time to look at your team
14 to --

15 MS. RUBENSTEIN: Mr. Chair --

16 MR. BRUNE: -- make sure that
17 you -- you may end up needing -- or you may need
18 to redesignate what those -- those positions do.

19 So, I'm not trying to push you at all. I
20 just want to make sure it's -- that you know that
21 this is something you should be paying attention
22 to within the next six months, please.

23 MR. MITCHELL: Yes.

24 CHAIR RIEGER: Craig?

25 MR. RICHARDS: Sure. Just two

1 quick things.

2 So, one, if you actually gave positions
3 back, like, you would gain a lot of respect. It
4 demonstrates you're trying to manage an
5 organization as opposed to feed the mill.

6 And that's not always the case.

7 MR. MITCHELL: Yeah.

8 MR. RICHARDS: So, that would -- I
9 mean, I would respect that.

10 And second is I just wanted to say that
11 Chad highlighted under Opportunities -- the first
12 bullet line, the one team framework that we talked
13 about.

14 MS. RUBENSTEIN: Uh-huh.

15 MR. RICHARDS: And as just
16 background for the new trustees, historically when
17 you look at the executive director reviews, one of
18 the things that came out -- and this has been
19 going on for years -- there was sort of this --
20 there was a little bit -- there was a little bit
21 of friction between the operations side and the
22 investments side. It's no secret. It's been
23 there for whatever.

24 So, this summer -- maybe a little
25 earlier -- somebody -- I think it was Lucinda --

1 came up with the idea of court of the one team
2 concept where "Let's -- let's try to get rid of
3 that divide and start acting as one team."

4 And I just wanted to say that I -- I
5 appreciate the use of that phraseology, and I
6 would encourage that to become thematic.

7 Or if that's not what you like, pick
8 something else.

9 But at least -- you know, I thought it was
10 a smart way to sort of talk about the problem, and
11 I just would encourage the continued use of that
12 kind of thing.

13 MR. BRUNE: Mr. Chair, can I have a
14 follow-up with Craig?

15 CHAIR RIEGER: Okay.

16 MR. BRUNE: Are -- are you meaning
17 then that we -- we split the -- we don't have
18 divisions listed?

19 So, we just say, "These are open
20 positions," and don't have them listed as ops or
21 investment?

22 MR. RICHARDS: No. No. I'm not --

23 MR. BRUNE: Or what are you --

24 MR. RICHARDS: I'm not -- I'm not
25 talking about in terms of, you know, how we list

1 an open position.

2 I'm talking about breaking down what has,
3 I think historically, just been some of the
4 dynamics we've had and -- and we try to sort of
5 make one team as opposed to, like, two separate
6 State silos.

7 CHAIR RIEGER: Adam?

8 MR. CRUM: Appreciate the
9 discussion.

10 You know, having -- going through the
11 orientation yesterday, being able to meet most of
12 the key principals on the investment staff and
13 along the ops side --

14 Tremendous progress since September on
15 being able to fill those. And I think that's
16 actually a testament to the long, arduous, you
17 know, executive director selection process.

18 So, nice job on the HR side and the kind
19 of overall stability that --

20 To echo what -- Trustee Brune and
21 Trustee Richards' comments, this is one of those
22 that I think you have a window of grace period at
23 this point in time as we go through this because,
24 you know, you're not even a month into it yet. Or
25 maybe, like, two days and a month.

1 But when you get there, I think -- you
2 know, particularly when we get towards the May
3 timeframe and then we start moving into our FY '25
4 budget development process, it really does look --
5 so, I appreciate Marcus's, you know, consideration
6 as well.

7 You know, on the private equity side, a
8 month and a half on the job as well.

9 So, there is a window here in order to do
10 that, and I think part of the conversation with
11 legislature is you've showed some momentum and
12 some forward progress.

13 And it's important for the public to
14 understand that after everything that's gone on in
15 the last year.

16 So, that's an important aspect.

17 But then also to, you know,
18 Trustee Richards' comment that if it does get to
19 the point -- and after a time you evaluate and one
20 or two come back in next years's budget
21 development cycle, that does continue to build a
22 large level of trust in the legislature.

23 MS. RUBENSTEIN: Trust -- Chair?

24 VICE CHAIR RIEGER: Yes.

25 MS. RUBENSTEIN: Okay.

1 Deven, if -- they refer to it -- which I
2 loved -- as the Mitchell Effect -- which I think
3 is impressive -- on the ops side.

4 But, again, on the investment side, it
5 seems like the ops people are coming from Juneau.
6 The investment side are not usually being
7 recruited from people in Juneau.

8 So, my -- that was why that number really
9 stood out to me that the investments team was
10 higher.

11 When I was going through -- as a member of
12 the Governance Committee on -- on Val's evaluation
13 going through the five-year strategic plan, it did
14 say that there was this -- as part of an executive
15 director, looking at an Anchorage office to help
16 with investment team recruiting.

17 So, my question to you is: What can we,
18 as a board, expect to hear from you next time on
19 that investment side?

20 Because as I've gotten to know some of
21 those remote employees in Austin and New York --
22 I've actually made it a priority when traveling to
23 go hear from them.

24 Is it about an Anchorage office, or is it
25 about more of the flexible work remote policy on

1 filling that investment staff?

2 Because there are now, as you known, four
3 employees -- three of them on the private equity
4 team -- one in California, one in Texas, one in
5 New York -- that --

6 That investment number, for me,
7 personally, I would like to see it back down.

8 Because the culture was usually on the
9 "How do you fill the ops side?"

10 But those numbers -- however you move
11 forward -- I don't think you're going to pull them
12 from local Alaskans.

13 So, that's just my -- it's more of a
14 comment.

15 And I'm looking to see what happens with
16 the Mitchell Effect of how -- probably the two of
17 you are going to have to come together to -- to do
18 it.

19 Because I -- I'm worried the Mitchell
20 Effect will be calming for the organization, but
21 we still need to get high-grade investment talent.

22 MR. FRAMPTON: Yeah.

23 Tricky thing about the -- I mean, four of
24 the open -- four of the positions we're
25 actively --

1 MS. RUBENSTEIN: Okay.

2 MR. FRAMPTON: -- recruiting for in
3 Juneau are analysts. The most junior level.

4 I would probably be pretty comfortable
5 with them in Anchorage. I don't know if I'd be
6 comfortable with the -- you know, because it's so
7 close. Same time zone.

8 MS. RUBENSTEIN: Yes.

9 MR. FRAMPTON: Just from a
10 supervising/training standpoint.

11 It's a little harder than -- like, Allen's
12 working out of Sacramento. And the private equity
13 guys, it's helpful to have them out in the field.

14 But all the remote private equity people
15 are pretty experienced.

16 MS. RUBENSTEIN: Yeah.

17 MR. FRAMPTON: So, that's --

18 MS. RUBENSTEIN: Okay.

19 MR. FRAMPTON: -- a factor.

20 But --

21 MS. RUBENSTEIN: Okay.

22 MR. FRAMPTON: A -- on the margin,
23 Anchorage would probably be a little easier to
24 recruit to than Juneau.

25 MS. RUBENSTEIN: It was surprising

1 to me to see it in the strategic plan that you've
2 now inherited that we're three years into.

3 But that was one of the things it said for
4 the executive director was looking into it.

5 MR. RICHARDS: Good luck with that.

6 CHAIR RIEGER: I -- Deven, I don't
7 know if we cut you off from finishing your
8 executive director report.

9 MR. MITCHELL: I -- I wasn't --

10 MR. BRUNE: Sorry, Mr. Chair.

11 I just want to say that at DEC, we opened
12 our positions that were Fairbanks specific, Juneau
13 specific, and Anchorage specific statewide.

14 And we got a much better pool for many
15 positions, and we got better candidates. We got
16 better finalists. We got better people filling
17 the positions.

18 It -- we're a small state. With
19 technology, we're able to have our Chair from
20 Anchorage like he's in the room with us.

21 You're able to do the same thing as long
22 as you set metrics for your staff that their
23 supervisors hold them accountable to.

24 Frankly, it shouldn't matter where they're
25 at.

1 MR. MITCHELL: It's definitely a
2 brave new world in -- in that respect of remote
3 work.

4 And, personally, I think it's a learning
5 process for every organization, at this point,
6 because it's so young. And -- and you can, I
7 think, very quickly go too far.

8 And I -- I agree with Marcus that it's
9 much easier to have a remote work experience with
10 a staff that's experienced or has had experience
11 in the culture of your organization prior to being
12 one-off office.

13 It's -- and -- and so a junior staff being
14 hired and working remotely, that -- that seems
15 more challenging, again, than the Allen
16 experience.

17 Or there's other employees that -- that
18 have spent time -- Logan -- within the
19 organization, and then have -- have, for personal
20 or for other reasons, determined that they're
21 going to leave the state.

22 And we say, "Hey. We don't want to lose a
23 valuable employee. How about we take you on under
24 this opportunity that now exists for us for you to
25 work remotely?"

1 And that makes a ton of sense to me.

2 It's a matter of how do we -- how do we
3 become an organization that it's normal for people
4 just to onboard from a remote place and understand
5 our culture.

6 And that's -- that's -- it's just a
7 challenge for everybody, I think.

8 MR. RICHARDS: Mr. Chair?

9 So -- and -- so, I'll -- I'll point it
10 out.

11 So, to me, the juxtaposition of the fact
12 that the operational staff almost all comes from
13 Juneau, and there's this giant massive thief
14 building that we're never going to have, you know,
15 an Anchorage office or anything.

16 You juxtapose that against the fact that
17 everybody wants to get paid as if we're recruiting
18 globally.

19 It really doesn't make any sense. I mean,
20 if the operations staff is really going to be, you
21 know, global and we're going to compensate people
22 as if they're not Juneau and Alaska based, then we
23 should be recruiting people outside of the Juneau
24 pool.

25 So...

1 MR. MITCHELL: I did have just one
2 final point on the budget. The budget year to
3 date is on track.

4 And we -- Lacey and I met with the OMB
5 director on Tuesday. And there -- there wasn't
6 specific feedback on the proposed FY '24 budget.

7 But certainly there was -- I think the --
8 the message was that there's concern because
9 revenues at the State are obviously down. The
10 State gets its revenue from the -- this
11 organization and from oil and gas -- oil
12 production.

13 And the price of oil is obviously down
14 from both the forecasts since July or June. And
15 so that's having an impact on the budget
16 development for F -- for next year.

17 And so it was a message of austerity that
18 I think the board just needs to be aware of
19 that as -- I don't know that we're not going to be
20 touched by that. It will be something that we'll
21 find out on December 15th.

22 And that was it.

23 Thank you, Mr. Chair.

24 CHAIR RIEGER: Okay. Thank you.

25 If there's no other questions for Deven,

1 we're just a few minutes behind schedule.

2 Let's move into the CIO.

3 MR. FRAMPTON: Okay. Great.

4 And Sebastian's going to come up with
5 me because we collaborated on a little longer
6 presentation than normal and -- to help with some
7 of it. So, he's going to join me.

8 MR. RICHARDS: So, Marcus, I was
9 unclear.

10 You are or are not confident about private
11 equity?

12 MS. LOESCH: This works if you want
13 to use it (indicating).

14 Otherwise, I'm more than happy to do it.

15 MR. FRAMPTON: Okay. Thank you.

16 All right. Thank you, everyone.

17 Well, I'll start with some of the normal
18 topics that I update folks on.

19 On the personnel side, I mean, just first
20 of all, things are working really well working
21 with Deven. I think we've got a good working
22 relationship.

23 And it's really nice to have the stability
24 of that position filled and to have a boss. And
25 so it's good stuff.

1 Since we're all in Juneau, I've got some
2 of the members of my staff here that have new or
3 different roles.

4 So, I was just going to kind of mention
5 those and let them raise their hands so people can
6 put a name to a face.

7 We've already mentioned Allen joined us.
8 He's the director of private equity. He's worked
9 with the Fund for a long time in different
10 capacities externally as a consultant.

11 So, it's great to have him on board. He's
12 got a lot of experience in the business.

13 And then our private income team.

14 So, Ross, if you want to raise your hand.

15 And then Logan is -- both have slightly
16 different roles now.

17 Ross had been reporting to Steve Moseley,
18 and so he's now a direct report to me responsible
19 for private credit and infrastructure.

20 Logan had been an associate. He's now a
21 portfolio manager. He filled that -- he
22 competed with -- it was broadly posted. Competed
23 and was clearly the best candidate. So, he's got
24 more responsibility, and he's doing a great job.

25 I've been working for the last couple

1 years with Rachel Price, who's my analyst. It's
2 been -- she's working on her CFA. She's doing a
3 great job.

4 She's the first analyst I've worked with
5 where -- well, like, I've always built my own
6 models, done my own slides and everything.

7 She's the first analyst I've worked with.
8 She's so proactive and so competent that I don't
9 really do my slides and my models anymore.

10 So, it's kind of scary stepping a step
11 back, but it's really opened things up for me.
12 So, I really appreciate the work I think Rachel is
13 doing.

14 I think Colton is here. That's Colton
15 (indicating). He's a fixed income analyst that
16 joined us several months ago straight out of
17 Georgetown and is off to a really great start.

18 So, those are the folks I'd like to
19 mention.

20 There's also -- I mean, Jim's here. He's
21 deputy CIO, head of fixed income.

22 So, with -- with the people I mentioned --
23 and then Fawad on public equities and Tim on real
24 estate -- I think -- even though we've got some
25 vacancies, we've got as stable an investment team

1 as we've had, I think, in 10 years. Like, I don't
2 think there's any key man risks with me for sure,
3 given all the backup that we've got here.

4 MS. RUBENSTEIN: Wow.

5 MR. FRAMPTON: So, just wanted to
6 point some of those out.

7 MR. RICHARDS: Through the Chair?

8 CHAIR RIEGER: Yes?

9 MR RICHARDS: Who's your -- who's
10 your investment committee now?

11 MR. FRAMPTON: Jim and I are the
12 two voting members.

13 MR. RICHARDS: So, it's just the
14 two?

15 MR. FRAMPTON: And then everyone's
16 invited to the meetings.

17 So, I have a slide on performance and
18 positioning. I'll get to that later.

19 We've got a number of slides here on asset
20 allocation, and -- and I'll tell you the genesis
21 of the thought process there.

22 Like -- so, Callan has, at every board
23 meeting, these great slides where they compare us
24 to all our peers. And it's the candlestick chart.

25 And they have this one slide where it's

1 large public funds, and they've got us 1, 3, 5,
2 10, and 20. And it -- it always, like, blows me
3 away.

4 I'm in -- I've been here 10 years. I've
5 been there for the whole period.

6 We're, like, top of the candlestick chart
7 on, like, 1, 3 -- so, like, topped us all among
8 peers 1, 3, 5, 10, and 20.

9 And I always laugh because we, like, blow
10 through it or, like, "Oh. Well, you can't look at
11 that because, like you have different asset
12 allocations than some of the large public funds."

13 Then we go to the endowment one, and
14 we're, like, a little above median.

15 And I'm always, like, "Wait. Hold on. We
16 got to stay on that page."

17 But -- but it does occur to me that asset
18 allocation does drive a lot of that. You know,
19 like, if you were 10 percent stocks, 90 percent
20 bonds the last 10 years and you were the best bond
21 investor, the best stock investor, you would be
22 bottom of the peers the last decade because it's
23 been a strong bull market.

24 And -- and so it -- you know, we've done a
25 good job. We've beat our benchmarks. But it

1 is -- asset allocation does drive a lot of that.

2 And it is remarkable that 1, 3, 5, 10, 20,
3 we're -- topped us all on large public funds.

4 And then reflecting more on it, it
5 occurred to me, like, the decade of the 2000s --
6 so, the first 10 years of that 20 year period --
7 was a very difficult period in markets. You had
8 the .com bust in '02, and you had the global
9 financial crisis at the end of the decade.

10 So, that -- that first 10-year period was
11 a period to be conservative. And we actually had
12 a really conservative portfolio back then.
13 Sebastian's remarked on it in past board meetings.

14 And then this last decade, we moved really
15 rapidly into a very high-octane portfolio.

16 So, when I joined in 2012, we were about
17 3 percent private equity. We're now today
18 20 percent private equity.

19 That's been -- the asset class the last
20 decade has been private equity.

21 You know?

22 And so what a great pivot to make at that
23 point. And I credit Jay Willoughby -- who was the
24 CIO -- on -- drove that.

25 And it's just -- now that we're going into

1 this new decade, markets have changed a little
2 bit. Interest rates are a lot higher than they
3 were a year ago.

4 It's worth reflecting on: Do you want the
5 more conservative portfolio? Do you want to be
6 among large public funds on the more high-octane
7 end with equities and private equity? Do you want
8 something in the middle?

9 We have -- in February, Callan does their
10 annual asset allocation review. So, I thought
11 this was a good time, like -- just to, like,
12 discuss these things. There's no decision.

13 You know?

14 And then in May, typically we open the
15 investment policy up. And that's when we talk
16 about -- that's -- if we make a change, typically
17 we'll make it in May. So, this is, like, you
18 know, six months early.

19 So, that -- and I worked with Rachel and
20 with Sebastian on these analyses, and so I've got
21 a number of slides on that.

22 And then I'm going to comment on private
23 market pacing. And, as always, I've got all the
24 investment actions we've taken in the quarter in
25 the back.

1 So, here's positioning and performance. I
2 mean, like, everything's changed since
3 September 30th. So, it's, like, such ancient
4 history all the numbers we'll review at this board
5 meeting.

6 For example, our -- our equity portfolio's
7 returned 15 percent since September 30th. Our
8 bond portfolio's returned almost 4 percent. So,
9 like, the markets have totally rallied back from
10 here.

11 And fiscal year to date -- through today,
12 we're up a couple percent, whereas we were down
13 about 4 percent as of September 30th.

14 Our positioning's similar today. We've
15 trimmed equities as the markets rallied. Like,
16 two weeks ago, we trimmed 500 million.

17 So, as of today -- as of today, we're
18 1.5 percent underweight stocks, about 2 percent
19 overweight private equity.

20 But --

21 MR. RICHARDS: Mr. Chair?

22 MR. FRAMPTON: Yeah?

23 CHAIR RIEGER: Go ahead.

24 MR. RICHARDS: Marcus, I had a
25 question on risk parity.

1 Explain to me how you can have public
2 equity down, you know, 6, 6.5, 7 percent and your
3 risk parity can be down so much higher.

4 It's not just the Permanent Fund. It's
5 the benchmark as well that's --

6 MR. FRAMPTON: Yeah. How we
7 underperformed that benchmark.

8 MR. RICHARDS: Yeah.

9 MR. FRAMPTON: Well, you know, the
10 risk -- I mean, the commodities had a bad quarter
11 in -- I -- we -- so, risk parity's a 1 percent
12 allocation of the Fund. We're underweight.

13 So, if we're at our target of 200 -- or
14 800, we're at 200 -- I mean, it's surprisingly bad
15 numbers. You would expect it to be somewhere
16 around stocks and bonds.

17 And I think the difference is commodities,
18 but I'm not 100 percent sure. It's a small
19 allocation, and one that I don't actually -- I'm
20 recommending that we discontinue.

21 MR. FRIER: Marcus, could it be
22 just the leveraged holdings in fixed income?

23 MR. FRAMPTON: Very possibly.

24 But, I mean, fixed income was down
25 3.5 percent.

1 So, yeah. I mean --

2 MR. FRIER: But the leveraged --

3 (Indiscernible crosstalk.)

4 MR. FRAMPTON: Yeah. The leverage
5 would amplify that. Yeah. I mean, it's leveraged
6 traditional assets and disappointing performance.

7 But yeah.

8 Okay. So, on this slide, I just tried to,
9 like, lay out our views on all our major asset
10 classes.

11 The far left would be very bearish; far
12 right, very bullish; yellow in the middle,
13 neutral.

14 So, I mean, I don't -- I mean, I've said
15 over and over again, I can't predict where the
16 stock market's going. But this is my best attempt
17 to.

18 You know, in particular with the rally in
19 the last -- and we have slides later on -- public
20 stocks are expensive right now, in our opinion.

21 In the rally of the -- in particular of
22 the last couple months, it appears to us and to
23 Bridgewater and to some other people we follow
24 that -- that the stock market has factored in
25 higher cost of capital -- so, a higher discount

1 rate of future earnings -- but has not factored in
2 a recession, which I think is increasingly likely
3 and is -- is one of the reasons why the market's
4 off this week is there have been some comments
5 from bank CEOs on that topic.

6 So, I mean, I would say we're not excited
7 about stocks right now. That's reflected in the
8 underweight that we have.

9 And so, actually, that -- we have a column
10 there how under or over our target we were at
11 the -- the date we produced this report, which was
12 early November.

13 We like fixed income now. It's -- we're
14 probably on a blended basis on that portfolio
15 getting about a 5 percent return, which is nice.
16 If you believe a recession's coming, that's a good
17 place to have some money.

18 I believe that on the 10-year look
19 forward, stocks and bonds probably are pricing in
20 similar returns with much less risk and more yield
21 than fixed income.

22 So, mildly bullish on fixed income.

23 I really like absolute return right now.
24 I think that -- that if we execute well -- and we
25 spent a whole board meeting on this, you know,

1 recently -- I think we can earn close to our
2 Fund's return objective with no market beta.

3 Like -- like, why would you not want that?

4 So, that's my favorite asset class.

5 Private income. Fairly neutral on right
6 now. There -- the private credit element of that
7 portfolio, you know, there -- like, lending
8 standards did erode, to a degree, in the last five
9 years.

10 We haven't seen much defaults on the LBO
11 debt. That could be around the corner. But we
12 think we're kind of getting paid for it in a way
13 that we're not in the high yield market.

14 So, I would say we're neutral on private
15 income, and we're close to our benchmark weight
16 there.

17 Private equity is the one that Craig made
18 a comment on as I started. I am as bearish on
19 private equity as I've been in my career, based on
20 some slides that I'll go through.

21 It's a point in time thing. I think over
22 long periods of time, that can be a great place
23 for us to be active.

24 It is illiquid. So, if you put a lot of
25 money out in a situation where public markets have

1 correct but private hasn't, you lose the
2 optionality to do that in a year.

3 And I don't -- well, I'll get more into
4 that. I just haven't seen the correction that
5 I've seen in public markets quite yet.

6 And then real estate, we like. We're
7 seeing on -- like, very high quality properties
8 that we would be buying at 3.5, 4 percent cap
9 rates a year ago, we're seeing 5.5, 6 percent cap
10 rates.

11 What a great way to earn CPI Plus 5 to
12 purchase very high quality real estate at
13 6 percent cap rates.

14 And then we're -- Tim's doing some other
15 interesting things. We've got a big lending
16 program that our capital's gotten way more
17 valuable to developers and to other people in the
18 industry. We're making loans on properties that
19 we'd like to own at double-digit interest rates.

20 So, we really like that area right now.

21 Risk parity is not an area we like right
22 now.

23 I mentioned I like fixed income. I just
24 don't think we need to access it in a levered way,
25 which is -- is the risk parity approach.

1 And the performance of our portfolio, in
2 particular, has been disappointing. We were down
3 13 percent versus the benchmark was down 10 last
4 quarter.

5 So, it's an extremely small portfolio for
6 us, but not one that we're positive on.

7 Cash, we like right now. We can earn -- a
8 month ago, we could earn -- actually, today on
9 T-bills and commercial paper, we can earn over
10 4 percent returns just in cash. And so we like
11 that.

12 Gold's been disappointing. That's not in
13 our benchmark, but we've about 1 percent of the
14 Fund in gold.

15 And it's -- you know, probably around our
16 cost basis. The bulk of that was purchased at the
17 beginning of this calendar year.

18 I would have thought with the inflation
19 and war and -- and whatnot -- everything that's
20 happened this year, I would have thought gold
21 would be the place to be.

22 I think it will be the place to be next
23 year if the fed has to pivot -- you know, the fed
24 has not had to balance unemployment versus
25 inflation to date. It's been all inflation.

1 And -- and if inflation persists -- if
2 their early attempts to squash it with taking fed
3 funds up to 4.5 percent are unsuccessful and we
4 wake up in 6 months with high single-digit
5 inflation and now starting to be unemployment
6 issues, they could pivot.

7 And I think that would be when gold would
8 be a really nice place to be.

9 Right now, I think investors are not
10 finding it attractive when they can make 4 percent
11 in cash.

12 So, that's a tactical trade that I did
13 that has not been a good one, but we still have it
14 on. And I like it going into next year.

15 I think you like gold, too.

16 But --

17 MR. VADAKUMCHERRY: Yes.

18 CHAIR RIEGER: And Marcus?

19 MR. FRAMPTON: Yeah.

20 CHAIR RIEGER: What -- two things.
21 One, I really like this chart. I appreciate you
22 putting it in. Maybe that's one of the ones --
23 the new ones your analyst put together.

24 MR. FRAMPTON: Yeah. Absolutely.

25 I'm not good with these visuals.

1 CHAIR RIEGER: But the -- one
2 comment on the REITs that's in that chart that
3 they're trading at this big discount.

4 Is that -- is that because -- what's the
5 discount compared to?

6 Is that what the REIT managers are saying
7 this stuff is worth?

8 And is it just because they're not using
9 the same cap rates you are, or is that actually a
10 real --

11 MR. FRAMPTON: Yeah. I mean,
12 there's --

13 CHAIR RIEGER: -- a real --

14 MR. FRAMPTON: -- a firm called
15 Green Street that publishes NAVs for all the
16 public REITs. And then all the, like, Wall Street
17 research analysts publish NAV estimates for, like,
18 the big publicly traded REITs.

19 And so it's a -- it is an estimate. It's
20 not from the companies. It's from people that
21 follow them, estimating in the private market what
22 their real estate's worth.

23 It -- in fall -- like, in October, it was
24 at a 25 percent discount. And it's -- the REITs
25 have rallied hard. And it's now, like, a 6,

1 7 percent discount.

2 And so, I mean, we bought I think
3 100 million of REITs -- Tim did -- in October.

4 And so, generally, when you get a mid-20s
5 discount on the REITs to what people think the
6 privates are worth, it's worth buying some REITs.

7 But they're subjective because, I mean,
8 rates moved up. And a lot of, like -- in office,
9 for example, there aren't a lot of properties
10 trading. So, people don't really know what these
11 properties are worth.

12 So...

13 CHAIR RIEGER: Okay. Thanks.

14 MR. FRAMPTON: Yeah.

15 MS. RUBENSTEIN: Mr. Chair?

16 On the real estate segment -- and in part
17 of this packet, it was really interesting to see
18 your real estate team is actually more active than
19 the private equity team.

20 MR. FRAMPTON: Correct.

21 MS. RUBENSTEIN: That was
22 surprising.

23 MR. FRAMPTON: Well, our private
24 equity portfolio's over its long-term allocation.
25 Our real estate portfolio is significantly under

1 it --

2 MS. RUBENSTEIN: Okay.

3 MR. FRAMPTON: -- is part of that.

4 Like, we have a 12 percent long-term
5 target for real estate, and we're at 9.

6 And private equity --

7 MS. RUBENSTEIN: Okay.

8 MR. FRAMPTON: -- we have a
9 19 percent long-term target, and we're at 20.

10 MS. RUBENSTEIN: So, it's on
11 purpose.

12 MR. FRAMPTON: And then the -- I
13 believe -- like, we could have a debate if we had
14 our private equity people and our real estate
15 people because people tend to like their areas.

16 But I believe real estate's more
17 attractive than private equity right now.

18 MS. RUBENSTEIN: That's why -- back
19 to the head count thing -- I don't understand why
20 you can't fill those real estate positions if you
21 guys are actively deploying capital.

22 MR. FRAMPTON: Yeah. They're good
23 jobs.

24 I mean, I think someone -- the job
25 market's changing fast. I mean, it -- I think

1 we'll be able to fill some of those for sure.

2 But we want someone -- we want analysts
3 with a few years of experience. I mean, we're not
4 set up well to train people with no experience.

5 And that's part of the issue. I mean,
6 analysts with a little real estate experience have
7 been in really high demand.

8 MS. RUBENSTEIN: Yeah.

9 MR. FRAMPTON: And so -- but I -- I
10 think we can fill those positions.

11 So, now I'm going to talk a little bit
12 about my views on private equity. This chart
13 shows leveraged buyout multiples from the mid-90s
14 to the present.

15 This is the value of the companies being
16 bought as a multiple of their EBITDA, which is
17 earnings before interest, taxes, depreciation,
18 amortization.

19 So, that number is the predebt, pretax
20 cash flow of the businesses.

21 So, I started my career in 2002. And I
22 was in the private equity industry in '07, and I
23 can tell you that the '07 to '09 multiple
24 contraction from 10 to 8 just looks like a blip on
25 this page. It was, like, the most painful

1 experience for people in the industry. I mean, a
2 lot of equity was wiped out because these are
3 levered transactions.

4 And so it's -- it's kind of stunning to me
5 how expensive -- the multiples people are paying
6 for, you know, small, private companies.

7 And the multiples today are higher than
8 they were in '07, and I don't know where these
9 will go.

10 But there's no fundamental reason, in my
11 mind, why a middle market industrial business was
12 worth 7 times cash flow in 2002 and today is worth
13 12 times cash flow.

14 Like, it is -- if we wake up in a
15 different interest rate environment -- there's
16 just no reason why -- it's not -- like, some
17 things grow over time. Like, GDP of countries
18 grow over time.

19 Like, we could go to the worst recession
20 of the world, and our GDP will not be what it was
21 in 2002.

22 But the -- the valuation multiple of cash
23 flow isn't something that should just grow over
24 time. It's -- it's a reflection of -- of desire
25 to purchase these businesses. It's a reflection

1 of capital going after them. It's a reflection of
2 interest rate environment and opportunity of other
3 places to put money.

4 I don't know if you want to --

5 MR. VADAKUMCHERRY: Yeah. No.

6 I mean, I'd just add to the thought about
7 interest rates changing. I mean, that's probably
8 key in, you know, looking at this and saying it's
9 too expensive. Plus cost of all the imports
10 besides capital -- like, everything is going up.

11 So, to Marcus's point, I mean, there's --
12 even without that, there's no reason why a
13 multiple should steadily grow.

14 So, there is a point in time maybe where
15 we should reassess. But, you know, it's been a
16 fantastic decade. It's, like, good to have been
17 there.

18 But going forward, public markets have
19 corrected; private valuations haven't. And I
20 think we should just take a pause to see what
21 might happen.

22 MR. FRIER: May I make a comment?

23 CHAIR RIEGER: I think Ken has a
24 question.

25 MR. FRIER: Oh, I'm sorry.

1 CHAIR RIEGER: Go ahead, Ken.

2 MR. FRIER: Okay.

3 I was looking at the research regarding
4 the outcomes of private equity funds by vintage
5 year.

6 MS. RUBENSTEIN: That's my comment.

7 MR. FRIER: And it's a really
8 interesting result.

9 But let me back up, though, and say I
10 totally agree with Marcus that these EBITDA
11 multiples are -- make the outlook for private
12 equity more challenging.

13 And I also agree with him that there's
14 going to be markdowns in our private portfolio
15 that we haven't seen yet but that we are
16 vulnerable to -- to having lower marks on these
17 private holdings as they impact with the downturn
18 that's underway flows through in that reporting.

19 But the interesting thing that I thought
20 was worth mentioning in the research I did on --
21 to sort of vintage year performance versus in
22 private equity is that historically, recession
23 years have been really good vintage years for
24 investing in private equity.

25 And you can see the reason why on this

1 chart. Below EBITDA multiple is a good -- you
2 know, a good price to pay. And in 2001 on the
3 left there, you can see there was a trough in the
4 multiples of private equity GPs have to pay.

5 And that was a fantastic vintage year.

6 2009, another recession year. Turned out
7 to be a fantastic vintage year for investing in
8 private equity.

9 So, I totally agree with what Marcus is
10 saying, but I would -- I wouldn't want to, like,
11 load up on private equity right now.

12 But I also agree with Marcus -- pretty
13 much I agree with Marcus on -- I really like that
14 page -- the allocation view page that you
15 introduced.

16 I -- I -- and I pretty much agree with
17 your outlook on -- on these asset classes.

18 But I -- with regard to your tactics on
19 private equity, I -- I would agree also to be
20 cautious now. But maybe not cautious.

21 I agree -- if there's a recession next
22 year -- which is -- I agree with you is probably
23 quite likely.

24 That could actually end up being a better
25 entry point after the carnage has happened and you

1 have private equity resets, you might want to go
2 bet -- go big again.

3 MR. FRAMPTON: Yes.

4 I'm hoping that we'll earn some
5 credibility. Then if we have a different view in
6 six months, we can turn it back on fast.

7 And I think we've got it -- Allen and his
8 team are set up where we can be pretty nimble.

9 MS. RUBENSTEIN: So, that would be
10 my same comment.

11 I -- I loved the presentation. But as a
12 fiduciary responsibility and working in the
13 private equity industry, this may be one of the
14 greatest vintage years of the next decade.

15 And just make sure that, to a risk
16 standpoint, if we say we are in endowment-style
17 investing, that means private equity has been as
18 high as 36 percent.

19 So, the question on the asset allocation
20 that I have that I would like us to look into is:
21 While we may be over the board-approved
22 20 percent, that's not really pure endowment-style
23 investing.

24 So, I know Craig and I have talked about
25 this. Are we actually taking enough risks, truly,

1 if these may be some of the best vintage years?

2 That's just kind of the high-level
3 question I have.

4 MR. FRAMPTON: Well, this chart has
5 two recessions -- and Ken's right -- both of those
6 recessions represented great entry points for
7 private equity. And it -- largely because
8 valuations came down.

9 The thing that's different this time
10 around than the other times is how much
11 institutional capital -- how many people have
12 appreciated exactly what you said and how great a
13 job Yale did in the early 2000s.

14 And now, like, every State pension fund
15 has, like, enormous private equity allocations --
16 is very different than what happened in '01 and
17 '07.

18 And I don't know how it'll play out. But
19 it is possible that we could go into a recession,
20 have a correction in stocks, and not see an
21 appropriate correction in private equity
22 multiples.

23 Like, I'm -- I don't -- I'm not saying
24 that's going to happen, but it's a possibility.

25 And I have not seen really much of a move

1 in the private equity side, and so I want to see
2 that first. Like, I don't want to just assume
3 that the next recession will be a great entry
4 point. Like, I need to see that chart change.

5 And that chart's through September. Like,
6 sometimes these charts are, like, stale. But,
7 like, year to date, I mean, there hasn't been -- I
8 haven't seen a correction.

9 I mean, there's less data than on the
10 public markets, and people could debate it. But,
11 I mean, it is possible that what you're saying is
12 right.

13 And it's possible that this time will be
14 different because there's so much money in the
15 sector.

16 MR. VADAKUMCHERRY: On the subject
17 of shutting off the tap, you've still got about
18 4.5 billion of unfunded commitments in the private
19 equity portfolio. That's pretty sizable.

20 And the forward pacing plan is not going
21 down to zero. So, that's not the plan either.

22 So, I think, you know, if that opportunity
23 come -- emerges -- like you've just pointed out --
24 that valuations do get collected, we always have
25 the ability to go back in.

1 So, it's not like, you know, we're cutting
2 off relationships and --

3 MS. RUBENSTEIN: Okay.

4 MR. VADAKUMCHERRY: Which is key in
5 private equity.

6 I think the -- what Marcus and -- and --
7 and we are trying to highlight is valuations are
8 pricey today. And let's just be cognizant of
9 that. Maybe, you know, be aware of that.

10 And if these continue over the next, let's
11 say, 12 to 24 months -- which -- which is still a
12 case -- I mean, private equity hasn't corrected so
13 far.

14 MS. RUBENSTEIN: Yeah.

15 MR. VADAKUMCHERRY: Let's take a
16 pause in terms of how we want to deploy.

17 That's --

18 MS. RUBENSTEIN: Okay.

19 MR. FRAMPTON: You know, on this
20 page, I've overlaid the EBITDA multiple of the
21 S&P 500 as a select chart against the same data
22 from the prior page, which is EBITDA multiple and
23 leveraged buyouts.

24 So, like, when I started my career in
25 private equity was in '01. The playbook

1 definitely was you're buying at 4 or 5 turns in
2 EBITDA less than public comps, professionalizing
3 businesses that hadn't been institutionally owned
4 before, and then exiting through IPOs or selling
5 to public companies at fairly enormous -- or
6 fairly material multiple changes.

7 So, like, these private equity -- and
8 those were the days when -- I mean, the
9 performance of Yale endowment in the late '90s and
10 early 2000s was remarkable. They were earning --
11 like, the total fund, Yale endowment, was earning
12 20, 30 percent annual returns at a time when the
13 Permanent Fund was earning single-digit returns.

14 If you look at the last five years, we
15 have very similar results to Yale endowment. And
16 a lot of people have -- have -- you know, like,
17 not 20 percent different returns.

18 And part of that is the adoption of that
19 endowment model broadly. And more capital is in
20 the private equity area.

21 And so this really attractive phenomenon
22 that we saw in the late '90s and early 2000s of
23 just very large multiple differentials between
24 institutional private deals and institutional
25 public deals went away in the -- around 2010.

1 And I think that was around the period
2 when, you know, funds like the Permanent Fund
3 and -- and other institutions adopted that model.

4 And, you know, so if you look from 2010 up
5 through 2015, I mean, they were -- valuations on
6 public and private deals were very similar.

7 And then the mark -- the public market got
8 really frothy here in the last five years, and it
9 pulled away. And then you see the big contraction
10 in the public market multiples through September
11 of this year and the private multiples not
12 correcting to a same degree.

13 So, I -- you know, that -- I think a lot
14 has changed in those 30 years that are on this
15 chart. Like, it's a -- it's a very different
16 environment today for -- for many reasons.

17 Yes?

18 MR. CRUM: So, for clarification,
19 you're comfortable with our 3.5 percent overweight
20 in PE, and you want to hold -- not -- not
21 rebalance at this point in time, and see what
22 happens in the next six months on if the market
23 resets at all?

24 MR. FRAMPTON: So, I mean, the
25 secondary market for private equity interest.

1 Like, if we went to sell our interests, we
2 would probably be -- we would be taking
3 double-digit discounts.

4 MR. CRUM: Yeah.

5 MR. FRAMPTON: So, if you, like,
6 sort of valued our portfolio and where we could
7 liquidate it today, we probably wouldn't be
8 3 percent overweight.

9 I would have -- with perfect hindsight --
10 so, the last, like, three or four years, we've
11 had target deployment of one-billion-six to
12 private equity with a \$400 million range around
13 it.

14 We pretty consistently took that whole
15 overage and did 2 billion a year. With hindsight,
16 it would have been probably better to be more
17 level.

18 This year, we'll probably put out a
19 billion in private equity.

20 So, our -- we've moderated our deployment,
21 but not massively.

22 And it -- to be honest -- like, if we
23 hadn't used that overage as consistently as we
24 did, we could have just probably stayed at the
25 same deployment. Which is probably the right

1 thing to do is not try to, like, time the cycle.
2 Like, have steady deployment to top-tier managers.

3 Because we have that overweight, we've had
4 to, like, cut back a little bit. And also because
5 we just don't like what we're seeing in the
6 market.

7 MR. CRUM: Okay.

8 MR. FRAMPTON: But we're not
9 cutting back completely.

10 We're -- we probably -- we'll probably do
11 \$1 billion this year of deployment.

12 MR. CRUM: Thank you.

13 MR. FRAMPTON: So, there's
14 leveraged buyouts, which is half or more than half
15 of the industry. The other half is venture
16 capital.

17 And this is just a summary of an article
18 that was in the Journal in November. It's just
19 pointing out that venture capital has, like, been
20 unabated.

21 You know?

22 So -- so, there's still a lot of money in
23 the system.

24 The article's just saying, "Even given the
25 decline in public markets, venture capital funds

1 have raised a record amount of money in 2022.
2 They've raised more money in the first three
3 quarters of the year than any prior full year."

4 So, it's not this phenomenon where you see
5 capital flowing out of a space and things getting
6 really attractive at that point. It's just --
7 it's still -- everyone one's kind of waiting to
8 see what happens.

9 Public funds have much larger allocations
10 to this area than they have in the past. And so
11 these factors in venture capital and buyouts have
12 resulted in just not as big of a reset as -- you
13 know, we want to see it be more aggressive.

14 And then here's the Fund -- I mean, the --
15 like, FTX has been in the news. It's this, like,
16 fraud, Ponzi scheme in the crypto space. They
17 raised \$2 billion from venture capitalists.

18 And, I mean, we only had about -- well, I
19 shouldn't say "only" because this is actually a
20 lot of money. We had \$4 million of exposure to
21 FTX.

22 Our overall crypto experience has been a
23 good one because we had a couple venture
24 capitalists invest in Coinbase. That company went
25 public. They exited their position.

1 So, we've made tens of millions of dollars
2 in profits in venture crypto. So, it's been a
3 good experience for us.

4 But this most recent one is -- kind of
5 highlights some of the excess that's occurred in
6 venture capital that this would happen.

7 MR. VADAKUMCHERRY: Yeah.

8 So, Bridgestone -- or the governance --
9 some of the big names in private equity actually
10 apologized with letters to, you know, investors
11 saying they didn't do proper due diligence.

12 That's probably a result of -- to -- to
13 what Marcus said earlier -- you know, too much of
14 capital sloshing around.

15 So, naturally the -- sort of when -- when
16 capital is in so much of excess, people want to
17 deploy. I mean, managers, GPs want to deploy.

18 It's not all bad. But that definitely is
19 reflected in FTX's or -- that sort of, you know,
20 situation.

21 Definitely there was a breakdown of
22 governance internally and within GPs or private
23 equity companies who invested in them.

24 Because -- and they are -- some of them
25 are top-quality names that we've heard of.

1 That, again, is another -- you know,
2 another reflection, maybe indicator --

3 MR. FRAMPTON: So, these -- didn't
4 have -- put \$3 billion into a private company that
5 was three years old. Didn't negotiate for board
6 representation. Didn't negotiate control rights
7 over related party transactions -- which is what
8 took FTX down.

9 We have several managers that participated
10 in that, and it is concerning that those standards
11 have eroded.

12 And it's concerning how -- you know, like,
13 when we would buy a -- a core real estate
14 property, we have something behind that.

15 And this -- it just -- the money vanished
16 in a week. It's concerning. I mean, I'm
17 highlighting the worst example, but it begs the
18 question of -- you know, like, I have -- I'm a --
19 friends with a CIO -- a smaller allocator who's in
20 some of these funds.

21 And she was saying to me, "Like, what are
22 you going to say to these managers? Because we're
23 a small investor in these. You're a big investor
24 in some of these managers. Like, this is
25 unacceptable."

1 And so I don't -- you know, I think that
2 it's not specific to those managers. I think
3 governance and standards have eroded in venture
4 capital because there's been so much excess, so
5 much money being made.

6 And I don't actually think it's specific
7 to those managers. I think they make many
8 different bets, and they thought that this was an
9 opportunity with a lot of upside. And they had
10 a -- much more money under management than they've
11 had in the past and tremendous pressure to get it
12 invested.

13 And that results in accepting investments
14 without board representation or just standard
15 governance that you would expect.

16 And then there's another deal. Celsius.
17 We don't have exposure to that. But Caisse de
18 Depot in Canada made \$150 million direct invest --
19 private equity investment into Celsius. And, you
20 know, 100 percent wipeout in days when it was --

21 I don't think it's been proven it was a
22 Ponzi scheme, but people are saying it was a Ponzi
23 scheme.

24 It's, like, what -- you know?

25 MS. RUBENSTEIN: Yeah.

1 MR. FRAMPTON: So...

2 MS. RUBENSTEIN: Marcus, on any of
3 these managers -- like, you guys, I believe, did a
4 200 million allocation to Sequoia.

5 Are you on their LPACs?

6 MR. FRAMPTON: I don't believe --
7 we are -- we are not on --

8 MS. RUBENSTEIN: Okay.

9 MR. FRAMPTON: -- Sequoia's LPAC.

10 MS. RUBENSTEIN: Would that maybe
11 be a better governance request when you guys do do
12 these venture capital managers of not just --
13 because it -- right?

14 When you're underwriting, you're
15 absolutely looking at what are the operational
16 controls and how do their investment committees
17 function.

18 But, really, to have a seat into their
19 decision-making, you would need to be on their
20 LPAC in order to understand it.

21 MR. FRAMPTON: Yeah. It would
22 certainly help.

23 I mean, we have many LPAC seats. This is
24 when we're a big investor with a manager. We --
25 so, that is something we do. We don't in that

1 case.

2 MS. RUBENSTEIN: I mean, they were
3 some of the most sophisticated --

4 MR. FRAMPTON: But --

5 MS. RUBENSTEIN: -- venture names.

6 So --

7 MR. FRAMPTON: That manager is top
8 notch. I mean, I don't -- I mean, this is what I
9 was saying to, like -- this peer of mine was,
10 like, "Well, are you going to" --

11 I don't know what she was expecting me to
12 do. Like, yell at them or something.

13 But it's, like, they have outstanding
14 returns, that manager we're talking about. They
15 had outperformed.

16 You know, I don't --

17 MR. VADAKUMCHERRY: Some of that --

18 MR. FRAMPTON: I don't know how
19 many deals they have in this fund. They might --

20 How many deals would they have in that
21 fund?

22 MR. POAG: We need to be careful --

23 MR. WALDROP: Probably 1500 --

24 MR. POAG: -- about revealing
25 company portfolio information --

1 MR. FRAMPTON: Okay.

2 Anyway, I -- I -- it's -- you know, I'm
3 not trying to, like, dwell on this one instance.
4 I think it's indicative of -- of excesses in a
5 sector.

6 MS. RUBENSTEIN: Okay.

7 MR. VADAKUMCHERRY: Right.

8 MR. FRAMPTON: I mean, there -- I'm
9 sure they're a -- I'm sure -- that manager we're
10 talking about is the most outstanding --

11 MS. RUBENSTEIN: But they're the
12 most --

13 MR. FRAMPTON: -- there is in the
14 business.

15 MS. RUBENSTEIN: -- well known.

16 MR. FRAMPTON: I'm sure they're
17 relooking at all sorts of things that they did.

18 MR. VADAKUMCHERRY: Yeah.

19 MS. RUBENSTEIN: Right.

20 MR. FRAMPTON: And even with this
21 loss, I mean, they still have an outstanding track
22 record.

23 MS. RUBENSTEIN: Okay.

24 MR. FRAMPTON: So, I think we're in
25 good funds. Managers are doing right things.

1 But it just happens when you're in a
2 sector that has excess. You just -- standards
3 erode.

4 MS. RUBENSTEIN: Okay.

5 CHAIR RIEGER: Marcus, just a
6 general comment -- or question.

7 You know, of the 4.5 billion that I think
8 you said we were -- we have commitments to private
9 equity that are, you know, potential draws, is
10 that --

11 So, what -- what degree do -- do those
12 managers have the discretion to hold back?

13 If they were looking at charts like ours,
14 can they just say, "We're not going to do anything
15 for the next six months"?

16 Is that within their --

17 MR. FRAMPTON: Yeah.

18 Generally --

19 (Indiscernible crosstalk.)

20 CHAIR RIEGER: -- put out a mandate
21 to just pump it out there?

22 MR. FRAMPTON: Generally, they have
23 a three-year investment period. And it's, like,
24 use it or lose it.

25 And, I mean, we've seen -- yeah. I mean,

1 it is use it or lose it.

2 It's not, like, this month you have to do
3 it. It's usually three years.

4 But --

5 CHAIR RIEGER: So, you're pretty
6 confident that they are --

7 MR. FRAMPTON: Oh. Not all --

8 VICE CHAIR RIEGER: -- have the
9 same analysis that you --

10 MR. FRAMPTON: Oh. I -- it depends
11 on the manager.

12 I mean, we try to back managers that show
13 discipline in frothy markets. And some managers
14 push the envelope on how much they can raise,
15 others don't.

16 I mean, that's what Allen and his team
17 look at.

18 And I -- but -- yeah. But, I mean,
19 generally, they will spend all the money you
20 commit to them. It's -- it has happened, but it's
21 rare that a manager will not deploy --

22 MR. VADAKUMCHERRY: Yeah.

23 MR. FRAMPTON: -- the money
24 committed to them.

25 MR. VADAKUMCHERRY: I think we

1 should expect them to --

2 MS. RUBENSTEIN: It's usually the
3 opposite.

4 Usually they deploy -- that's what's been
5 happening. They deploy it in 24 months, and then
6 they come back into the market and raise more
7 money and more money --

8 MR. VADAKUMCHERRY: Sure.
9 That's --

10 MS. RUBENSTEIN: -- without ever
11 having the exit.

12 So, if anything, it's probably going to
13 get things more normalized -- which is go back to
14 the three-year deployment period.

15 A standard 10-year fund, you have 2 -- two
16 1-year extensions, right?

17 MR. FRAMPTON: Right.

18 MS. RUBENSTEIN: So, if anything,
19 people may start triggering those extensions.

20 But, to your point, it may be of just a
21 rush of deals --

22 MR. FRAMPTON: Uh-huh.

23 MS. RUBENSTEIN: -- to get it done.

24 MR. FRAMPTON: Yeah. It'll be
25 interesting.

1 But, I mean, it may be that that
2 4.5 billion's deployed into a very attractive
3 environment. I mean, if we go into a recession
4 and markets normalize or correct.

5 I just haven't really seen it yet.

6 MS. RUBENSTEIN: Okay.

7 MR. FRAMPTON: Okay.

8 So, continuing the gloom and doom.

9 So, the -- the -- probably the most
10 predictive measure of forward returns on stocks
11 are -- is the Shiller price earnings multiple,
12 which is the current price of stocks over 10 years
13 of earnings per share, adjusted for inflation.

14 So, you know, everyone quotes current year
15 earnings, but current year earnings move around a
16 lot with where we are in the cycles. And the
17 Shiller P/E normalizes that over the last 10
18 years.

19 So, you know, at -- coming into this
20 year -- so, that's -- left chart blue line is the
21 Shiller P/E.

22 Coming into this year, stocks had only
23 been that expensive in 2000 and 1929. And they've
24 now corrected from a Shiller P/E of 39 -- oh.
25 And, actually, I'm wrong. It had only been that

1 expensive in 2000. It was more expensive in 1929.

2 It's corrected from a Shiller P/E of 39
3 down to 28. So, it's still a fairly
4 expensive equity market on that measure throughout
5 history.

6 And then on the right there, we've put
7 together a scatter plot on the forward 10-year
8 real returns of stocks versus the Shiller P/E.

9 And the red line, you know, represents
10 where we are today. I believe -- yes -- at 28.

11 And it would indicate a likely 10-year
12 forward real return of 2 percent. I think in your
13 updated Callan forward expectations, you had -- it
14 was about 7 --

15 MR. ALLEN: Yeah.

16 MR. FRAMPTON: -- nominal.

17 So, Callan's saying -- I mean -- and,
18 like, no one knows what's going to happen, so I'm
19 not saying they're wrong.

20 But Callan's calling for over 5 percent
21 real return on stocks. And I'm suggesting that it
22 might be more like 2 percent real.

23 So, I'm not feeling like it's, like -- you
24 know, the -- and actually, through today, the
25 equities are down 12 percent calendar year to date

1 through today.

2 So, like, it's actually not that big of a
3 correction that we just went through after the
4 recent rally.

5 So, I have no idea where the stock
6 market's going in the next year, but I'm
7 suggesting that it's not, like, a -- a cheap
8 market right now.

9 And I've got some slides -- I mean, these
10 charts are, like, small. But, I mean, the
11 point -- it's hard to follow. These are just some
12 charts from some research we follow.

13 And the takeaway is -- is just that -- on
14 the right that -- this is from Bridgewater. The
15 takeaway is that they believe that stocks have
16 factored in the change to discount rates -- are
17 actually up now for discount rates and aren't
18 factoring in a recession on earnings.

19 So, I -- you know, time will tell what
20 happens.

21 And then the -- another thing I just
22 wanted to point out as we talk about asset
23 allocation is execution.

24 Like, how do we execute in these asset
25 classes?

1 And -- and absolute return -- I'm glad we
2 did that at the last board meeting. We're, like,
3 in -- I think our executed -- Julian's execution
4 there is outstanding, and we've had good
5 performance.

6 And we've put together a portfolio that's
7 really valuable and does not look like other --
8 doesn't look like the benchmark in that we have so
9 little beta and the returns have been so good.

10 And so if we were just spraying money out
11 to hedge funds -- like, if -- if we said we want
12 half the fund in hedge funds -- like, you
13 convinced us last board meeting -- you did such a
14 good job, we're going to put half the Fund in
15 hedge funds, our execution would definitely
16 suffer.

17 We'd be investing in lower quality
18 managers, and it just wouldn't actually probably
19 at that point be probably something that we should
20 even have.

21 But because Julian is -- has such a high
22 bar and is so careful in what he invests in,
23 it's -- the execution's good.

24 And when you look at the optimizer that
25 Greg will do in February, there's just a return, a

1 correlation, and a volatility. It does not factor
2 in execution at all.

3 Like -- and so your optimizer might say a
4 third hedge funds, and I would say, "Let's not do
5 that because our execution will be terrible."

6 Fair?

7 MR. ALLEN: Right. Yeah.

8 So, we don't -- we kind of assign kind of
9 a market average execution to each asset class.
10 We don't give Marcus 26 extra basis points because
11 he has Julian in our expected return.

12 So, you know, we use the same capital
13 market expectations for the whole year with every
14 client. And, you know, it's not -- our clients
15 aren't not, like -- like, we'll be going -- where,
16 you know, everybody's above average.

17 Right?

18 MR. FRAMPTON: Right.

19 MR. ALLEN: So, we ran into
20 problems in the past -- actually up here in
21 Alaska -- giving special, higher returns to
22 clients who we thought had better execution.
23 We've done that in the past. We did that for the
24 Permanent Fund.

25 And ARMB was really upset with us that

1 they didn't get the same treatment.

2 Right?

3 So, we have to be real careful. And so
4 we -- we don't do that anymore.

5 MR. RICHARDS: Through the Chair,
6 what -- what years was that, Greg?

7 Out of curiosity.

8 MR. ALLEN: That was, like, four --

9 MR. CENTER: That was a couple
10 years back. Yeah.

11 MR. ALLEN: Three or four years
12 ago. Yeah.

13 MR. CENTER: At least four years
14 now. Yeah.

15 MR. ALLEN: Yeah.

16 MR. FRAMPTON: So -- and I think
17 that's appropriate. It's hard for him to have
18 different numbers for --

19 And actually, just for us, our numbers
20 would be different depending on the size of the
21 portfolio because certain areas --

22 MR. VADAKUMCHERRY: Right.

23 MR. FRAMPTON: -- are capacity
24 constrained.

25 And so on this chart, the size of the

1 circles represent the size of our current
2 portfolio. And then the color and -- left to
3 right -- represents how capacity constrained I
4 think that these areas are and how much better you
5 can be if you're smaller and have a higher bar.

6 And I think I'm happy that we're doing
7 more like a billion a year in private equity now
8 because I think -- I think we can have a higher
9 bar and we can have higher execution.

10 We did last year underperform our
11 benchmark in private equity for the first time in
12 a long time.

13 And so that raised the question in my mind
14 of whether our execution has declined as the
15 portfolio's grown. And maybe it's not as dramatic
16 as this chart illustrates, but I think we can be a
17 little bit better in private equity if we're a
18 little smaller.

19 And then this -- it's the same point.
20 But, I mean, if you ask me where we can earn a
21 return of CPI Plus 5, what are the best areas to
22 do it, I think it's absolute return in real estate
23 because I think in real estate right now -- it's
24 just the inherent cash flow and returns of these
25 properties is giving us a return well in excess of

1 CPI Plus 5.

2 Whereas in stocks and in private equity,
3 you're making a prediction on where multiples will
4 be in three years.

5 Like, the -- the dividend yield on the
6 stock market could be 2 percent, and I could be
7 saying, "I think it's a 2 percent real return."
8 Greg could be saying, "I think it's a 5 percent
9 real return."

10 And we're not debating the inherent cash
11 flows or return coming off these assets. We're
12 just trying to predict where multiples are going
13 to be.

14 Whereas in real estate today, we're buying
15 very high quality properties at fundamentals that
16 just produce CPI Plus 5 because their cap rate's
17 at 5 or 6, there's rent growth similar to
18 inflation, and we do use a little leverage.

19 So, in the market today, Tim and his team
20 are underwriting real estate transactions for core
21 properties of 8 or 9 percent over a 10-year hold
22 kind of produced from the fundamentals of the
23 property, not a question whether we can flip it to
24 someone else.

25 And then absolute return all boils down to

1 execution. I think we can generate close to a
2 real return of CPI Plus 5 there through the
3 trading activities of our -- our partners.

4 So, I -- those are -- I don't know whether
5 stocks will produce a 5 percent real return.
6 Based on that prior slide, I suspect they won't
7 over the next 10 years.

8 But I do think these two areas will.

9 MR. ALLEN: Marcus --

10 MR. FRAMPTON: Yeah.

11 MR. ALLEN: Through the Chair.

12 Can you talk a little bit about the path
13 that the target for real estate has taken at the
14 Permanent Fund?

15 Because I feel like it was higher, and
16 then it was reduced.

17 And is it kind of on its way back up?

18 And -- you know --

19 MR. FRAMPTON: Yeah.

20 When I came in 2012, we had probably 12 or
21 13 percent of the Fund in real estate. And we had
22 a long period of challenging performance and poor
23 execution.

24 I mean, back to that point, like, if you
25 execute poorly, it's, like, you know, you're

1 better off just owning a stock market.

2 And in particular, we owned very little
3 industrial, which has probably been the top area
4 of the last decade.

5 And we owned -- the bulk of our apartment
6 exposure was one portfolio that we sold in 2016.

7 And so after 2016, our portfolio was,
8 like -- it's a bit of exaggeration -- but half
9 off -- it's half, like, mall retail.

10 MR. CENTER: Oh, boy.

11 MR. FRAMPTON: And just got killed.

12 You know?

13 And Tim's done a great job kind of turning
14 things around.

15 We now have our sector weights exactly
16 where they need to be, and we beat our benchmark
17 in real estate last year for the first time in a
18 long time.

19 But it was -- from an exposure standpoint,
20 it was 12. And then it got down to 6 when we sold
21 the apartment portfolio and then got write-downs.

22 And then I think our team had a hard time
23 deploying capital into multi-family knowing that
24 they had sold at this valuation. They didn't --
25 that was more appealing to them than what they

1 were seeing on new deals.

2 And we were kind of frozen for a few
3 years. So, the --

4 MR. ALLEN: So, the target was
5 adjusted to sort of reflect that.

6 So, I guess I would point out that the
7 current target for real estate is -- is low
8 relative to what it's been historically for the
9 Fund.

10 And so as we're thinking about asset
11 allocation going into May, I'm hearing Marcus is
12 bullish on their execution now. Generally bullish
13 on the asset class.

14 If there were an increase in the
15 allocation to real estate that comes out of the
16 May meeting, it would really be kind of getting
17 you back to where you have historically been --

18 MR. FRAMPTON: Correct.

19 MR. ALLEN: -- in terms of your
20 real estate target.

21 MS. RUBENSTEIN: Mr. Chair?

22 CHAIR RIEGER: I just -- we'll take
23 questions.

24 I just want to know -- we are at risk of
25 running behind --

1 MR. FRAMPTON: Oh, okay.

2 CHAIR RIEGER: -- if we go too
3 slow.

4 But go ahead.

5 MR. FRAMPTON: How much time do I
6 have left so I can tailor it to --

7 CHAIR RIEGER: Well, to be done on
8 schedule, you'd be done at 10:30.

9 But this is -- a asset allocation, this is
10 really important --

11 MR. FRAMPTON: Right.

12 CHAIR RIEGER: -- so I don't want
13 to shortchange it.

14 MR. FRAMPTON: Okay.

15 CHAIR RIEGER: Just --

16 MS. LOESCH: Trustee Rieger, if I
17 may?

18 CHAIR RIEGER: Yeah.

19 MS. LOESCH: We have -- I had
20 allotted 30 minutes for the investment advisor
21 comments, and we only have two that will be
22 joining us.

23 So, that gives us 10 extra minutes.

24 MR. FRAMPTON: Okay. I'll take
25 those.

1 MS. LOESCH: Just so you know.

2 CHAIR RIEGER: Okay.

3 So, consider yourself having -- just

4 having gotten an extra 15 minutes or so.

5 MR. FRAMPTON: Okay. Deal.

6 MS. RUBENSTEIN: Mr. Chair?

7 CHAIR RIEGER: Go ahead, Ellie.

8 If you had a question --

9 MS. RUBENSTEIN: Yeah.

10 CHAIR RIEGER: -- go ahead.

11 MS. RUBENSTEIN: So, back to your

12 30-year window comments, right, when the Yale

13 endowment model became famous -- it's a real

14 question for you guys.

15 Is this new sovereign wealth fund standard

16 going to become the next decade?

17 Because it seems like you've built a

18 really impressive diversification framework that

19 allows you to do some of the different creative

20 stuff as you get into things like what is special

21 ops.

22 So, I'm trying to figure out where you're

23 pulling inspiration from in other portfolios that

24 are doing -- when he says you're -- you're

25 increasing real estate.

1 What benchmark or peers are somewhat doing
2 this?

3 MR. FRAMPTON: I don't know that I
4 know the answer to that. I mean, I could think
5 about it and come back to you.

6 I mean, I'm trying to look and see where
7 there's value in the market and how we can put a
8 portfolio together with balance and lower risks
9 that -- that achieves the return we want.

10 I don't know -- I mean, I think that -- I
11 think if you look at -- I mean, we're a large
12 public fund. If you look at our portfolio against
13 other large State public funds, I think we have a
14 higher risk portfolio than average. A high-octane
15 portfolio.

16 I think in the 2000s, we had a more
17 conservative portfolio than average.

18 I don't know that -- I mean, I guess you
19 could call what we have an endowment model. But,
20 I mean, I don't -- I think it was the correct move
21 when Jay Willoughby moved in that direction 10
22 years ago.

23 I never heard him call it, "We're now
24 doing an endowment model."

25 I heard him say, "I like private equities

1 right now."

2 MS. RUBENSTEIN: Okay.

3 MR. FRAMPTON: "I like the setup."

4 I don't think -- I mean, we'll get to,
5 like, a -- what I've labeled a strawman portfolio.

6 It's not, like, radically different than
7 what we're doing right now. It's a more balanced
8 portfolio with lower risk than what we're doing
9 right now that can achieve our return objectives.

10 MS. RUBENSTEIN: Okay.

11 MR. FRAMPTON: And there's probably
12 some sovereign wealth fund doing something
13 similar, but -- I don't know.

14 I'll work with Pauly on the name and --
15 Do you have somebody in mind?

16 No?

17 CHAIR RIEGER: Ken, did you have a
18 question too?

19 MR. SKJERVEM: I -- I did.

20 CHAIR RIEGER: Oh.

21 MR. SKJERVEM: I -- through the
22 Chair --

23 CHAIR RIEGER: Oh. John. Go
24 ahead.

25 MR. SKJERVEM: Yeah.

1 I mean, it is a -- it is an endowment
2 portfolio --

3 MS. RUBENSTEIN: Yeah.

4 MR. SKJERVEM: -- relative to your
5 public fund peers because the public fund peers
6 are trying to de-fees a set of liabilities.

7 MR. FRAMPTON: Uh-huh.

8 MR. VADAKUMCHERRY: Right.

9 MR. FRAMPTON: Right.

10 MR. SKJERVEM: And going forward,
11 we will be increasingly challenged to do so in
12 the -- as our plans mature.

13 The maturation of even the well-funded
14 plans is happening very quickly. And even
15 well-funded plans will be in a situation by 2030
16 where the negative cash outlays will be mid -- and
17 in some cases -- upper single digits.

18 The Permanent Fund has its own challenges
19 not around the formula but its distribution. But
20 it is a distribution. Therefore, in my mind, it
21 is an endowment.

22 MR. FRAMPTON: Right. That's a
23 very good --

24 MR. RICHARDS: Through the Chair.

25 I mean, it's the difference between having

1 a defined set of liabilities that you know you
2 have to meet come high or hell water [sic] -- we
3 don't have that.

4 We have 5 percent a year --

5 MR. SKJERVEM: Right.

6 MR. RICHARDS: -- on a calculated
7 basis.

8 If we underperform, it's still 5 percent a
9 year. It's not, "You got to pay people's
10 pensions."

11 So, I mean, you can call it -- just like,
12 you know -- Pauly, like, how do you -- what title
13 do you use --

14 MR. FRAMPTON: Okay. Yeah.

15 MR. RICHARDS: -- in the market,
16 right?

17 MR. FRAMPTON: No. I was --

18 MR. RICHARDS: But it's -- it's
19 not. It's a fundamental way you think about what
20 you're trying to achieve.

21 MR. VADAKUMCHERRY: I think when
22 you look at it from a -- you know, asset
23 allocation -- to your point, Trustee Rubenstein --
24 that -- you know, and when you -- and I think
25 Greg's -- Callan's point about that earlier.

1 We are more towards -- in the spectrum of
2 public to endowment models -- let's say in terms
3 of asset allocation alone. Not the liability side
4 of payment structures -- we are much closer to the
5 endowment model -- if you want to call it that
6 just to name it -- where we have a higher risk
7 portfolio.

8 Higher risk meaning more equity. Equity
9 exposure. Whether that's private or public.
10 Definitely skewed, I would say, much towards the
11 endowment model.

12 So, if you take a Yale, for example, we're
13 not there.

14 MS. RUBENSTEIN: Huh-uh.

15 MR. VADAKUMCHERRY: But we did that
16 exercise about two years ago -- I mean, a year and
17 a half ago -- where we looked at that spectrum.
18 And that was in the context of the risk capital
19 definition and stuff.

20 So, we were much closer to the endowment
21 model.

22 And I think one factor that Marcus pointed
23 out earlier in terms of scalability -- it's got
24 two dimensions. Like, one is the market, and one
25 is our capabilities internally.

1 MS. RUBENSTEIN: Yeah.

2 MR. VADAKUMCHERRY: So, we need to
3 factor both that -- when you look at Yale, they've
4 got a different resource structure.

5 I'm -- we have got one of the best teams.
6 I'm not talking about the teams at all.

7 But where we are looking -- a lot of
8 factors. So, we are in that higher risk, I would
9 say, space. And all we're saying is, you know, we
10 are there.

11 And maybe should continue to be there, but
12 not go higher.

13 So, I think that's -- that's fundamental
14 in -- in this --

15 CHAIR RIEGER: Adam?

16 MR. CRUM: Just for context.
17 You've been mentioning Yale a lot.

18 What is their P/E target at?

19 MR. FRAMPTON: I'd have to look it
20 up.

21 I -- they had it broken out -- I think
22 it's in the mid to high 30s, I believe.

23 MR. CRUM: Okay.

24 MS. RUBENSTEIN: 36 percent.

25 MR. FRIER: Yeah.

1 MS. RUBENSTEIN: So, that's what
2 I'm saying.

3 We're underperforming --

4 MR. FRIER: FOR -- and Yale -- it's
5 probably about 30 percent if you include venture
6 and leveraged buyouts. I think they have more in
7 venture than leveraged buyouts. So, that's one
8 way that the Yale is different from us.

9 They're about the same as us on real
10 estate. I think Yale's about 10 percent. And
11 that's, you know, that's close to where we are.

12 The other big difference is Yale has much
13 more absolute return than we have. More than
14 20 percent absolute return.

15 And, you know, that's a portfolio that
16 we're just (inaudible).

17 MR. CRUM: Thank you.

18 MR. RICHARDS: Through the Chair.

19 CHAIR RIEGER: Go ahead.

20 MR. RICHARDS: Just final point
21 there is -- it --

22 So, Sebastian, you say we're more on the
23 high end of risk, but we're not. Like, we're --
24 we're in the -- you know, of everything Callan
25 shows us, we're kind of in the middle, right?

1 We're between your average pension fund
2 and your average more aggressive endowment fund.

3 But risk pays over time --

4 MR. VADAKUMCHERRY: Absolutely.

5 MR. RICHARDS: -- as we all know.

6 So, over a 10- and 15- and 20-year period,
7 we can take on the risk and absorb it. Even our
8 liabilities adjust to tolerate some bad years.

9 So, you know, a mindset to be like a
10 pension fund with a defined liability puts us in a
11 narrow -- you're -- you're taking --

12 MR. VADAKUMCHERRY: Oh, totally.

13 MR. RICHARDS: -- risk into account
14 too much.

15 Right?

16 We -- we want to risk up. We don't want
17 to risk down. That's the way I think about it.

18 Now, not all things are absolute, and
19 we're all fine in our balance.

20 But, I mean, that's my thought.

21 MR. VADAKUMCHERRY: I mean,
22 totally. I mean, there's no -- I don't think
23 there's any debate about, you know, whether we
24 should be more like a -- I'm just going to use the
25 word pension fund -- lower risk pension fund in

1 terms of asset allocation.

2 We're not there. I'm just trying to
3 highlight that maybe we can take more risk. But
4 there are times in -- you know, and that's what, I
5 think, Marcus was highlighting --

6 If I may just repeat what you said,
7 Marcus.

8 There are phases or -- or cycles -- let's
9 call it that -- where certain positions and asset
10 allocation have paid.

11 So, if you look at the 2000 decade --
12 which we did, actually. We did that analysis. If
13 we had the same asset allocation that we have
14 today, close to 50 percent in equities -- or more
15 than 50 percent in equities -- public and
16 private -- we've underperformed for that whole
17 decade. If you took that decade, we would have
18 underperformed.

19 So, we don't know what the next decade is
20 going to look like. But we are sort of positioned
21 in -- in -- in the right sort of frame -- I would
22 say structure.

23 We just should be careful about, you know,
24 upping risk from this point.

25 And -- and I think Marcus has developed

1 this strawman, which is a pretty --

2 MR. FRAMPTON: Well, let me, like,
3 lead up to that.

4 CHAIR RIEGER: Yeah. Let's let
5 Marcus present it.

6 MR. VADAKUMCHERRY: Sorry. Sorry.

7 CHAIR RIEGER: Okay. Okay.

8 MR. SKJERVEM: Can I -- through the
9 Chair.

10 Can I just add that --

11 CHAIR RIEGER: Oh, yes.

12 MR. SKJERVEM: The governor on us
13 going all endowment is our size. It gets back to
14 the execution risk that Marcus is telling us
15 about.

16 So, it's fine to compare us to Yale until
17 you realize that we're double the size.

18 And so implementation in venture and
19 implementation in absolute return, scale works
20 against you. And that's why we'll never be pure.

21 I guess that's the full employment act.
22 For all of us, it's really a challenge.

23 But that's the -- our size is the limit to
24 full endowment.

25 CHAIR RIEGER: So, Marcus, go

1 ahead --

2 MR. FRAMPTON: Okay.

3 CHAIR RIEGER: -- and do your
4 strawman.

5 MR. FRAMPTON: So, the -- another
6 variable is just how fast the market's moving.

7 So, you know, like, we can just make
8 outstanding returns in areas that we couldn't a
9 year ago.

10 And in January, Callan comes out with
11 their capital market expectations. I don't know
12 what day it was they produced it, but we got it at
13 the end of January. And there will be a new one
14 this January.

15 And then because the stock market sold off
16 and rates went up, Greg and his team put out a new
17 study in August.

18 At that point, the 10-year Treasury yield
19 has gone from 1.8 to 2.75. So, all the
20 interest-rate sensitive asset classes, you could
21 get a 1 percent higher return on, effectively.

22 And so I think -- you don't normally put
23 that out, I don't think.

24 MR. ALLEN: No. We've never done
25 it before.

1 So, the moving interest rates was
2 unprecedented both in size but also off of --
3 coming off such a low base.

4 And it completely changed the whole
5 trade-off between stocks and bonds.

6 And, spoiler alert, but I think our number
7 for bonds -- 10-year number that'll be coming out
8 in just a couple weeks -- is 4.25.

9 So, I don't remember what it was at the
10 beginning of last year, but I think it was in the
11 2s.

12 We've never had a jump like that in our
13 expected return for bonds since I've been doing
14 this -- since '88.

15 So, all of the sudden --

16 MR. FRAMPTON: 4.25. Okay.

17 MR. ALLEN: -- you can afford to
18 take less risks because you can actually earn a
19 yield.

20 MR. FRAMPTON: And by comparison,
21 your August fixed income was 4. It's now 4.25.

22 And then -- yeah. Last year it was 2.10.

23 So -- but since Callan -- I put this
24 together early November. Rates had moved another
25 140 basis points from when Callan in August --

1 based on it -- on a 100-basis point movement put
2 these out.

3 Now, rates have come in in the last month
4 and a half substantially. The 10-year's now at
5 3.5. So, it's up 75 basis points from when Callan
6 did their August numbers.

7 So, just things are, like, moving around
8 really fast. But generally in the direction of
9 making these lower returning asset classes higher
10 returning.

11 But the point on this page is the rates
12 are up 140 basis points from August as of the date
13 I did this page. So, 140 basis points.

14 So, what I did was I -- on this page we
15 showed, for all our asset classes, what Callan's
16 January capital market expectation was, what it
17 was in their August update.

18 And then for the, like, really
19 interest-rate sensitive areas -- so fixed income,
20 real estate, and then absolute return -- because
21 the higher cash rates flow straight through in
22 that asset class too -- we added another 140 basis
23 points.

24 For the third, the light blue column --
25 which I'm calling August Adjusted -- and -- and,

1 you know, all these -- like we said, all these
2 numbers are moving around a lot.

3 But I have a new set of forecasts, which
4 is what I think is appropriate based off what
5 Callan put out, adjusted for August to November.

6 That's the column on the right.

7 So, like, on cash, for example, I think we
8 can earn almost 4 percent today in cash.

9 Which -- you know, I'm putting this out as
10 strawman. It's not a recommendation. It's six
11 months before any decision would ever have to be
12 made.

13 But I'm just saying what if we looked at a
14 portfolio -- like, in the last decade, given where
15 capital markets were, you needed a lot of equities
16 and private equity to put a portfolio together
17 that can earn CPI Plus 5. Like, can't -- is
18 there -- can you look at one with more balance,
19 better diversification, lower risk that might, in
20 today's world, do something like that?

21 So, that's why I'm just calling it a
22 strawman, not, like, a recommendation or anything.

23 And so we've got in fiscal -- on the left,
24 that's our current investment policy, which
25 changes each year. We're step -- we -- we're

1 stepping up private equity 1 percent a year but
2 arrived ahead of schedule at the target.

3 So, the column on the right is, like, what
4 I've adjusted for fiscal '25. I -- I have
5 5 percent of the Fund less in equities -- one in
6 stocks, one in private equity. And then more
7 fixed income -- 20 percent versus 18 percent. A
8 little more real estate, 13 versus 12. Pushing
9 Julian a little bit on hedge funds.

10 It's, like, "Can we do 7, not 6 and keep
11 the execution there?"

12 Let's consider eliminating risk parity.

13 And then let's consider having a special
14 opportunities portfolio that's more like what we
15 had 10 years ago where it is go anywhere, anytime.

16 What we -- the history is we had a special
17 opportunities portfolio that could do anything,
18 anywhere. And then over actually a pretty short
19 period of time, it all got invested in private
20 equity deals that -- that was Jay's notion of a
21 special opportunity was a private equity deal.

22 And so today, and for the last 10 years,
23 it's been private equity and special
24 opportunities.

25 But that special opportunities moniker

1 isn't really, like, adding anything. It's just --
2 has a nice ring to it, I would say.

3 Probably the one investment we have today
4 that would go over special opportunities would be
5 our gold investment, which today mostly is in cash
6 and, like, doesn't fit well there.

7 And then that way at least it's isolated.
8 And you may conclude in a year or two that I'm not
9 very good at picking special opportunities.

10 At least it's got its own area so that
11 it's broken out and evaluated that way.

12 And right now gold is the one investment,
13 and it's been about flat.

14 So, actually, I'm being too hard on
15 myself, because stocks are down double digits.
16 So, depends on how you think about the benchmark.

17 Yes?

18 MR. BRUNE: Mr. Chair.

19 So, Marcus, I just want to make sure I
20 understand the recommended or potential
21 recommendation to decrease private equity, yet
22 special opportunities you said had historically
23 been private equity.

24 MS. RUBENSTEIN: Yeah. I --

25 MR. BRUNE: So, we're effectively

1 staying with that same range of 18 --

2 MR. FRAMPTON: No.

3 MR. BRUNE: -- percent --

4 MR. FRAMPTON: That's not what I'm
5 saying.

6 We have certain private equity investments
7 that are labeled special opportunities. I would
8 just label them private equity.

9 MR. BRUNE: Okay.

10 So, it would not be private equity --

11 MR. FRAMPTON: Yeah.

12 MR. BRUNE: -- like it would have
13 historically been --

14 MR. FRAMPTON: I wouldn't -- I
15 would only move probably gold and maybe some of
16 the risk parity there.

17 I don't --

18 MR. BRUNE: I understand.

19 MR. FRAMPTON: I'd have to think
20 about it.

21 MS. RUBENSTEIN: Mr. Chair?

22 So, do you consider co-investments in
23 private equity or special ops?

24 MR. FRAMPTON: Definitely private
25 equity.

1 MS. RUBENSTEIN: Okay.

2 MR. FRAMPTON: I mean, we co-invest
3 in infrastructure --

4 MS. RUBENSTEIN: Okay.

5 MR. FRAMPTON: -- private credit.
6 We co-invest in --

7 MS. RUBENSTEIN: So --

8 MR. FRAMPTON: -- real estate.

9 And they go in the asset class --

10 MS. RUBENSTEIN: So, is it --

11 MR. FRAMPTON: -- that they are --

12 MS. RUBENSTEIN: -- adding new --
13 is it, like -- like, what is it -- or is it just
14 basically it's going to be slimmed down to what?

15 MR. FRAMPTON: It's, like, you
16 know, Warren Buffett says, "Hold the bat on your
17 shoulder till you see a fat pitch."

18 It's that. I mean, I think that's what it
19 originally was supposed to be.

20 MS. RUBENSTEIN: Okay.

21 MR. FRAMPTON: And Jay did American
22 Homes for Rent. That was very well timed. Then
23 he did Juneau Therapeutics.

24 MS. RUBENSTEIN: Right.

25 MR. FRAMPTON: Made a

1 billion dollar gain on that.

2 And, I mean, American Homes for Rent was a
3 special opportunity. It's, like, it fits between
4 the cracks.

5 MS. RUBENSTEIN: Okay.

6 MR. FRAMPTON: Like, it's -- no one
7 in real estate at that time was doing rental
8 homes.

9 Yeah. It's things --

10 MS. RUBENSTEIN: Okay.

11 MR. FRAMPTON: -- that fit in the
12 cracks.

13 I mean, I don't have anything right now.
14 Like, I think gold is a special opportunity, but
15 time will tell.

16 There are -- at times, there could be --
17 credit is an area where you see special
18 opportunities a lot in dislocated periods.

19 Like, I would probably open an account
20 that our fixed income team has access to that if
21 we saw high-yield bonds really selling off, we
22 might buy some.

23 I -- there have -- you know, the CLO
24 market, like, really seized up this fall. And
25 there was a period where AAA CLO debt was

1 yielding -- this was floating rate, AAA-rated --
2 was yielding 6 or 7 percent.

3 Like, I never did enough work on it to
4 say, "Oh, yeah. That's the fat pitch."

5 But, you know, we don't really have a
6 mandate for that, like, with fixed income. So, I
7 would think maybe once a year there would be
8 something really --

9 MS. RUBENSTEIN: Okay.

10 MR. FRAMPTON: And it would
11 actually be special. It wouldn't be, like, we're
12 going to back a P/E fund --

13 MS. RUBENSTEIN: So, we're
14 getting --

15 MR. FRAMPTON: -- and label it
16 special opportunities.

17 MS. RUBENSTEIN: And the -- how
18 it's shown today, private equity/special ops
19 with -- 75 percent of it is probably private
20 equity today, right?

21 MR. FRAMPTON: It's 100 percent
22 private equity.

23 MS. RUBENSTEIN: Yeah. I mean,
24 there's no differentiation.

25 So, it --

1 MR. FRAMPTON: Why do you say
2 75 percent?

3 What 25 percent do you think isn't?

4 MS. RUBENSTEIN: I still -- when
5 you read through the handout -- I mean, the
6 hundreds of pages of it --

7 MR. FRAMPTON: Yeah.

8 MS. RUBENSTEIN: -- it just seems
9 like it's a random bucket.

10 So, is that all --

11 MR. FRAMPTON: Correct, yes.

12 MS. RUBENSTEIN: -- going to get
13 moved into the private equity -- and correctly
14 coded -- a venture, growth buyout, co-investments?

15 MR. FRAMPTON: That's a more
16 meaningful distinction --

17 MS. RUBENSTEIN: Okay.

18 MR. FRAMPTON: -- than special
19 opportunities --

20 MS. RUBENSTEIN: Okay.

21 MR. FRAMPTON: -- private equity.

22 MS. RUBENSTEIN: Okay.

23 MR. FRAMPTON: I would recommend
24 looking at what's our venture portfolio, what's
25 our LBO portfolio --

1 MS. RUBENSTEIN: Okay.

2 MR. FRAMPTON: -- not what are we
3 calling special opportunities --

4 MS. RUBENSTEIN: Okay.

5 MR. FRAMPTON: -- and what are we
6 calling private equity.

7 MS. RUBENSTEIN: Okay.

8 MR. FRAMPTON: I totally agree with
9 that.

10 MS. RUBENSTEIN: Okay.

11 MR. FRAMPTON: I don't think any --
12 there's not a single investment that I would move
13 from private equity to special opportunities.

14 MS. RUBENSTEIN: Okay.

15 MR. FRAMPTON: Because it's 100
16 percent private equity --

17 MS. RUBENSTEIN: Okay.

18 MR. FRAMPTON: -- and venture.

19 So --

20 MS. RUBENSTEIN: But you don't have
21 to wait till asset allocation to redo the coding,
22 do you?

23 MR. VADAKUMCHERRY: No.

24 We've already in the system got it as --
25 like you just said. Venture, buyouts -- what is

1 it -- you know, debt -- is there. So, it's
2 already there.

3 It's just that the portfolio's name today
4 is private equity and special opportunities. For
5 some reason, that was the case historically.

6 And so that probably will change going
7 forward.

8 MS. RUBENSTEIN: Okay.

9 MR. ALLEN: So -- through the
10 Chair.

11 Marcus, it sounds like you're proposing
12 and talking about creating a special opportunities
13 bucket when we do the May asset allocation.

14 MR. FRAMPTON: Yes.

15 MR. ALLEN: So, I guess -- I think
16 it would be worth thinking about between now and
17 then how you would benchmark that.

18 Because I think what you put in a special
19 opportunities bucket is going to be educated by
20 what your return and risk goals are for that
21 bucket.

22 And there's a bunch of ways to do it.
23 I've seen -- you know, we have other clients that
24 have that.

25 But -- if the benchmark is more like an

1 equity benchmark, you probably wouldn't do that
2 6 percent fixed income deal in there, right?

3 MR. FRAMPTON: Right.

4 MR. ALLEN: Or put gold in there,
5 maybe.

6 Or so -- and so I think that's the
7 trick --

8 MR. FRAMPTON: That's a tough
9 question.

10 MR. ALLEN: -- with these is --

11 MR. FRAMPTON: Yeah.

12 MR. ALLEN: -- you know, you don't
13 know what's going to go in there, but you kind of
14 have to have a benchmark because you can't have
15 something with, like, a zero return expectation in
16 your target.

17 Right?

18 So, anyway, it's just something to be
19 thinking about as we're mulling this over between
20 now and next May.

21 MR. FRAMPTON: Okay. Yeah. That's
22 a really good point. I'll think about that.

23 MS. RUBENSTEIN: Interesting.

24 MR. FRAMPTON: Okay.

25 Do you want to do this page, Sebastian?

1 MR. VADAKUMCHERRY: Yeah. Sure.

2 MR. FRAMPTON: Or I can do it if
3 you --

4 MR. VADAKUMCHERRY: No. Go ahead.

5 MR. FRAMPTON: Oh. You want me to
6 do it?

7 Okay. I've just been talking a lot.

8 So, on this page, we've got the existing
9 policy; current, next year, fiscal '25 target
10 allocations; and then the strawman that I did.

11 I'm kind of just focused on the fiscal '25
12 column because that's where we're looking to
13 arrive at.

14 And -- and so we just have -- the top
15 column is what would the returns have been with
16 Callan's old January capital market expectations.

17 So, our portfolio actually was -- and I
18 went back and looked at your January presentation.
19 It may have changed modestly midyear up to a real
20 of, like, 4 or 5 or something.

21 But in January, it was a projected -- our
22 portfolio was a projected real return of 4.2. So,
23 80 basis points below our Fund's return objective
24 of CPI Plus 5.

25 And then the strawman that I came up with

1 would be an even lower projected return of CPI
2 Plus 4.

3 And then the middle area is the August --
4 is what I came up with as what might be the
5 expectations now taking their August numbers and
6 then changing for subsequent interest rate
7 changes.

8 Our old portfolio with those new
9 numbers -- and this is the benefit of where fixed
10 income's now higher -- is actually a CPI Plus 5.1
11 projected return. And then the strawman I came up
12 with is just modestly lower. It's CPI Plus 5.

13 So, my point is sort of, like -- like, a
14 year ago, even our endowment model portfolio
15 didn't have a projected return of CPI Plus 5.

16 And now today, you can have a -- you could
17 have a -- a more balanced, lower risk portfolio
18 that does deliver CPI Plus 5.

19 So, regardless of what we decide in asset
20 allocation, the benefit of this difficult year
21 we've had in returns is that the forward returns
22 are much more attractive. And we're back at a
23 point where we can put a portfolio together that
24 can earn CPI Plus 5.

25 And then I'm further arguing that we can

1 do it with more risk and less balance.

2 And to that point, Sebastian did this
3 slide on the risk side.

4 Sorry. Go ahead, Deven.

5 MR. MITCHELL: Five minutes, I
6 think, is --

7 MR. FRAMPTON: Okay.

8 MR. MITCHELL: -- another five
9 minutes you allocated.

10 MR. FRAMPTON: Okay. All right.
11 Time flies.

12 MR. VADAKUMCHERRY: Yeah. Just
13 quickly.

14 Marcus is definitely going to be a sort of
15 more honest person than I am because he
16 highlighted that the Y axis is not scaled from
17 zero to -- up -- it's from 14.8 to up.

18 So, I think the objective here was to
19 highlight that the strawman has a lower risk. It
20 was not to say, you know, that it's our lowest
21 portfolio. It's just lower than the, let's say,
22 original asset allocation. That was the only
23 objective.

24 And we measured it on two dimensions. One
25 is in terms of volatility of VaR, and the other is

1 drawdown risk.

2 And on both columns, the strawman seems to
3 have a lower expected risk than the original asset
4 allocation for the same return target.

5 MR. FRAMPTON: Yeah. All right.

6 Yeah. I mean, it still is sobering that
7 in a global financial crisis scenario, our
8 existing allocation we would effectively lose
9 50 -- over 50 percent. And then this one is just
10 under 48.

11 So, we are talking about changes on the
12 margin, and those are still, you know, very large
13 losses if there's a repeat of the financial
14 crisis.

15 Oh. Back to Yale. They have a thing when
16 they talk about asset allocation that I think's
17 neat. They are very explicit on what they're
18 doing.

19 And, actually, one of the reasons why
20 people are so familiar with it is their CIO wrote
21 a very good book that lays, like, everything out
22 in great detail.

23 But they -- they have a -- a focus on
24 maintaining no more than 30 percent of the
25 endowment in what they call low risk assets. So,

1 cash, bonds, and absolute return.

2 And they've flipped what we have. We have
3 a big bond portfolio -- 18 percent -- and a
4 7 percent absolute return portfolio. They have a
5 25 percent fixed -- or 25 percent hedge funds and
6 5 or 6 percent fixed income. So, they kind of
7 flipped it.

8 And they're a smaller fund than we are,
9 and so I think they're in a little bit better
10 position to do that -- to execute absolute return
11 at scale for them than we would be, given the size
12 of our portfolios.

13 And so I'm just showing our existing
14 policy on the strawman on this market exposé
15 thing.

16 And I -- I mean, in a perfect world, I'd
17 love to be a 30 percent market in sensitive
18 assets. Our current plan gets us down to 26. So,
19 4 percent less than what Yale has as their
20 minimum.

21 So, on that one metric, we have a more
22 aggressive portfolio than Yale.

23 And then on my strawman, we're just right
24 under them. We're 29 percent, they're 30. And I
25 like that.

1 And then on liquidity, they seek to limit
2 their illiquid areas to no more than 50 percent of
3 the portfolio.

4 And on this -- that's also somewhat of a
5 risk thing. The more illiquid you are, you have
6 illiquidity risks if you're trying to exit
7 positions.

8 On that, we are lower risk than them.
9 Like, today, we're planning to get up to
10 40 percent illiquid whereas their limit's 50. And
11 under my strawman, we end up at, like, 37 percent
12 illiquid.

13 So, we have one measure that they commonly
14 cite where we're riskier, one where we're less
15 risky.

16 So, I like to look at those when I'm
17 talking about asset allocation.

18 I'm probably, like, out of -- or -- I --
19 I've gone through at this point, like, the meat of
20 what I was going to go through.

21 I have a slide on risk parity, but it -- I
22 don't -- I think I've said my bit on that.

23 So, I just want to make sure I pause for
24 questions, if there are any.

25 MR. RICHARDS: Through the Chair.

1 Marcus, what would be the timing of
2 getting rid of risk parity if that's what you're
3 going to recommend?

4 Is that in the May meeting?

5 MR. FRAMPTON: Well, I mean, our
6 target allocation is 1 percent, and we've been
7 underweight.

8 So, we're at 200 million -- so, it would
9 be -- three-fourths of it is gone because we're
10 underweight. And I think the remainder would
11 be -- I don't know. I haven't focused on it -- at
12 a minimum, July 1.

13 Yes?

14 CHAIR RIEGER: Just -- one thing I
15 just didn't understand in these slides -- Marcus,
16 if you go back two slides to existing policy and
17 the strawman.

18 There's a third block on the -- looks like
19 this one (indicating).

20 Right there.

21 MR. FRAMPTON: Yeah. Okay.

22 CHAIR RIEGER: What is that bottom
23 line?

24 MR. FRAMPTON: Oh. Yes.

25 So -- okay. So, earlier, I had said that

1 based on where the Shiller P/E is, I think stocks
2 could return 2 percent real, not the higher number
3 that Callan has.

4 And I was just saying -- you know, it -- I
5 think it's actually 2.1. And then the inflation
6 forecast is at 2.5.

7 That third line is, well, what happens if
8 I'm right, not Greg, and equities return 4.6?

9 In that scenario, my portfolio has a
10 higher return -- you know, in the middle column,
11 the current expectations, strawman's slightly
12 lower return than existing policy.

13 If I'm right and Greg's wrong on equities,
14 my strawman has a slightly higher return than the
15 existing policy and lower risk.

16 VICE CHAIR RIEGER: Okay.

17 MR. FRAMPTON: So, I mean, I
18 actually would anchor on that bottom one,
19 probably, if I were betting on it.

20 Which I guess we kind of are betting on
21 it.

22 VICE CHAIR RIEGER: Okay. Thanks.

23 Anything else?

24 Questions for Marcus?

25 Well, thanks. That was a great

1 presentation.

2 Let's go back to my agenda page.

3 MR. RICHARDS: I think a break.

4 CHAIR RIEGER: Is it break next?

5 Okay. I think we have investment
6 advisors, and then break.

7 MS. LOESCH: Correct.

8 CHAIR RIEGER: Yeah.

9 So, let's -- let's try to get through the
10 investment advisor comments, and then go to break.

11 So, Ken or John, do you guys care who goes
12 first?

13 I'll call on John first, then.

14 MR. SKJERVEM: As it should be
15 because I did show up in person --

16 MR. FRIER: I'm on the top in the
17 agenda.

18 MR. SKJERVEM: -- for the
19 seventh -- for the second December in a row.

20 MS. RUBENSTEIN: It's such a
21 hardship.

22 MR. SKJERVEM: Yeah.

23 Except I guess the joke's on me because I
24 dressed for cold, not wet.

25 For the record, John Skjervem, advisor.

1 That was -- that last hour or so was
2 terrific and largely redundant with some of my
3 prepared remarks.

4 Honestly, I thought it was so good, I wish
5 my own board was here to listen to that.

6 So, how am I going to add any value?

7 I would just reiterate the expensive --
8 even after the, you know, 12 percent down year to
9 date, how expensive equity markets are, both
10 public and private.

11 And -- and so while the appeal of an
12 attractive vintage year is strong, there's still,
13 in my mind, so much pain between here and there.

14 And that -- so, it's really theoretical
15 that by the time we get to that attractiveness,
16 there's going to be so much pain in the rearview
17 mirror that, psychologically, I think we'll feel
18 different about it.

19 So, you know, equity -- public equity
20 markets are still trading above their historical
21 P/E ratio despite how challenging 2022 has been.

22 So, you know, the only consolation prize
23 is this idea of a strawman or a 60/40 portfolio is
24 finally starting to look more viable because we've
25 had rates come up.

1 But, again, I think Marcus and Sebastian
2 covered that in very productive detail.

3 So, the only other things I would add
4 would be at the margin, I would think about trying
5 to add a little more inflation exposure.

6 So, this is a comment in the context of
7 the work that Callan will be doing -- and really
8 from a long-term framework that if we have this
9 strawman, how might we position it for the next
10 decade.

11 I would say at the margin for the next
12 decade, a little more inflation sensitivity for
13 two reasons.

14 No. 1, I don't think we're going to
15 deglobalize. But I think we are retreating from
16 globalization, principally to have more secure
17 supply chains.

18 And so at the margin, that's inflationary.

19 And No. 2, the energy transition, as I
20 described in September, is going to be
21 inflationary.

22 And -- and so I think those are two
23 secular forces that, independent at any one point
24 in time of fiscal and monetary policy -- those are
25 inflationary pressures.

1 And so how might that manifest?

2 Yale talks about a natural resources
3 allocation. In Utah, we talk about EMIF -- which
4 is energy, mining, and infrastructure.

5 This is largely nomenclature because I
6 know you have these exposures within private
7 credit, maybe absolute return.

8 So, however we want to organize the
9 nomenclature, my suggestion would be, at the
10 margin looking forward for 10 years, to have more
11 inflation sensitivity.

12 So, real assets broadly defined and
13 independent from real estate.

14 Let's see. The last thing I thought might
15 be worthwhile was this idea of special
16 opportunities.

17 One of the things we did in Oregon that I
18 thought worked really well is set up a discrete --
19 we called it the opportunity portfolio. But it
20 was set up for the sole and express purpose to
21 take advantage of fat pitches.

22 And -- and so it had two criteria. The
23 first criteria was these were fat pitches that
24 didn't fit into one of the other established asset
25 classes. And then the second criteria is what

1 Greg brought up -- is this notion of a benchmark
2 is really important.

3 And over time, we realized that the
4 important criteria there was opportunity cost. If
5 it doesn't fit in anywhere else, you're not going
6 to do it just for the sake of doing it to be
7 eclectic or interesting or novel.

8 So, we set up a benchmark that the
9 opportunity cost was the assumed rate. So, for
10 the Permanent Fund, the opportunity cost would be
11 CPI Plus 5.

12 So, it's got to be something that
13 doesn't -- you know, falls outside of the other
14 traditional asset class buckets. And as a
15 benchmark, it's the opportunity cost.

16 And then the -- corollary to that would be
17 it would have a strategic allocation of zero.
18 Because under normal circumstances, it would fall
19 into one of the traditional asset classes.

20 Well, if it doesn't, it's outside the
21 norm, then you have to have this idea of an
22 opportunity cost that's got to be greater than CPI
23 Plus 5.

24 So, those would be my comments this
25 morning.

1 CHAIR RIEGER: Thanks.

2 Any questions for John?

3 Ken.

4 MR. FRIER: All right. Good
5 morning, everybody.

6 And, Trustee Crum, I look forward to
7 meeting you when I'm up there next year.

8 Being your advisor has been kind of a
9 journey for me. I've been trying to figure --
10 figure this out.

11 When I started out as your advisor, I was
12 pretty deferential to anybody at the organization.
13 So, I know I would just beat up on guest speakers
14 and people like that.

15 But as time has gone on and I've watched
16 how you manage portfolio strategy, I really wanted
17 to advocate for some changes. So, I've started to
18 get more direct in the comments that I'm making to
19 you.

20 Along the way, I -- you know, I don't want
21 to cross the line. I've been -- I've talked to
22 Marcus and to the executive directors and to some
23 board members.

24 And I've asked, "Is it -- is it really
25 okay for me to say that in a meeting?"

1 And in every case, the person that I asked
2 said, "Yes, Ken. You're -- you're just -- call it
3 as you see it. Even if we don't like it. But
4 that's what you're here for."

5 So, that's -- so, what's -- what you're
6 about to hear is kind of a sincerely held -- a
7 critique and suggestion about how I think we can
8 manage portfolio strategy a little bit -- a bit
9 better.

10 And the main thing that I think that we
11 ought to do is to own our strategy -- to own the
12 portfolio strategy.

13 And what I mean by "portfolio strategy" is
14 our choices about asset allocation and our choices
15 about risk.

16 I mean, those are the most important
17 choices that we make, and we ought to enhance the
18 way that we do that. And I came to this
19 conclusion by observing the decision-making at the
20 Fund over these past years.

21 I think the main reason that we were not
22 better prepared for the downturn that we're having
23 this year is because of the way that we manage the
24 top level portfolio strategy.

25 I mean, at this -- at our Fund, the

1 portfolio strategy is an annual exercise that we
2 outsource to a consultant. We don't really see it
3 as an ongoing responsibility for ourselves.

4 And I think it would be better for us if
5 we -- we felt that the plan that we get from
6 Callan is kind of the beginning of the work that
7 we have to do to manage the portfolio rather than
8 being perceived as being the final answer or the
9 whole truth or the end of what we do.

10 I sincerely believe that if we manage our
11 own investment strategy that we'd have better
12 investment performance. It would make the Fund a
13 better destination for Callan.

14 I think strategic management, by ourselves
15 of our own Fund -- I think is really the most
16 important fund management capability that we don't
17 really have at this point.

18 I -- I recognize the model that I'm
19 proposing where, like, we own the strategy and we
20 can change it -- change it midstream, you know,
21 that would be a big departure from what the Fund
22 has done historically and from what most of our
23 peers do.

24 And moreover, as Marcus pointed out early,
25 the existing way that we've been doing things has

1 led to more than decent results. Really kind of
2 exemplary results over the long time.

3 So, the model that we have now is -- you
4 know, it meets the fiduciary standards. It's not
5 necessarily -- it's not a bad model. It's a
6 well-accepted model.

7 But the model that I'm suggesting, I
8 think, is the prevailing model at the best
9 allocators. At the elite allocators, the
10 organization owns the strategy. The
11 organization's continually thinking about how to
12 make it better.

13 And throughout my career, every time that
14 I've been a chief investment officer -- including
15 the role that I'm in now -- I was responsible for
16 the strategy, and I'd be expected to change the
17 strategy if there was a good reason to do so.

18 And usually -- I mean, most of the time
19 you don't want to change it. You know, most of
20 the time you really don't have a big enough
21 insight into what happens next.

22 But there are sometimes extraordinary
23 circumstances, such as the circumstances we just
24 went through.

25 And so what I'm advocating for is that we,

1 ourselves, have a -- an ability to react when
2 markets are really dislocated.

3 I think the Fund is losing money this year
4 for reasons that we talked about at every board
5 meeting last year. I mean, in every meeting, we
6 talked about how the outlook for the stock market
7 looked poor and/or we talked about how, you know,
8 high and rising inflation might be a problem for
9 us.

10 I mean, Marcus was saying this.

11 Sebastian, all your advisors.

12 You had guest speakers who came in and
13 said, "We don't -- we don't really like the
14 outlook for the stock market."

15 And, "Wow. This is -- like, we're about
16 to have the worst inflation in 40 years."

17 So, we -- we're good about identifying the
18 issues, and we identified the issues before they
19 had really caused harm to us.

20 And I was really hopeful last year since
21 we had begun the conversation about these problems
22 that that would lead to a discussion about what we
23 could do about these problems.

24 But the board has never -- never saw a
25 really deep dive into what we ought to do when

1 a -- to prepare for when the equity bubble bursts.
2 We never really saw a deep dive in what we ought
3 to do about the inflation problem.

4 Those are really tough issues, but we
5 never really dug into them and developed a
6 strategy for what to do.

7 And so we just went into this -- this
8 downturn with kind of -- kind of vulnerable, not
9 very well prepared for it.

10 I think that if we had done deep dives on
11 those issues, we probably wouldn't have been
12 comfortable doing anything dramatic. I wouldn't
13 advocate us doing anything dramatic.

14 But even within the investment policy
15 bands that we have, we could have done something.
16 We could have done more than we did.

17 We probably -- given how much markets have
18 changed this year, we probably could have saved
19 ourselves, you know, a billion or more. We still
20 would lose a lot, but we wouldn't lose as much.

21 But -- but what we are -- what I've
22 observed is we're just an organization that
23 follows its plan. We just -- we don't expect
24 Marcus to really react to what's happening and
25 propose changes in asset allocation or changes in

1 risk.

2 I know that mark -- Marcus is always doing
3 fine adjustments, so he probably gives himself
4 a -- you know, or 1 percent, 2 percent here and
5 there.

6 And I think Marcus has good investment
7 instincts. Probably because I almost always agree
8 with him on the outlook.

9 So, he's always doing fine adjustments.

10 The problems that we had going into this
11 year -- these are really big problems. You know,
12 I think -- if I were you -- if I were a board
13 member, I wouldn't want to be given a choice. I
14 would be -- want to have it laid out in front of
15 me.

16 "Look. We're probably going to have a
17 bear market. In the average bear market, we lose
18 35 percent. In this bear market, the -- you know,
19 our cyclical holdings are -- are -- you know, our
20 tech holdings, our biotech holdings, our -- our
21 opportunistic portfolio, that -- it's going to be
22 especially vulnerable.

23 And so, you know, we could do something
24 about it or what -- we could lay out the options.
25 Maybe in the end, we would decide that we're just

1 not comfortable or we're not sure.

2 And the same thing with respect to the
3 fixed -- the fixed income market.

4 We should recall that at the beginning of
5 this year, U.S. inflation was 7 percent. And the
6 10-year Treasury yield was 1.5.

7 And that was, like, one of the worst
8 relationships between inflation and interest rates
9 in the history of the United States.

10 But we didn't have that discussion about,
11 "Well, it -- if that's the relationship between
12 inflation and interest rates, something has to
13 give."

14 Right?

15 "Either inflation comes down a lot, or
16 we're going to lose a lot of money in fixed
17 income."

18 And we could have talked about that.

19 Like, "How could we lose less in fixed
20 income?"

21 But we never did. We never did talk about
22 that.

23 So, if -- if we're going to own our own
24 strategic management, I think Marcus would need to
25 be able to be equipped to do that from -- and I

1 know that -- that -- you know, I think he has good
2 instincts. I think he also -- like, honorably and
3 reasonably -- doesn't think that we should just
4 rely on him to, like, move billions of dollars,
5 you know, between asset classes on his own
6 authority.

7 When I started as your advisor, I
8 wondered, well, why doesn't Marcus have, like, a
9 strategy and risk person or a strategy and risk
10 team?

11 And I -- you know, in my prior roles as
12 the CIO -- at least at big funds -- I always had
13 a, you know, strategy group.

14 And so if there was a big issue, like,
15 "What do we do about inflation," then I had some
16 people on my team that would help with that.

17 I realize that Marcus doesn't really
18 have -- doesn't really need or hasn't a need of a
19 strategy organization. Maybe he still wouldn't
20 want to have one. But he hasn't needed it because
21 the board doesn't expect him to do anything big in
22 strategy or in risk management.

23 And so there's -- there's not -- there's
24 not a push for something to happen there. So,
25 it -- but it -- but we're -- Marcus is kind of

1 left on his own, I think.

2 But it -- and I think -- it feels like
3 he's on his own, but I don't think he really is
4 fully on his own.

5 I mean, even if he didn't have a full-time
6 strategy guy or gal or a strategy group -- I mean,
7 he does have an excellent team. He has Sebastian
8 and the asset class heads and other people on the
9 team who, together, could help work through these
10 issues.

11 I also don't think we use Callan as --
12 to -- as much as we could. Callan was my
13 consultant in the past. There's a lot of other
14 really awesome people at Callan besides Greg and
15 Steve.

16 And when I -- when they were my
17 consultant, I would always just throw big problems
18 at them.

19 Like, last year, we could have asked
20 Callan, "What the heck should we do about
21 inflation?"

22 I bet other Callan clients were asking
23 about that.

24 And I'm sure they would have been glad to
25 come in and say -- you know, and tell us about the

1 work they've been doing for other clients.

2 So, we could think about that.

3 But the other -- the other way that Marcus
4 isn't really alone is, like, in his -- in his
5 shoes -- I mean, I've been in those shoes before.
6 I mean, you really are in a position at a big,
7 well-respected fund to call on anybody in the
8 world to help you with a big problem.

9 I mean, Marcus could call on any academic.
10 You could call on, you know, any asset management
11 firm, say -- you know, to get input on "What can
12 we do about these big problems?"

13 The issue really isn't access to excellent
14 information. It's more his bandwidth. I mean,
15 Marcus has a really, really tough job. He's under
16 a lot of pressure.

17 I don't think -- the things I would love
18 to see happen, I don't really know that he has the
19 bandwidth to do them. And -- and so I think we
20 would need to help him to do more.

21 So, anyway, that's -- that's my speech.
22 That's how I see things.

23 I mean, we're following an accepted model.
24 We're not doing anything wrong, but we -- we also
25 will miss opportunities to do better. And we did

1 miss opportunities to do better in the past year.

2 And I think if we took ownership of the
3 strategy, then it would improve our ability to --
4 to deal with market dislocations, such as the ones
5 that we just had. And, in my view, it's -- it's
6 the most important thing that we could do to
7 improve how we manage the Fund.

8 So, this is a big topic. And I probably
9 have, like, offended or annoyed or alarmed a lot
10 of people. I -- I am scheduled to talk to you
11 guys -- give an advisory presentation to some of
12 you in probably the May meeting.

13 And so -- I mean, that could be -- if the
14 board's interested in pursuing this further, then
15 that could be an opportunity to sort of dig into
16 it.

17 So, I could tell -- you know, go -- I'm
18 sure there's a lot of questions I could kind of go
19 into what I'm talking about and how it could work.

20 So, those are my remarks for today.

21 Thank you.

22 CHAIR RIEGER: Craig?

23 Go ahead. I've got a question too.

24 Go ahead.

25 MR. RICHARDS: So, Ken, you know,

1 you've talked about this the last couple of
2 meetings.

3 And I like that you do because you're --
4 you're challenging some of the basic thought
5 processes of how the organization is run.

6 But what's interesting --

7 MR. FRIER: Well, I'm glad. It
8 sounded like you wanted to fire me.

9 MR. RICHARDS: But -- but -- so,
10 when I think about what you're saying, I think of
11 it like this, though.

12 This board has three new trustees. I'm
13 the only one that's been here more than one
14 term -- although Steve has served a term in the
15 past.

16 So, there's no consistency in the board,
17 right?

18 It just turns over all the time.

19 With the exception of Marcus, I don't
20 think we've had a CIO that lasted more than a few
21 years for a very long period of time.

22 So, if you had a perfectly managed,
23 dynamic organization that could rapidly take on
24 more strategic decision-making to deal with market
25 conditions, that would be great. But I don't know

1 that we have the capacity as an organization to do
2 that with continuity over a long period of time.

3 So, the way I think about it is almost
4 opposite of what you're saying, which is let's
5 address allocation every 5 or 10 years and not
6 even worry about it.

7 Because as an organization, it's that
8 20-year bet that matters. It's not the 2-year
9 bet.

10 So, in order to do something like you're
11 talking about where we get more into the market
12 condition adjustments, I mean, we would really
13 have to think about how do you do it successfully
14 when you know your team is changing and your team
15 is small.

16 So, that's my thought.

17 CHAIR RIEGER: Thank you, Craig.

18 I -- I agree with some of that.

19 Ellie has a comment.

20 MS. RUBENSTEIN: Yeah.

21 So, Ken, I appreciate your comments, as
22 well as John's.

23 Because since I've been on the board, the
24 first thing I saw was I was surprised there was
25 not an investment committee at the board level,

1 truly. Also surprised to hear that an investment
2 committee is just two people.

3 And then I dug into -- with some of the
4 legislative suggestions of -- at board changes --
5 a traditional board that would allow you to do
6 some of the inflationary comments would come
7 through an investment committee. You're going to
8 talk about portfolio construction and market
9 conditions.

10 The only way to do that with a small
11 talent pool and the six-person board level here
12 would be you -- you would formalize a Ken or a
13 John and have them as an independent so there's
14 continuity of a board as well as investment
15 conditions.

16 Almost most of those pension and
17 endowments have investment committees. So, it is
18 actually surprising to me there isn't an
19 investment committee on the board.

20 And that's my fear is -- if you talk to
21 Marcus or you talk to Allen -- there isn't a team
22 where -- today in place you could get rid of the,
23 you know, consultant sort of speak [sic]. Like
24 the Pathways of the world. They are really doing
25 a lot of the work.

1 And so if you get into the fundamentals of
2 the budget -- as I've said, I remember in the last
3 meeting -- \$187 million in fees and some of this
4 that's going out.

5 When you start to look at what real
6 portfolio construction is, it's reducing the
7 amount of fees and brings thing in-house.

8 But, again, to do that, it's a total one
9 package. You need to increase pay. You have to
10 have the talent. You have to have the board,
11 right?

12 And you have to have the legislative
13 buy-in.

14 So, that, to me, is the next phase of,
15 okay. We got through this executive director that
16 predated half the board.

17 But what Ken is best-in-class management.
18 That's the chapter where it's not just endowment
19 investing. It is the total picture of you now
20 have a C suite.

21 Right?

22 Great. We have an active board.

23 But as -- Craig, you and I have talked
24 about before.

25 But, again, now is it -- what is it you do

1 so that you put in all the work and then you don't
2 have a CIO leave. You don't have an ED leave.

3 Right?

4 You have the talent to continue it.

5 Because if you pull back some of those
6 consultants, then you do have a risk.

7 So, it's -- to me -- what I was excited
8 about this morning, is it's the first time we've
9 had the conversations about it versus we're in
10 crisis reactive mode.

11 Right?

12 Like, that's, to me, the importance of
13 this morning is nothing's been about a crisis.

14 Is that -- is that a fair comment?

15 MR. RICHARDS: Yeah. Yeah.

16 So, I'll completely agree with you that in
17 all the time I've been on the board, the Permanent
18 Fund does not rationalize or think through what
19 it's really doing at a high level in terms of, you
20 know, what's our vision and where do we want to be
21 in 20 years and the governance structure and what,
22 you know, big picture decisions are going to get
23 us there.

24 But that doesn't mean that it necessarily
25 should because I think what we're doing works

1 pretty well within the limitations of the
2 framework.

3 But --

4 MS. RUBENSTEIN: I don't know.

5 MR. RICHARDS: But I, for one,
6 think this is going to be a neat strategic
7 planning exercise.

8 MS. RUBENSTEIN: Uh-huh.

9 MR. RICHARDS: And unlike last time
10 where you show up and there's a consultant there
11 and you just talk about some stuff -- you know,
12 some things come out of it, I think it's a
13 wonderful opportunity to really have some of these
14 really big-picture conversations.

15 MS. RUBENSTEIN: Yeah.

16 CHAIR RIEGER: Well, I'd just add
17 too I think -- you know, the comments about board
18 turnover is something that I've spoken out about
19 before too that it makes some of this stuff more
20 difficult.

21 But I like what Ken is suggesting, right?

22 If we're happy with the discussion we had
23 on the CIO report and how it went this time and
24 how interesting it was and -- probably what Ken's
25 suggesting, it would be a three-hour session --

1 MS. RUBENSTEIN: Oh, yeah.

2 CHAIR RIEGER: -- not an hour and a
3 half session or more.

4 But it eliminates --

5 MR. FRIER: Well, I asked -- sorry.

6 CHAIR RIEGER: -- about how -- you
7 know, how frequently -- if we were to pursue that,
8 I mean, how frequently does the board meet? I --
9 what is our capability staffwise to be nimble?

10 Because also I think -- what I hear Ken
11 speaking to is going to require -- if we're going
12 to do that, we're going to be giving more frequent
13 decision-making course corrections to staff. And
14 do we have that capability to do it?

15 And then the last one is one that I
16 think -- I appreciate Sebastian's comments on it.

17 But part of what -- what will come into
18 question when we do that, I think, is what is our
19 risk tolerance on plain, old tracking error?

20 I mean, we -- we only are X basis points
21 off of what the world has done, you know, whether
22 it's up or down.

23 And how far are we willing to take
24 tracking error risks, specifically?

25 And I think that's a good threshold

1 question to -- to really -- to take advantage of
2 what Ken's advocating.

3 It'd probably just be a useless exercise
4 unless we're really -- really willing to take a
5 risk of being something more. 2 percent above or
6 2 percent below or even 3 percent.

7 And, you know, maybe we are; maybe we
8 aren't. But we should have that discussion too.

9 Jason?

10 MR. BRUNE: So, Mr. Chair, I
11 appreciate this conversation.

12 That -- either more frequent board
13 meetings or bigger ranges for Marcus to have his
14 wiggle room for --

15 But -- but I guess one of the concerns I
16 have is a two-person investment committee of which
17 one is in a reporting structure to another is
18 awkward.

19 And I'm sure it doesn't work that way.
20 I'm sure there is the autonomy to speak your mind.
21 But there's always that underlying "you report to
22 me" structure that -- at least from a public
23 perception perspective -- not knowing Marcus as
24 the amazing person he is -- it could be perceived
25 that it's a dictatorship.

1 And the dictatorship has been phenomenal
2 over the course of the last six years. I -- I
3 appreciate the returns that we've seen.

4 But, I mean, I'm -- I'm thinking as far as
5 public perception.

6 And so, I guess, Ken, I would -- I
7 would --

8 MR. FRAMPTON: Can I actually
9 say --

10 MR. BRUNE: Oh, yeah. Yeah.

11 MR. FRAMPTON: So, like, the way
12 Jim and I run the investment committee, it's
13 unanimous, first of all.

14 Oh. But you're pointing out, like, he
15 reports to me.

16 MR. BRUNE: Absolutely.

17 MR. FRAMPTON: So, he --

18 MR. BRUNE: Yeah. So, of course
19 it's going to be unanimous.

20 Especially if he --

21 MR. FRAMPTON: Well, like, meaning
22 if he objects to --

23 (Indiscernible crosstalk.)

24 MR. BRUNE: -- incentive comp based
25 on how you evaluate him.

1 MR. FRAMPTON: Okay. Fair.

2 I mean, to be clear, we've got 5 percent
3 bands on most of our asset classes.

4 Like, I don't -- I rarely bump into them.
5 Like, I'm not advocating for bigger bands.

6 MR. BRUNE: But that's why I was
7 saying --

8 MR. FRAMPTON: The part --
9 (Indiscernible crosstalk.)

10 MR. FRAMPTON: -- I don't know
11 where the market's going month to month.

12 MR. BRUNE: Either we have more
13 frequent meetings, or we give bigger bands.

14 So, my question for Ken would be -- again,
15 having not been here when a lot of those meetings
16 occurred -- but you said at those meetings we were
17 telegraphing. We knew what was coming with
18 inflation. We knew what was coming.

19 You just said that you see a potential
20 recession with 30, 40 percent decrease in -- in
21 equities potentially coming.

22 MR. FRIER: 30 from --

23 MR. BRUNE: If -- if you --

24 MR. FRIER: From start -- the
25 beginning of this year.

1 MR. BRUNE: Yeah, yeah.

2 If you --

3 MR. FRIER: And we're probably down
4 17 percent since December. Maybe we get another
5 17 percent --

6 MR. BRUNE: So, would your
7 recommendation have been -- it's not in our
8 current policy -- but to have completely thrown
9 out and bailed on quickly the ranges of what we
10 had in public equity?

11 I mean, it -- it -- I'm just intrigued as
12 to your perspective.

13 Because, obviously, Marcus has that
14 flexibility to have certain ranges, and we give
15 him the direction you --

16 MR. FRAMPTON: And I didn't use
17 it -- to be clear, I did not know the market was
18 going to go down this year.

19 Like, I thought it was (inaudible) market,
20 and I think today it's a reflexive market.

21 But I -- at no point, did I call the -- I
22 made negative comments about the stock market. I
23 did not know the market was going to go down. I
24 want to be clear on that.

25 I do not know what the market will do in

1 the next six months. I don't. No one -- I don't
2 believe anyone on my team does.

3 MR. BRUNE: I'm just trying to
4 understand what --

5 (Indiscernible crosstalk.)

6 MR. FRAMPTON: -- that are good at
7 that, and I'm not one of them. I just want to be
8 clear on that.

9 MR. FRIER: I would have liked for
10 you -- the board to have had a choice about what
11 to do.

12 I think that we had the equity bubble last
13 year. And as Marcus just pointed out, it's the --
14 you know, the second most extreme bubble in the
15 history of the United States.

16 And we know -- if you study equity
17 bubbles -- that, like, every bubble bursts
18 eventually, right?

19 All bubbles in the history of bubbles have
20 burst eventually.

21 So, the -- but the hard part is, like,
22 "Well, how do we know when it's bursting?"

23 And -- but it's hard to know -- or it's
24 hard to really time it perfectly.

25 But what we could have done, though, is

1 carefully examined what do we have in this
2 portfolio?

3 If the equity bubble is going to burst,
4 what do we own now that would be particularly
5 vulnerable? What could we do to kind of
6 bubble-burst proof -- what do we do with -- to try
7 to, like, protect ourselves?

8 It's like, you know, putting the plywood
9 on the windows before the hurricane comes.

10 I mean, all of those discussions we could
11 have had without knowing exactly when the bubble
12 would burst but pretty secure in the knowledge
13 that it would burst eventually and it would affect
14 us and with the hope that we would try to prepare
15 for it well enough that when it did burst that we
16 would try -- we would reduce the damage.

17 What I think -- I think we already have --
18 to try to, you know, answer -- answer the -- I
19 guess it's Trustee Brune, right?

20 To answer your question, we do have ranges
21 for all our asset classes.

22 And so what Marcus could have done is he
23 could have just gone to the bottom of the existing
24 range without violating policy because the outlook
25 was -- was difficult.

1 We -- he also -- in fixed income --
2 without changing how much we own in fixed income,
3 we could have made pretty major changes in our
4 exposure to a rising rate environment.

5 But we didn't really even talk about that.
6 I mean, we should have had a deep discussion about
7 what is the role -- what is our reason to have
8 20 percent of our Fund in fixed income at a time
9 when the expected bad outcome is an
10 inflation-driven downturn?

11 At the -- we talked about how inflation
12 was 7 percent. We had 20 percent of our portfolio
13 in fixed income at 22 percent.

14 But we could have talked about do we want
15 that? What's the role of that part of the
16 portfolio for us? What might happen to that part
17 of the portfolio in this high inflation
18 environment?

19 So, we could have kept 20 percent fixed
20 income, but we could have just slammed it all to
21 be short duration fixed income. We could have
22 hedged it.

23 I mean, in places that I work, we hedge.
24 Like, we could have taken all the duration
25 exposure out of it, and it would have saved us

1 more than a billion dollars if we had.

2 So, what I'm advocating for is that when
3 we identify some things that we own are at risk,
4 that we go deeper in terms of, well, what might
5 happen to us, and is there anything we could do
6 about it?

7 And then it becomes a board choice about
8 the kind of degrees of freedom. Like, how much we
9 really are comfortable doing about it.

10 And you're always making decisions under
11 uncertainty. But what I -- what I don't like is
12 the attitude that you -- that you never make a
13 decision.

14 What I felt like -- just to go on -- and I
15 hope this isn't kind of an offensive
16 illustration -- but to think about ourselves as
17 we're in charge of a very valuable ship at sea,
18 and that ship's full of the treasure of the State
19 of Alaska. And it's on autopilot.

20 And last year in the meetings, somebody in
21 every meeting was saying, "There are icebergs
22 ahead of this ship, and, you know, we don't know
23 exactly where they are or how severe they'll be."

24 And then, like, are we the organization
25 that just says, "Well, all right. That's

1 interesting. Carry on with the plan," or do we
2 have, like, the deep discussion about, "Well, what
3 can we do for iceberg management?"

4 I mean, I think we should have done -- I
5 think we should have done more of that.

6 CHAIR RIEGER: Okay.

7 I know we're way behind schedule. We'll
8 give Adam the last question, and then we'll take a
9 break.

10 MR. CRUM: So, as the neophyte in
11 the room, I really appreciate all this discussion.

12 You know, over the last year, you know,
13 the board had other issues that they were helping
14 to work on with a lot of special meetings across
15 it.

16 But now that we've got -- looking at how
17 we are now with the great stabilizing Mitchell
18 Effect, with -- perhaps are you advising -- you
19 know, you talked about a strategy team.

20 And at -- over the next number of months
21 as we have the full C suite intact, as they
22 evaluate it, would you advise that they possibly
23 look into repurposing some of these open or vacant
24 positions to create a strategy team to help with
25 that?

1 Because we've heard numerous times today
2 that we're both a large fund and a small staff
3 across the board.

4 Would that help across -- to make sure
5 that, you know, Marcus does have some more
6 bandwidth to think broader across the board?

7 You know, is that -- is that something you
8 were saying on the strategy side?

9 MR. FRIER: At most of the funds --
10 and, John Skjervem, chime in on this.

11 But most of the funds of this kind of
12 stature and scale and impact, there is a strategy
13 team. They have a strategy and risk person. So,
14 the -- it's not just all on the chief investment
15 officer.

16 So, I think that Marcus needs bandwidth to
17 deal with these important issues. And they're
18 really hard, and they're -- they're, you know,
19 anxiety provoking.

20 I've been in those shoes. And, like, I --
21 you lose sleep a lot at night because you know any
22 kind of change is going to end up being hundreds
23 of millions of dollars.

24 So, I mean, it's really -- I mean, Marcus
25 should ask for what he wants.

1 But -- but the model I'm talking about is
2 just -- it's the more common model, I believe, for
3 large funds like ours where the CIO has asset
4 class heads, but also has a function that's about
5 portfolio strategy.

6 MR. MITCHELL: Mr. Chair?

7 CHAIR RIEGER: That's -- Deven, and
8 then I want to --

9 MR. MITCHELL: Just before -- just
10 before you wrapped up.

11 I know Marcus had volunteered to -- to put
12 his thoughts to paper on this issue. And it's --
13 this discussion has obviously become a lot more
14 than it could have.

15 And I think it's -- it's very provocative
16 presentation that Ken's provided to allow the
17 board to kind of reflect on what's the board's
18 role? What -- how should staff be approaching?
19 Should we be making -- I think -- I mean, I was
20 going to use the words "bets" -- but predictive
21 allocation based on the current realities of the
22 world?

23 And at one point, we were considering
24 borrowing millions of dollars and then investing
25 that money hoping to outperform the rate of

1 borrowing.

2 And so we did a ton of Monte Carlo
3 situations, and there's -- it's kind of easy to
4 look back Monday morning quarterback style and
5 say, "I would have called this play instead of
6 that play, and we would have won the game."

7 It's much more harder to predict the --
8 much harder, I should say -- to predict the
9 future.

10 And so when you look back historically
11 with those Monte Carlo simulations, your
12 performance -- it was cut in half in some cases
13 based on 5 days within a 10-day period.

14 If you were out of the market five days --
15 and predicting those five days is very, very
16 difficult.

17 And so I think it's an interesting topic
18 from a theoretical perspective and from a
19 strategic perspective going forward. And I think
20 there's probably ways around the periphery that we
21 can make changes to try and incorporate some of
22 Ken's ideas.

23 But it's going to be long lived, and I
24 think we would start with getting Marcus plugged
25 in with the board.

1 CHAIR RIEGER: Okay. Let's --
2 Thanks.

3 MR. BRUNE: John --

4 CHAIR RIEGER: John, we are way
5 behind schedule. Please make it quick.

6 MR. SKJERVEM: I'm going to push
7 back on my fellow advisor.

8 This is exactly how funds our size do it.
9 Public funds our size.

10 So, Ken, you know, the difference in our
11 experience is I've lived most of my CIO life in a
12 fishbowl. This is a fishbowl.

13 So, I come back to what Trustee Richards
14 said, within the limitations of our framework.
15 Can we do that? Should we do that?

16 Yeah. But we have to be willing to change
17 the framework because it's not just agility that
18 we need the luxury of. We need the luxury of
19 being wrong.

20 Who's going to sign up for being wrong in
21 a fishbowl?

22 Nobody.

23 If I were in your chairs, I would do
24 nothing but strategic allocation, pursuant to my
25 consultants, for the rest of my life because the

1 political and professional jeopardy of doing
2 something different is disproportionately large.

3 So, we've got an investment committee we
4 could put together in a nanosecond. The three
5 advisors, Jim, Marcus, two trustees. There's your
6 investment committee.

7 Could it meet in executive session? Could
8 it be wrong?

9 No. Its minutes would have to go out to
10 the world.

11 So, again, it -- the limitations of the
12 framework. We can't get to there unless you have
13 some changes to the framework.

14 CHAIR RIEGER: Okay.

15 Let's take a 10-minute break, and then
16 we'll come back.

17 Thanks.

18 (A break was taken.)

19 CHAIR RIEGER: Okay. We're back
20 from break.

21 And the next item is a risk overview from
22 Sebastian.

23 MS. LOESCH: Oh, sorry. I have to
24 change presentations. I am so sorry.

25 Okay. Now try.

1 MR. VADAKUMCHERRY: Good morning.

2 CHAIR RIEGER: You've got the
3 floor.

4 MR. VADAKUMCHERRY: Thank you,
5 Chair and trustees. Good morning.

6 Today's presentation, as usual, has got
7 two parts. The second part is the nominal risk
8 metrics that we update the board -- the trustees
9 as of September end.

10 And the first part is what I'll start off
11 with is -- that at first -- Trustee Richards had
12 suggested at the last meeting that, you know,
13 we -- we sort of provide a refresher of some of
14 the basic risk concepts, especially given that we
15 have three new trustees. And so this is an
16 attempt to do a very high-level overview of some
17 key concepts.

18 So, I'll start off with page 101, which is
19 on the screen now. Going back to I think the
20 earlier comment made by Trustee Richards, risk is
21 good. Absolutely. I mean, I think we believe in
22 that. It is good up to a limit.

23 And that APFC is in the business of taking
24 risks. So, our objective is not to be risk
25 averse. We want to take risk to generate returns.

1 We want to be risk aware, though. It's --
2 it's not prudent to be not aware of the risks we
3 take.

4 And I think the third point is super
5 important here in that principal preservation is
6 paramount.

7 So, that's got a lot said in that
8 statement. But going from the statute that we've
9 got, basically our first objective is to protect
10 the principal and then generate returns.

11 With that, I'll move on to the next page.
12 That's 102.

13 Again, this is just a high-level overview.
14 The top half sort of lists out our key risk
15 measures from an investment/financial perspective.

16 So, we've got volatility, which is
17 probably the most important aspect that we look
18 at, both in terms of standalone and tracking
19 error. The second is drawdown, which is sort of
20 a -- a -- how much could we lose in a worst-case
21 scenario. The third aspect is liquidity. And the
22 fourth is concentration sometimes not captured by
23 the above.

24 And then of course we look at market
25 signals as something that's outside extraneous to

1 the portfolio.

2 And most of these are covered by either
3 the risk appetite definition -- which was approved
4 by the board -- and/or the investment policy
5 statement, again approved by the board.

6 So, I'll go back to the risk appetite in a
7 minute.

8 The bottom half of that slide is -- is
9 what we termed as operational risks. And those
10 are not financial/investment risks.

11 I think the important part here is that
12 APFC is not in the business of taking operational
13 risks. We take investment risks.

14 So, operational risk is not the intended
15 driver for returns, unlike maybe some other
16 institutions.

17 We don't have a defined appetite, but
18 prudence would suggest that we have a very, very
19 low appetite for operational risks.

20 So, that's financial versus operational
21 risks. And those are some of the measures that we
22 have.

23 On the next page, page 103, I've just
24 focused on volatility because that is sort of the
25 primary risk measure that we have.

1 And we've got three distinct sort of
2 computations or -- or variance of volatility that
3 is measured. And I just want to highlight this
4 because there's been a lot of questions asked in
5 the past about why is this risk number different
6 from another risk number that you report.

7 And I'll start off with No. 1, which is
8 the volatility of historical returns. This is
9 something that Callan produces on a quarterly
10 basis.

11 And they look at -- Callan looks at the
12 10-year historical returns for the Fund and
13 computes a volatility number for that historical
14 period.

15 It's not based on current asset
16 allocation. It's based on the allocation of every
17 point in time over those last 10 years. So,
18 that's looking sort of backwards in a way. That's
19 exposed -- that's after the fact.

20 It's accurate, and it is -- it's what it's
21 supposed to be. All three are important measures,
22 and all three are different purposes.

23 The second that I call value at risk is
24 more a forward-looking estimate of risk and not
25 backward looking. So, it basically tries to look

1 at what the risk is based on current asset
2 allocations.

3 So, I think the important distinction here
4 is one is based on current asset allocation or
5 current riskiness of the portfolio while the other
6 is not.

7 And it's -- in terms of how it's computed,
8 we use a BlackRock system or model called Aladdin.
9 And it's simply -- it's still the same math, it's
10 just that it's got a -- a larger database to sort
11 of crunch numbers on.

12 And the third sort of box there is --
13 again, the same as the VaR -- or the value at
14 risk -- that is -- is covered in the second box.
15 It's just that we've adjusted that for certain
16 assumptions that we did during risk appetite.

17 So, there's a third "risk appetite" value
18 at risk quantity that's computed.

19 So, those are the three, let's say,
20 different measures of volatility that we -- it's a
21 bit confusing at times, but I think it's
22 essential. And it's -- the three of them have
23 distinct objectives or purposes.

24 I'm just going to the next page which sort
25 of touches on the same point. I just want to

1 highlight the difference between what Callan
2 computes on a historical basis and what, let's
3 say, we compute or -- or the system computes on a
4 looking-forward basis.

5 Callan's computation of risk in 2018 was
6 around 9.5ish percent. That's a very accurate
7 computation of what has happened in the past.

8 And then if you notice on the chart on the
9 left, the risk level fell to 7 and a bit. So,
10 around 2.5 or 2-plus percent decline in -- in
11 risk.

12 And that's simply because the 2008 and
13 2009 performance fell off the rolling 10-year
14 window. So, it's not because the risk posture
15 changed between 2018 and 2019. In fact, our risk
16 posture between '18 and '19 was higher. So, the
17 risk was higher in '19 compared to '18.

18 Both these numbers are accurate. Both
19 these numbers are correct. I just wanted to
20 highlight they sort of serve two different
21 purposes.

22 Because these -- these questions have been
23 asked in the past, and I just wanted to make sure
24 that trustees are aware of what these two measures
25 reflect on.

1 So, that's on risk measures and VaR and
2 volatility. The next topic I'd like to touch here
3 on the same part -- in the same part is risk
4 appetite.

5 In -- over two years ago, end of 2020, the
6 board -- the trustees approved a definition of
7 risk appetite.

8 And the point there was -- we've always
9 had a target return as we've looked at the Fund
10 and said, "We want to achieve CPI Plus 5 or a
11 benchmark return."

12 We've -- we've not had a target risk
13 level. So, how much risk can we take to achieve
14 this return is a very important question. I mean,
15 they go hand in hand.

16 What I've bolded there is super important
17 here -- is that we can achieve the same return by
18 taking different levels of risk.

19 And the trick or the objective is to
20 achieve our target return at the minimum level of
21 risk, or the correlation to that is to sort of
22 maximize the return for a given level of risk.
23 It's -- it's the same, basically, optimization
24 exercise.

25 And here, what we've looked at is only

1 financial risk. So, we've not touched on the
2 operational risk aspects. I mean, to be
3 realistic, we are not exposed to -- we are exposed
4 to some operational risk. We've seen that in the
5 past and what's happened.

6 But given our construct, it exists. I'm
7 not saying it trivial. But it's not as, let's
8 say, impactful as financial/investment risks.

9 CHAIR RIEGER: Sebastian?

10 MR. VADAKUMCHERRY: SURE.

11 CHAIR RIEGER: Before you go off
12 that, I'm -- can you refresh my memory?

13 Do we have a -- I think we do. Can you
14 tell me: What is our risk appetite for tracking
15 error?

16 MR. VADAKUMCHERRY: So --

17 CHAIR RIEGER: And I know it's in
18 the charts, but it --

19 MR. VADAKUMCHERRY: It's --

20 CHAIR RIEGER: What is -- how --
21 what does that translate to in --

22 MR. VADAKUMCHERRY: It's about 400
23 basis points today. So, that's our limit overall.

24 And we are at about 217 basis points
25 compared to that limit.

1 CHAIR RIEGER: And that's
2 portfolio-wide?

3 So, that's --

4 MR. VADAKUMCHERRY: That's APFC
5 level. For fixed income, it's less. For public
6 equity, it's slightly higher.

7 CHAIR RIEGER: So, that --

8 MR. VADAKUMCHERRY: For --

9 CHAIR RIEGER: So, that means that
10 for the portfolio, compared to, what, like, an
11 80/20, we could be 2.7 percent above or below?

12 That's with -- that's the tracking error
13 that we're --

14 MR. VADAKUMCHERRY: No.

15 CHAIR RIEGER: -- submitting
16 ourselves to?

17 MR. VADAKUMCHERRY: No.

18 Actually, for -- for tracking error, we
19 look at the benchmark and not the 80/20 portfolio.

20 CHAIR RIEGER: Okay.

21 MR. VADAKUMCHERRY: So, the -- the
22 passive benchmark -- I'm sorry. Not the passive.

23 The benchmark that we have for the
24 portfolio -- which is not the 80/20 by the way --
25 so, we have not looked at it compared to the

1 80/20. So, we don't have a limit compared to the
2 80/20.

3 We have a limit of VaR compared to the
4 80/20.

5 CHAIR RIEGER: Okay.

6 MR. VADAKUMCHERRY: And I'm coming
7 to that in a minute.

8 CHAIR RIEGER: Okay.

9 MR. VADAKUMCHERRY: So, we've
10 defined the risk appetite across two dimensions.
11 One is in terms of a risk tolerance portfolio --
12 which is the 80/20 that we just talked about --
13 and a liquidity level. I'll come to the liquidity
14 level later.

15 But focusing on the risk tolerance
16 portfolio. We have, again, two sets of measures
17 we compare the current APFC portfolio to the risk
18 tolerance portfolio. And that is -- one is value
19 at risk --

20 So, that's sort of a derivative of
21 tracking error, Trustee Rieger. So, that's not
22 precisely tracking error, but it is a derivative
23 of tracking error.

24 And we've got a limit on the 80 -- on the
25 current portfolio that should be within the 80/20

1 portfolio.

2 And in addition to that, we have a limit
3 for stresses. We've chosen the deepest or the
4 worst class over the last two decades and taken
5 that as our, let's say, measure.

6 And we've got a slide here -- this is
7 the -- so, on this -- on page 108, it basically
8 outlines what the risk appetite should be or how
9 it will work.

10 So, we can have a portfolio that's not
11 80/20. It can have a number of asset classes.
12 But the riskiness of that portfolio in terms of
13 value at risk should be less than that of the risk
14 tolerance portfolio.

15 And I've got a slide that comes down in
16 the next part where, you know, we measure this on
17 a quarterly basis and report back to the board.

18 We are within that limit but very close to
19 that limit as we speak.

20 So, start off -- to flip back one
21 page here. I'd like to highlight one of the
22 adjustments that we've done that we do for
23 computation of the portfolio risk, vis-a-vis the
24 risk appetite or -- or the risk tolerance
25 portfolio.

1 We have just the private equity -- or we
2 discount the private equity risk by a factor of
3 25 percent. That was -- that's happened in the
4 past over discussions of a period of maybe a year
5 or year and a half where we went back and forth.

6 And the board finally agreed -- decided to
7 adjust that private equity risk factor that's
8 computed by Aladdin down by 25 percent.

9 So, essentially we take private equity as
10 if it is 75 percent of current exposure.

11 MS. RUBENSTEIN: Craig, were you on
12 the board when that happened?

13 MR. RICHARDS: I thought we were
14 doing 1.6, the public risk.

15 CHAIR RIEGER: I thought -- that's
16 what I thought I remembered too.

17 MR. VADAKUMCHERRY: No.

18 So, private equity risk was 1.6 times
19 public equity risk in computation. But we felt
20 that was too high. So, we discounted it by 25
21 percent.

22 So, it's, like, 1.3ish today comparing to
23 public equities.

24 Maybe I'm not articulating myself well
25 here.

1 So, Aladdin computes private equity risk
2 at about 1.6 to 1.8 times that of public equities.

3 MR. RICHARDS: Right.

4 MR. VADAKUMCHERRY: And there was a
5 lot of discussion around that during period, and
6 it was felt that that was too high.

7 Although Callan gets -- I mean, sort of
8 produced exactly that same ratio. Public equities
9 to -- sorry -- private to public in Callan's
10 framework is also around 1.6.

11 But we thought as a -- as a group that it
12 was too high. And so we brought that down to
13 around 1.25 to 1.3 times public equities.

14 So, from 1.6 to 1.3. And that's the
15 roughly 25 percent discount, if that makes sense.

16 So, how we do this mechanically is we
17 compute -- we use Aladdin to compute the riskiness
18 of the portfolio, and then we sort of discount the
19 private equity riskiness by 25 percent and then
20 compare it to the 80/20 portfolio.

21 Again, just to sort of dwell on that point
22 for a minute more. And that's precisely because
23 the 80/20 does not contain private equity, if that
24 makes sense.

25 So, we sort of wanted to make sure that we

1 are not being overconservative when we compare it
2 to the risk -- to the 80/20.

3 So, again, here, we've -- we've got the --
4 Marcus has had the ability to sort of invest in
5 any class that's within the investment policy. He
6 doesn't have to stick to the 80/20.

7 But the riskiness of that portfolio should
8 be within the 80/20 framework.

9 And in addition, we've got a liquidity --
10 a minimum liquidity threshold, which dictates that
11 the total -- the aggregate of public equities,
12 fixed income, and cash, should be at all times
13 greater than 40 percent.

14 MR. RICHARDS: So, through the
15 Chair, I have a question.

16 CHAIR RIEGER: Yeah.

17 MR. RICHARDS: So, just
18 historically -- I -- I was never a fan of this, so
19 I'm not going to revisit that.

20 But where I was left a little murky -- and
21 I still don't quite know the answer -- is if we
22 actually exceed the target, do we do anything
23 about it?

24 MR. VADAKUMCHERRY: We have to come
25 back to the board.

1 So, we report it to the board --

2 MR. RICHARDS: Okay.

3 MR. VADAKUMCHERRY: -- on a
4 quarterly basis.

5 MR. RICHARDS: All right. That
6 makes sense.

7 MR. VADAKUMCHERRY: And then it's
8 up to the board to --

9 MR. RICHARDS: So, it's my -- my
10 concern was always that this thing is a little
11 mechanical. So, to me, it shouldn't drive
12 decision-making.

13 But if where we're at is -- if we exceed
14 it, it's just a flag for people to consider,
15 then --

16 MR. VADAKUMCHERRY: Yeah. I mean,
17 we have to --

18 MR. RICHARDS: -- that's logical.

19 CHAIR RIEGER: Sebastian, can I ask
20 a -- one -- I have to ask you to go back one
21 page to 106. I guess it's two pages.

22 So, we -- when you -- where you at the top
23 say value at risk one year, one standard
24 deviation, that's a standard deviation off of
25 what?

1 MR. VADAKUMCHERRY: It's a standard
2 deviation of that portfolio.

3 CHAIR RIEGER: Of --

4 MR. VADAKUMCHERRY: So, over a
5 10-year time horizon, we take a -- okay.

6 So, it's a -- it's a standard deviation
7 over a period of one year with a, you know,
8 66 percent confidence level.

9 CHAIR RIEGER: So, I guess -- that
10 means we -- but if we -- let's just say you had
11 the -- help me understand it. I'm sorry to be a
12 little slow on this one.

13 MR. VADAKUMCHERRY: Yeah. No.

14 CHAIR RIEGER: But you have a --
15 you have a portfolio -- a benchmark portfolio, and
16 it has a measured volatility that you've been
17 tracking.

18 And so you calculate it out.

19 MR. VADAKUMCHERRY: Right.

20 CHAIR RIEGER: And it has a
21 volatility.

22 And at some point, that represents -- the
23 volatility is the one standard deviation point
24 above or below.

25 MR. VADAKUMCHERRY: Correct.

1 CHAIR RIEGER: Are we -- let's say
2 just then that we did, in fact, decide to take
3 a -- a tilt --

4 MR. VADAKUMCHERRY: Uh-huh.

5 VICE CHAIR RIEGER: -- of -- of
6 more equities or more this or more that so that
7 we're different from the model portfolio.

8 How does that show up on that standard --
9 you know, in that standard deviation as a limit
10 separately from just the regular standard
11 deviation that a benchmark portfolio would have?

12 MR. VADAKUMCHERRY: Yes.

13 So, each asset class has a -- has its own
14 standard deviation based on historical -- how it's
15 behaved historically.

16 VICE CHAIR RIEGER: Uh-huh.

17 MR. VADAKUMCHERRY: And in addition
18 to that, there is a correlation factor between
19 asset classes.

20 So, if we, for example, bumped up real
21 estate today, it would -- it could -- it's likely
22 to actually decrease the overall standard
23 deviation of the portfolio because real estate has
24 got a -- has historically had a lower correlation
25 to, let's say, public equity.

1 Just --

2 MS. RUBENSTEIN: Interesting.

3 MR. VADAKUMCHERRY: -- an

4 illustrative example.

5 But simply by increasing an asset class,

6 it does not -- it does not necessarily mean that

7 the overall standard deviation should increase.

8 That's one.

9 The second is increasing an asset class

10 with a higher standard deviation, VaR is remaining

11 the same, is likely to increase the standard

12 deviation of the portfolio.

13 So, public equities, in your example,

14 Trustee Rieger -- if we actually bumped up public

15 or private equities at this point, overall

16 standard deviation of the portfolio would

17 increase.

18 And -- and the limit to that -- to your

19 question and the -- how much more can we increase,

20 let's say, the overall standard deviation is to

21 the point where the 80/20 portfolio standard

22 deviation is at, if that makes sense.

23 CHAIR RIEGER: I guess it all makes

24 sense.

25 I'm just -- I'm still, I guess, a little

1 hung up on the conversation we had before the
2 break about the tracking error risk that we may or
3 may not be willing to take compared to a benchmark
4 portfolio.

5 And it sounds like it's in -- it sounds
6 like it's in its own -- its own entirely separate
7 measurement that we're not measuring.

8 MR. VADAKUMCHERRY: So, there is --
9 we are measuring the volatility of a standard
10 deviation --

11 CHAIR RIEGER: Uh-huh.

12 MR. VADAKUMCHERRY: -- compared to
13 the benchmark as one of the computations and --
14 so, that's coming further down in this
15 presentation -- and compared to the risk appetite
16 portfolio.

17 Which is not our benchmark, by the way.
18 So, the 80/20 is not our benchmark. We've used
19 that as a risk benchmark.

20 So, we've got a target return benchmark,
21 which is the composite of all the other
22 benchmarks. And we measure standard deviation on
23 that. And we measure value at risk of volatility
24 on that -- or related to that.

25 We also measure it relative to the 80/20.

1 And the reason we chose the 80/20 is
2 because it's higher than the actual benchmark
3 today. So, if we looked at our composite
4 benchmark, it's not 80/20. It's probably -- to be
5 exact, it's slightly less than -- even -- maybe
6 75/25.

7 Our portfolio, on the other hand, is
8 slightly above our benchmark in terms of
9 riskiness.

10 So, maybe -- I think the confusion is
11 we've got three parts. We've got a benchmark;
12 we've got our portfolio; and we've got a risk
13 tolerance portfolio.

14 If I stack them up in terms of riskiness,
15 the 80/20 or the risk tolerance portfolio would be
16 the highest. Then our portfolio -- the APFC
17 portfolio -- and then our performance benchmark.

18 So, we've got a riskiness that's higher
19 than the performance benchmark but not yet at the
20 risk appetite threshold. Both in terms of
21 standard deviation and riskiness of VaR.

22 CHAIR RIEGER: Okay.

23 Well, I'll let it go.

24 MR. VADAKUMCHERRY: If that makes
25 sense.

1 CHAIR RIEGER: Sorry.

2 MR. BRUNE: Mr. Chair?

3 CHAIR RIEGER: Yeah. Jason.

4 MR. BRUNE: And I'm probably
5 getting too nerdy on this one, so shut me up,
6 please.

7 But I know one standard deviation is
8 68 percent, would likely fall in it. And your 2
9 is 95 percent, and 3 is generally around
10 99 percent.

11 So, why was one standard deviation chosen?

12 I mean, do we -- do we want the risk to
13 be -- does that give us the opportunity to make,
14 I'm assuming, more money, more opportunities for
15 that if you're only within one standard deviation?

16 Or do we, being in the fishbowl that we're
17 in, want that risk appetite to be within two
18 standard deviations?

19 I mean --

20 MS. RUBENSTEIN: Yeah.

21 MR. VADAKUMCHERRY: It's just a
22 scaling up of -- because, I mean, as you --

23 MR. BRUNE: Yeah.

24 MR. VADAKUMCHERRY: So, going from
25 1 to, let's say, 1.96 or, you know, 2 standard

1 deviations is just scaling it up or down.

2 So, in fact, internally when we -- when we
3 distribute the risk dashboard that you get on a
4 daily basis, it's got a 97.5 percent confidence
5 level. So, that's almost 2 standard deviations.

6 MR. BRUNE: Okay.

7 MR. VADAKUMCHERRY: So, we look at
8 it in different ways. It doesn't matter because
9 we are comparing it to a benchmark. So, we
10 measure both on the same scale.

11 So, if we use one standard deviation for
12 the portfolio, we use that for the benchmark or
13 the risk tolerance portfolio as well.

14 MR. BRUNE: Thank you.

15 MR. VADAKUMCHERRY: If that all
16 makes sense.

17 MR. BRUNE: Uh-huh.

18 MS. RUBENSTEIN: It's actually
19 interesting comment.

20 Because everything you do in every asset
21 class is about benchmarking.

22 MR. VADAKUMCHERRY: Yes.

23 It's a relative-based performance and risk
24 measurement process, mostly.

25 MS. RUBENSTEIN: Okay.

1 MR. VADAKUMCHERRY: So, I'm moving
2 on to the last slide on this part.

3 We've talked about investment risks a lot
4 today, you know, in the first few pages.

5 I just want to touch on operational risk
6 or -- you know, we talked about this about -- of
7 scalability.

8 Asset allocation sort of requires -- or
9 generates returns, entails risks, and requires
10 resources. I think that's something that John
11 alluded to earlier.

12 We should be aware of our resource set and
13 our capability set. It's -- it's sometimes
14 ignored when we compare ourselves to, let's say,
15 endowments or other peers.

16 We should always be aware that there are
17 different resource requirements for different
18 asset classes.

19 And we should do what we have the best
20 capability set for, both in terms of resources,
21 systems, and -- and -- and, you know, all of the
22 aspects.

23 So, I just wanted to highlight that.
24 And -- and what is bolded in that -- in that slide
25 is we are not in the business of taking

1 operational risk.

2 So, unlike a custodian bank, which
3 basically has huge amounts of operational risk,
4 they are in the business of taking operational
5 risks.

6 I don't know if I can use Callan as an
7 example, but they probably have a higher
8 operational risk or noninvestment risk factor that
9 drives their returns.

10 Unlike for us, majority of our returns are
11 driven by investment risk -- should be driven by
12 investment risk.

13 So, what that means or what that implies
14 is that we should have a very low appetite for
15 operational risk. We should not be wanting to
16 take that at any point in time.

17 CHAIR RIEGER: Adam?

18 MR. CRUM: So, to that point, then,
19 do we have operational risks that you've
20 identified within the organization?

21 MR. VADAKUMCHERRY: Yeah.

22 I mean, like -- so, we absolutely have
23 operational risks. Not to the extent that some of
24 the other institutions -- like the ones I've
25 mentioned has.

1 What I was trying to highlight here,
2 Trustee Crum, is that we have it. And it's --
3 it's important that we are cognizant of it, we are
4 aware of it, and we build mitigants.

5 So, we do have, you know, legal. We have
6 reputational risks. We have operational risks.
7 So, we've got a, you know, middle office function
8 that's very important in settling deals. If there
9 are gaps in that or that results -- the
10 requirements in that, we need to close those gaps.

11 So, it's just something that is sometimes
12 ignored because they don't come in, you know, the
13 big picture or the important --

14 MR. CRUM: Uh-huh.

15 MR. VADAKUMCHERRY: -- parts of
16 investment process.

17 But it is important. We don't want to
18 have an appetite for operational risk, even if
19 it's a very low threshold.

20 So, with that, I'll sort of leave this
21 part of the presentation, unless there are other
22 questions.

23 I'll move to part 2, which is basically an
24 update of risk metrics as of September 30th.

25 To Trustee Rieger's point, we just talked

1 about this in the past few minutes. Our risk
2 level is the blue line compared to the risk
3 appetite, which is the orange line.

4 And as you can see, it's moved around
5 because volatilities change. So, there are -- the
6 chart on the left side is the value at risk, and
7 we've been consistently below the risk appetite
8 level.

9 If I did this chart against the benchmark,
10 we would be above the risk appetite -- I mean, the
11 benchmark level in terms of risk.

12 The second or the middle chart is
13 basically the drawdown risk compared to the risk
14 appetite. Again, we're below that. So, we are in
15 the green zone here.

16 And on liquidity as well, we are sort of
17 well within the threshold. But our liquidity has
18 been, let's say, declining.

19 So, we've had around 65 percent of the
20 portfolio in those three buckets as of 2021. And
21 today it's closer to 55 percent. Still around the
22 40 percent.

23 MR. RICHARDS: Through the Chair.

24 Does liquidity -- does that slope just
25 reflect that private equity valuations aren't

1 going down?

2 MR. VADAKUMCHERRY: Private equity,
3 as a whole, has gone up, actually.

4 MR. RICHARDS: Okay.

5 MR. VADAKUMCHERRY: So, it
6 doesn't --

7 (Indiscernible crosstalk.)

8 MR. FRAMPTON: -- gone down.

9 MR. VADAKUMCHERRY: Going up.

10 MR. RICHARDS: Yeah.

11 MR. FRAMPTON: He said -- he said
12 it doesn't reflect that they aren't going down.

13 MR. VADAKUMCHERRY: Oh, okay.

14 Yeah. That's right. Sorry.

15 MR. FRAMPTON: Because there is a
16 little artificial element that, like, if it was --
17 it might be lower if it was, like, really market
18 to market.

19 MR. VADAKUMCHERRY: Oh, yeah.

20 Absolutely.

21 It is not market to market. So, we don't
22 know.

23 On the next page, what we've -- do here,
24 again, reported on a quarterly basis is to report
25 the Fund realized volatility. Exactly the same

1 thing that Callan reports.

2 Instead of using a 10-year horizon, we use
3 a 3-year quarterly return profile here. And it's
4 moved -- it's ticked up a bit, not a whole lot,
5 over the last few quarters.

6 And our realized Sharpe is, again, quite
7 healthy. It's gone below the 1 percent -- or the
8 1 times in this last quarter, as expected. 1.6
9 today.

10 So, that's a rolling three-year period.
11 This is more a snapshot as of -- it's -- sorry for
12 the error there. It's as of September 30th, not
13 June 30th.

14 Most of our asset classes have had a
15 positive Sharpe. Fixed income and risk parity are
16 the two ones which has a negative over the
17 three-year period. And almost entirely because of
18 these last couple of quarters.

19 This is the slide, Trustee Rieger, which
20 compares the standard deviation to our benchmark
21 and the relative -- I mean, the VaR to our
22 benchmark. So, not the risk appetite portfolio.

23 As you can see here on the right-hand
24 side, the top bar basically reflects a
25 15.4 percent relative VaR.

1 What that means is the portfolio is 15.4
2 times riskier than our benchmark. Again, to
3 repeat myself, it's not 15.4 times -- not
4 15.4 percent more than the risk appetite
5 portfolio.

6 Interestingly, both public equities and
7 fixed income have a lower risk level than their
8 respective benchmarks.

9 And so the driver of the higher risk level
10 at the Fund level is -- is almost entirely private
11 equity.

12 And on the left side, we've got the
13 individual tracking errors. We don't compute a
14 tracking error for private equity. We look at
15 only the public assets for tracking error to
16 benchmark.

17 So, if there are no more questions, going
18 to the next page. We've got several liquidity
19 thresholds.

20 And here I'll sort of highlight on -- on
21 the bottom half of the page where we look at
22 future commitments.

23 So, I mentioned 4.5. It's -- it's -- the
24 more accurate number is 4.2, which is the unfunded
25 commitments for private equity. Our total

1 unfunded commitments for private assets is about
2 8 billion.

3 So, we are not actually shutting off the
4 tap today if we, you know, desire to readjust
5 allocations because these are committed numbers.

6 Again, here we are within the threshold of
7 the limits. So, in the green zone.

8 MR. BRUNE: I'm sorry.

9 They're committed but not yet --

10 MR. VADAKUMCHERRY: Deployed.

11 MR. BRUNE: -- allocated?

12 MR. VADAKUMCHERRY: Yeah.

13 MR. BRUNE: And so where do those
14 funds reside?

15 Is that some of the gold that -- I mean --

16 MR. FRAMPTON: Oh.

17 So, some people -- like, if you look at
18 private equity right now, we're getting capital
19 calls, we're sending money out, and then we're
20 getting distributions back in.

21 And they're, like, roughly equal, and
22 they've been roughly equal for years.

23 So, we don't -- some investors --
24 particularly like family offices and
25 individuals -- if they make a commitment to a

1 private equity, they'll put the cash in a
2 segregated area.

3 We model out what we think the timing that
4 we'll get these calls on and what money we think
5 will come back.

6 So, we don't -- we have tons of liquidity.
7 We have over half the fund in assets that we can
8 access in, like, two days.

9 So -- but we don't segregate assets out.
10 We don't -- I just am extremely confident we have
11 the liquidity to meet those capital calls.

12 MR. BRUNE: Thank you.

13 MR. VADAKUMCHERRY: So, on
14 page 116, we've sort of profiled the stress tests
15 that we do for the portfolio, and we've compared
16 each stress to the benchmark.

17 And the last stress on the bottom of that
18 right-hand chart is the GFC prices. So, we look
19 at how the portfolio would have performed assuming
20 a repeat of the GFC.

21 And as was noted in the earlier
22 presentation, we would lose about half the value
23 of the Fund compared to about 46 percent on the
24 benchmark.

25 So, we have a slightly riskier portfolio

1 than the benchmark. There are a few stresses
2 where the benchmark has a higher loss level. But
3 again, only marginally.

4 So, this, again, something that we do
5 report on a quarterly basis.

6 Compared to the bench -- to the risk
7 appetite -- I know this is a bit confusing, but
8 I'm just repeating myself here.

9 Compared to the benchmark, we are better
10 off than the -- sorry. The risk appetite. We are
11 better off than the risk appetite, the 80/20.

12 Having said it so many times, I think I'm
13 confused myself now.

14 So, the last slide on this deck is just a
15 simple currency breakdown and a country breakdown.
16 We are predominantly U.S. based, both in terms of
17 currency -- U.S. dollars and country.

18 And those tables provide a breakdown of
19 the other big -- both emerging market and
20 developed market exposures.

21 It's not changed a lot over the last maybe
22 year. And the overall exposure to the U.S. --
23 currency and market -- has always been at these
24 high levels. About 75 percent at all times.

25 At least since I joined, I think it's been

1 that.

2 MR. FRAMPTON: Yeah.

3 But if China invades Taiwan, that
4 \$200 million -- or 160 was the number in Russia
5 that we're talking about -- the billion-five that
6 will be -- we have a billion-five invested in
7 Taiwan and China.

8 We had, I think, 160 million in Russia
9 when the Ukraine invasion happened.

10 And so it would be a bigger --

11 MR. VADAKUMCHERRY: Impact.

12 MS. RUBENSTEIN: Are you --

13 MR. FRAMPTON: -- discussion
14 than -- yeah.

15 MS. RUBENSTEIN: Are you growing
16 China, or is this, like staying flat?

17 MR. FRAMPTON: Yeah. We are --
18 we're not actually growing it.

19 So, like, on -- most of those assets are
20 in equity -- public equities. It's, like,
21 5 percent of our equity benchmark.

22 MS. RUBENSTEIN: Uh-huh.

23 MR. FRAMPTON: And, I mean -- yeah.
24 So, we're not, like -- I think we have a slight
25 overweight in equities to China.

1 And the Chinese stock market's up, like,
2 30 percent in the last month, which is
3 interesting.

4 So, like, that has helped performance --
5 Fawad having that overweight.

6 So...

7 MR. RICHARDS: What is the status
8 of the Russia money?

9 Didn't we get out of the debt, and we
10 still have --

11 MR. FRAMPTON: Some of it --

12 (Indiscernible crosstalk.)

13 MR. FRAMPTON: Yeah.

14 A lot of the bonds we traded out of.

15 But the ones that were, like -- worth,
16 like -- that went down, like, 99 percent, we still
17 hold.

18 We still hold some equities. I mean,
19 it's, like -- market value's, like, sub
20 \$20 million at this point.

21 The stuff that you're just, like, giving
22 it away, we didn't do anything with. But the
23 stuff we can get, like, 30 cents on the dollar, we
24 traded out of most of that.

25 MR. BRUNE: What have they done

1 since we got out?

2 MR. FRAMPTON: Some of them
3 rallied.

4 I mean, that period where everyone was
5 talking about it, I think was the -- many of
6 the -- the -- the non-Ruble denominated Russian
7 treasuries rallied pretty good at the end of the
8 summer, and that was the stuff that we traded out
9 of.

10 And the stuff that's, like, local market
11 traded and Moscow stock exchange stocks are, like,
12 not worth anything and never rallied.

13 MR. VADAKUMCHERRY: I --

14 CHAIR RIEGER: Just to clarify.

15 On the -- on the country breakdown, are
16 you only listing the emerging market countries?

17 MR. VADAKUMCHERRY: Yup.

18 CHAIR RIEGER: Okay.

19 MR. VADAKUMCHERRY: On the
20 currencies, we did the developed markets.

21 I mean, just -- we can add the developed
22 markets if...

23 MS. RUBENSTEIN: Uh-huh.

24 CHAIR RIEGER: Okay.

25 MR. VADAKUMCHERRY: And with that,

1 that's the last of the pages on the risk overview
2 section.

3 The risk dashboard, which is on the next
4 page, is something that we distribute on a daily
5 basis.

6 And if any of you have questions on that,
7 I would be happy to answer.

8 CHAIR RIEGER: Any questions?

9 If not, thank you, Sebastian.

10 MR. VADAKUMCHERRY: Thank you.

11 VICE CHAIR RIEGER: Let's go to the
12 asset class overview.

13 Ross.

14 MR. FRAMPTON: So, I'll introduce
15 Ross Alexander here for the benefit of the newer
16 trustees.

17 At every board meeting -- at one point, we
18 would have every asset class do, like, a 30-minute
19 presentation at every board meeting. And, I mean,
20 there was a benefit to that. You get more
21 frequent updates.

22 What we've changed to is one asset class
23 each board meeting. So, we did absolute return
24 last time. This summer we did infrastructure.

25 And so Ross joined the Fund in 2016 --

1 Is that right, Ross, or is it 2017?

2 MR. ALEXANDER: '18.

3 MR. FRAMPTON: '18.

4 MR. ALEXANDER: Trying to give me
5 credit for --

6 MR. FRAMPTON: All right.

7 So, when he started, Ross was a portfolio
8 manager reporting to me. And then when I became
9 CIO, we was a portfolio manager reporting to Steve
10 Moseley. Now he's back reporting to me.

11 But in that entire time -- 2018 till
12 now -- he's been the person responsible for our
13 private income portfolio and has done a really
14 good job.

15 The -- one thing that's -- before I hand
16 it over to Ross that I think's interesting is
17 we've got a decent amount of energy transition
18 investments in infrastructure. So, we found a lot
19 that we like there.

20 And we have a couple managers that are
21 going to present. One is specifically an energy
22 transition mandate.

23 And we really like investing in oil and
24 gas in public markets and in private equity. I
25 think 7 or 8 percent of Allen's portfolio is oil

1 and gas.

2 And it's -- particularly in the last year,
3 it's been a great area.

4 But then we also like energy transition,
5 which is sort of, like, what John Skjervem was
6 talking about at the last board meeting.

7 He was, like, you know, "Look. There are
8 good opportunities in both."

9 So -- and Ross will comment on some of
10 that, and we'll have a couple of managers that
11 comment on it.

12 So, over to you, Ross.

13 MR. ALEXANDER: Thanks.

14 Yeah. The -- the two managers that you'll
15 hear from in a little bit -- Stonepeak and EnCap
16 after lunch -- EnCap is an oil and gas manager by
17 trade. Like, that's been their whole existence
18 for the past 30-plus years.

19 And because of their experience there and
20 a lot of the similarities between the -- the parts
21 of that market that they focus on and the energy
22 transition space, they take a very, we think,
23 pragmatic view of the energy transition market.

24 So, it's not, you know, from a simply
25 altruistic viewpoint. Like, they're finding good

1 opportunities that they think are fairly defensive
2 and still fit within -- within their, you know,
3 playbook.

4 So, a -- an interesting way to play energy
5 transition, so that's why we like them. You'll
6 hear more from them later.

7 So, we're going to talk about
8 infrastructure today. It's part of the private
9 income, private credit that's infrastructure,
10 private credit, and then a third subportfolio that
11 we call income opportunities. It's kind of a
12 catch-all for something that doesn't fit in infra
13 or credit.

14 I cover that with Logan Rahn, who you saw
15 earlier today when Marcus introduced him.

16 But in order to not duplicate what you're
17 going to hear later from the managers, we didn't
18 want to go into too much on market specifics
19 because they're much closer to it than we are, and
20 we thought it was valuable for you to hear from
21 them as the experts.

22 So, kind of wanted to just take this
23 opportunity to kind of level set of what is
24 infrastructure? Why are we allocated to it? What
25 do we like? You know, what are some of the

1 characteristics of -- of these assets and the
2 types of investments that we're making as well as
3 you know, themes and challenges?

4 So, what are we looking out for today?

5 And then we'll wrap up with just a -- a
6 brief snapshot of our portfolio, how we're
7 positioned, and, you know, what the performance
8 has been like over the past several years.

9 So, on the whole, private income, you
10 know, the -- the total portfolio's about
11 \$6.1 billion today. Infrastructure is just over
12 half of that, 3.3, I believe.

13 You know, the objective of that -- that
14 overarching portfolio, generate a return between
15 the expected returns of fixed income and public
16 equity.

17 You know, we're -- we're not shooting for
18 the lights out here. We're trying to preserve
19 capital, minimize downside risk, but still
20 generate an attractive return that is a credo to
21 the portfolio.

22 On the infrastructure piece, you know, the
23 objectives here kind of build on the private
24 income objectives.

25 We're looking for that attractive

1 risk-adjusted return. Very topical today from,
2 you know, both what you've heard from other
3 speakers as well as just what you're seeing in the
4 market today.

5 These assets oftentimes have inflation
6 protection characteristics. So, it's a -- an area
7 that we've heard for, you know, as long as we've
8 been invested in infrastructure going back to 2007
9 that these assets are inflation protected.

10 But we hadn't been tested, you know, until
11 this past year. So, there was some uncertainty
12 of, you know, what -- what would that outcome
13 really look like? Is it as protected as we
14 thought it was?

15 And the result has been quite good, and
16 it's -- it's held up really well. And these
17 assets have demonstrated those -- that resilience.

18 The other -- the other main objective here
19 is low correlations with other major asset
20 classes. That one's a little tougher for us. We
21 do take a fair amount of equity risk here.

22 So, we think it's a lower risk equity
23 play, but it is still equity risk. So, you know,
24 in times of stress, those asset classes tend to
25 move together.

1 We hope we aren't moving as extreme and we
2 can minimize that correlation to a certain degree.
3 But recognize that they still -- they still are
4 equity risk here.

5 You know, the only other thing I'd mention
6 on this slide is that through the cycle
7 expectations, you know, the APFC objective labeled
8 here is higher than the Callan number that they
9 use for their capital market projections.

10 And that's what we use -- that 7.25 is
11 what we use for our policy and our planning
12 purposes.

13 But when we're actually allocating to
14 funds and making investment decisions, we are
15 targeting a higher return than that.

16 So, we're not looking for single digits as
17 we build our portfolio. But for planning
18 purposes, that's -- that's where that number plays
19 in.

20 So, infrastructure can mean a lot of
21 different things to a lot of different people.
22 It's a very common term, but not well defined
23 across all investors.

24 So, in its most basic form, it's the
25 tangible things that enable society to exist and

1 flourish. So, it's common things that we rely on
2 every day but maybe don't think about all the
3 time.

4 So, something like energy infrastructure.
5 That's power generation. It could be a
6 natural-gas fired power plant. It could be
7 renewables, the energy transition space. It could
8 be midstream pipelines, whether it's, you know,
9 oil and gas, oil pipelines -- you know, taking oil
10 from the wellhead to a refinery, gas processing.
11 Can look -- take a lot of different forms.

12 We are active -- as we'll go through this
13 list -- in almost every one of these areas.
14 Definitely every area that we have listed. So,
15 we're exposed to all of these.

16 Another area that's really common in
17 infrastructure portfolios is transportation
18 assets, whether it's passenger or cargo.
19 Airports, toll roads, passenger rail lines is kind
20 of a newer part of that one. Railcar leasing we
21 see oftentimes within our portfolio.

22 Utilities are a big one. This is -- a lot
23 of publicly traded infrastructure stocks are
24 focused on the utility space, especially within
25 the U.S. Could be wastewater treatment plants,

1 could be water distribution networks, desalination
2 plants, electricity transmission systems.

3 One of the newer parts of the
4 infrastructure market over the past probably 5 to
5 10 years that's really come into play and is a
6 meaningful part of most investors' portfolios
7 today is telecommunications assets. Cell phone
8 towers, data centers, fiberoptic networks.

9 These used to be a -- considered a higher
10 risk opportunity that would sit in most people's
11 private equity bucket.

12 But as we've seen the -- really how much
13 we all rely on these systems for daily -- daily
14 life, you know, they -- they've been deemed to be
15 derisked as not -- you know, not having as much
16 technology risk as they used to for those
17 underlying networks that enable the data
18 transmission.

19 So, we've seen those enter our
20 infrastructure bucket. It's a very meaningful
21 part of our portfolio today and continues to grow.

22 And then this last portion, the social
23 infrastructure. It's a -- it's a broad category
24 that is -- it's -- mainly revolves around
25 healthcare and education. And it's not the actual

1 provision of either one of those, but it's the
2 facilities that allow that to happen.

3 So, it's not an area that we're
4 particularly active. We have never made a direct
5 commitment into one of those types of assets.

6 But we see it within our portfolio from
7 time to time. And over the years, it's -- it's
8 taken on a couple different forms.

9 You know, we've seen infrastructure
10 investors, you know, in Europe invest in
11 crematorium or mental health facilities.

12 We oftentimes will see opportunities arise
13 in healthcare facilities today that are more
14 around radiology facilities or you know, on the
15 education side that would also fit under social.

16 You're going to see student housing
17 sometimes kind of float into infrastructure.
18 Other groups would put it in real estate. And
19 then some private education facilities outside of
20 the U.S. would fall under here.

21 So...

22 CHAIR RIEGER: Jason?

23 MR. BRUNE: Excuse me, Mr. Chair.

24 Thank you, Ross.

25 I know you're going to get into this in a

1 few slides, but I -- I wanted to ask the question
2 now.

3 With the EHF funding that was out there,
4 I'm seeing at the DEC significant inflationary
5 pressures that are worrying us that it's going to
6 cause the costs of infrastructure projects -- like
7 water, wastewater treatment plants -- to go up
8 because billions of dollars were put on the
9 different infrastructure. Not just water and
10 wastewater but many of those items that you have
11 on there.

12 Again, I know you're about to address
13 that. But how does that impact our consideration
14 of projects when returns could be significantly
15 risky because of cost overruns because of
16 inflationary pressures, et cetera?

17 And is that causing us to think about
18 fewer opportunities, especially in light of the
19 huge influx of cash that came from the federal
20 government from EHF?

21 MR. ALEXANDER: Yeah.

22 So, couple different points on that one.
23 One is that, you know, it -- that dynamic is
24 having an impact a little bit on, you know,
25 what -- what sectors we target.

1 So, you know, we're not looking to -- to
2 be exposed to an asset that, you know, your --
3 your input costs are going up, but you can't get
4 that back on the revenue side.

5 So, you know, if we can -- if we can see
6 today, you know, commodity price exposure, that's
7 not a bad thing. Because, yes, your inputs are
8 going up, but so is your revenue on the back end.

9 Renewables -- if you're an owner of an
10 operating renewable asset, that's a very difficult
11 proposition today because the price that you have
12 contracted that power at is not able to float with
13 inflation.

14 So, it's -- it's pushing us to maybe pick
15 our spots as far as target sectors go.

16 Most of the capital that we are deploying
17 is not into public projects within the U.S.
18 That's a very small portion of our portfolio.

19 It's not -- it's a -- that part of the
20 infrastructure market is -- takes a long time to
21 get your money out the door. You know, if you're
22 in the P3 space, those are -- you know, it takes,
23 you know, five to seven years to get from -- you
24 know, through that development process to the time
25 you can have a shovel in the ground. And then

1 you've got to actually go through a multi-year
2 build process.

3 So, by the time we are seeing, you know,
4 the -- the outcome of that, you know, that may be
5 close to a decade.

6 And our strategy of investing is mostly
7 through closed-end funds which have a shorter
8 life.

9 So, we're not in the public construction
10 process in the U.S. So, there's groups that do
11 focus on that. They take a much longer view of.
12 We don't.

13 So, it's -- it's -- it has an impact --
14 kind of a knock on effect of everything we're
15 doing, but it's not a direct impact, I guess I
16 would say.

17 MR. BRUNE: Thank you, Ross.

18 VICE CHAIR RIEGER: Just a
19 follow-up on that.

20 Did -- in the projects that you're
21 typically fund -- getting placed into, what is the
22 typical level of leverage in those?

23 If there is a typical.

24 MR. ALEXANDER: It depends on the
25 sector.

1 MS. RUBENSTEIN: Uh-huh.

2 MR. ALEXANDER: I mean, I think if
3 you were to look at it across our entire
4 portfolio, it's probably a 50 percent leverage at
5 the asset level.

6 And then the fund -- the owner is
7 leveraging their acquisition -- you know, at
8 acquisition.

9 So, there's multiple layers of leverage on
10 all of these. So, these can be quite leveraged.
11 So, interest rate sensitivity is a big, you know,
12 area that we look at.

13 A lot of the debt that infrastructure
14 owners are able to place is fixed rate for the
15 long term. So -- or some of it is. Not all. I
16 shouldn't say a lot of it.

17 So, you know, these are -- these are
18 assets that lenders, you know, feel are fairly
19 derisked at the asset level.

20 So, you can still see a good rate today,
21 but that movement in interest rates is meaningful
22 and impactful on multiple levels for us.

23 MS. RUBENSTEIN: Mr. Chair?

24 CHAIR RIEGER: Ellie.

25 MS. RUBENSTEIN: On the topic of

1 characteristics, this is usually the category or
2 asset class where there may be ESG funds.

3 Even though there is no investment
4 mandate, are you seeing the managers that you
5 invest in have ESG reporting come through in some
6 of these types of projects?

7 MR. ALEXANDER: Yes.

8 We have never -- you know, we feel
9 fortunate that we're in a position that the -- the
10 message that we've heard from the board is that
11 our mandate is economic.

12 So, we do not target ESG funds for the
13 sake of targeting ESG funds or a climate fund.
14 Whatever -- however you want to categorize it.

15 With that said, you know, across all three
16 of those letters in that acronym, those are real
17 risks to any company.

18 So, all of our managers, regardless of
19 sector or jurisdiction that they target, they are
20 incorporating ESG reporting into what they're
21 feeding back and also truly looking at it from a
22 derisking of their business to better position it
23 for the sale.

24 And you can EnCap this. They would be the
25 great -- they've be the right people to ask on it

1 as oil and gas investors -- you know, how they
2 think about it.

3 Because, you know, they're -- they're
4 looking to derisk it not just from the headline
5 risk but also it -- it's an ability for them to
6 make more efficient businesses.

7 MS. RUBENSTEIN: Yeah.

8 MR. ALEXANDER: I mean, if you look
9 at, you know, a -- a midstream company, you know,
10 they're going to own a pipeline oftentimes.

11 And if they're able to reduce leaks, you
12 know, kind of enable the reduction of flaring,
13 that's a benefit for everybody. And it also
14 allows them to drive greater revenues.

15 So, they're reporting on it. Different
16 groups are more proactive than others.

17 MS. RUBENSTEIN: Could it be too
18 much of a risk -- given the public testimony we
19 had -- that since your managers are doing ESG
20 reports that are public, given back to you -- when
21 you submit the board presentations, if somebody
22 already has an ESG report and they're here
23 speaking, could you include that ESG report so we
24 can see it?

25 MR. FRAMPTON: I mean, the concern

1 I have with that is, like -- if all of the sudden
2 someone says, "Tobacco's not ESG" --

3 Like, value -- like, there are ESG risks
4 with any company.

5 MS. RUBENSTEIN: Yes.

6 MR. FRAMPTON: Like, if you're,
7 like, a horrible culture -- the S, like, driving
8 off good employees, it's terrible -- terrible
9 governance, if you're, like dumping chemicals in
10 a -- if you're violating environmental laws, like,
11 that is, like, terrible business.

12 One of the biggest risks in investing is
13 valuation. Like, what price are you paying?

14 If everyone decides they like a certain
15 sector because it's ESG, they're probably
16 overpaying, and we probably want to avoid it.

17 And then if someone says, you know, "We
18 don't like tobacco because of ESG," like, I'm all
19 of the sudden really interested in tobacco at that
20 point.

21 So, I mean, we can -- we have managers
22 that we back because they've got good track
23 records who have ESG apologies -- policies.

24 And my guess is infrastructure's an area
25 where almost everyone has an ESG policy because --

1 MS. RUBENSTEIN: That's what I was
2 thinking.

3 MR. FRAMPTON: -- like, to be
4 relevant in certain states, you need one.

5 In absolute return, the good managers
6 are so -- don't have ESG policies yet because
7 they're so good they don't need to deal with --
8 it's a distraction for any investor to have to do
9 noneconomic things.

10 So, like, if we had a rule that said,
11 "Everyone's got to have an ESG policy," it's,
12 like, half our hedge funds we redeem from -- I
13 don't know.

14 Well, that may not be what you're asking.

15 MS. RUBENSTEIN: That's not what
16 I'm asking.

17 MR. FRAMPTON: You're saying, like,
18 a manager --

19 MS. RUBENSTEIN: That's a --
20 (Indiscernible crosstalk.)

21 MS. RUBENSTEIN: That's -- you're
22 looking at it from an investment mandate.

23 I'm looking at it in order to reduce
24 public pressure on people saying, "The Permanent
25 Fund needs to divest from fossil fuels."

1 They're not seeing that --

2 MR. FRAMPTON: We have some
3 investments --

4 MS. RUBENSTEIN: Exactly.

5 MR. FRAMPTON: -- that are --

6 MS. RUBENSTEIN: It's just --

7 MR. FRAMPTON: -- appeal to the
8 ESG.

9 MS. RUBENSTEIN: -- classified --
10 unless you're an investor and you understand how
11 to go into a portfolio and say, "Okay. In themes
12 today, it's most likely to come up in the
13 infrastructure bucket" --

14 MR. FRAMPTON: Yeah.

15 MS. RUBENSTEIN: The public isn't
16 seeing that because they're not an investor.

17 Is that fair?

18 MR. FRAMPTON: Right.

19 MS. RUBENSTEIN: So, I was saying,
20 like, when these -- you know, if -- if you know --
21 if you're an investor, "Okay. This is where it's
22 most coming out here" --

23 It's pretty standard that my guess is most
24 of your managers in this category have ESG
25 reports.

1 MR. FRAMPTON: Totally. Yeah.

2 MS. RUBENSTEIN: Just include it in
3 the public packet so that they're seeing that you
4 guys are funding the energy transition.

5 That's what I meant.

6 MR. FRAMPTON: I just don't want to
7 be misleading that, like, we're now an ESG
8 investor --

9 MS. RUBENSTEIN: That's not --

10 MR. FRAMPTON: -- when we're a
11 financial investor.

12 I know. But you're not saying that.

13 But if I got this packet, and the first
14 200 pages are this, the next 200 pages are, like,
15 the third of our managers --

16 Sorry. Go ahead.

17 MR. CRUM: I was going to say to
18 clarify something you said, you have managers that
19 have good track records. Some of whom may happen
20 to have an ESG.

21 MS. RUBENSTEIN: Yes.

22 MR. FRAMPTON: Totally. Yes.

23 MR. CRUM: But that's not the
24 deciding factor upon -- which you use. You go
25 upon the good track record.

1 MR. FRAMPTON: Right.

2 MR. CRUM: Okay.

3 MR. FRAMPTON: So, I -- so, do we
4 include those reports?

5 That might be a good report. I don't want
6 to push back on that.

7 MR. RICHARDS: So, I do.

8 So -- so, you become what you measure.

9 MS. RUBENSTEIN: Yes.

10 MR. RICHARDS: We don't care about
11 ESG, except for the way he said it.

12 So, if you start measuring it, then you
13 start caring about it.

14 Right?

15 So, it's, like -- to me, it's sort of a
16 slippery slope of if you -- if you start creating
17 these benchmarks, well, then you start caring more
18 about than maybe you should.

19 MS. RUBENSTEIN: I don't mean it in
20 the benchmark, Craig.

21 I mean as information.

22 MR. RICHARDS: What's that?

23 MS. RUBENSTEIN: I -- I truly mean
24 it in information.

25 MR. RICHARDS: Okay.

1 MS. RUBENSTEIN: Because, like --

2 MR. RICHARDS: I'm just saying
3 that's why I would not measure it is because if
4 you include it, then people will focus on it. And
5 it becomes talking points, and it becomes
6 something that becomes of a higher level of
7 importance than it should be.

8 MS. RUBENSTEIN: I -- see, I look
9 at it as public trust and transparency.

10 MR. RICHARDS: Sure.

11 MS. RUBENSTEIN: And we get letters
12 addressed to the board about we're not doing
13 enough to do anything. We're frankly -- the
14 investment team is already looking at it.

15 That's my point. It's not a mandate.
16 Just -- I look at it as transparency.

17 MR. FRAMPTON: Can't argue with
18 that.

19 Or maybe you can. I don't know. Sorry.
20 I didn't mean to contradict you.

21 Can't argue with transparency.

22 MR. ALEXANDER: All right.

23 So, moving on a little bit.

24 You know, despite infrastructure covering
25 a very broad range of asset types, you know, there

1 are some common characteristics that we see
2 across -- across the board here.

3 The first and one of the main, you know,
4 characteristics you'll hear highlighted is high
5 barriers to entry. You know, these are assets
6 that are not easy to replicate. They're
7 oftentimes quite expensive.

8 So, simply from a capital allocation
9 standpoint, they're -- they're hard to have a
10 competing asset.

11 Other times, it's citing or efficiency.
12 If you have an airport, local jurisdiction's not
13 going to easily go out and approve an airport in
14 a -- you know, in a nearby location.

15 Same with power transmission lines. I
16 mean, you see it all the time from, you know,
17 projects getting shot down that are quite viable
18 and needed. But the barriers to entry to build a
19 new project are high.

20 So, if you have that existing asset,
21 you're in a very good spot.

22 These are oftentimes essential services.
23 So, things that you cannot turn off in your daily
24 life.

25 I mean, if you think about a cell phone

1 tower -- if I were to lose my job -- please,
2 Marcus, don't fire me -- or if -- you know, if we
3 enter a global recession, very few of us are going
4 to change, you know, cell phone plans or change
5 the amount of data that you're consuming on a
6 daily basis.

7 So, you know, these are things that we all
8 rely on, whether we're consumers or businesses,
9 regardless of the end user. Puts you in a pretty
10 favorable position if you can own that asset.

11 There are also times -- they oftentimes
12 have a hard asset base. So, you know, from a --
13 an inflation protection characteristic, you know,
14 if you own an existing asset and you're seeing
15 inflation and input costs, commodity prices,
16 that -- that replacement cost continues to
17 increase, helps to maintain solid value within
18 your existing asset.

19 Also, you know, one of the core tenets of
20 infrastructure oftentimes is stable, predictable
21 cash flows. It's not a perfect -- you know, not
22 every business is perfect. Not all of them, you
23 know, have complete stability. We see different
24 types of contracts.

25 But, you know, for the most part, these

1 are assets that are kicking off cash on a regular
2 basis.

3 And, finally, the inflation piece. And
4 this is one that we -- you know, we keep hearing
5 about.

6 But, you know, not all assets are created
7 equal. You know, power generation facilities, if
8 it's -- if it's a natural gas-fired power plant,
9 the -- they're able to increase costs, you know,
10 as their input costs go up.

11 Renewables, the exact opposite. They do
12 not get to re -- to reset pricing if there's
13 inflation.

14 So, you need to kind of consider where you
15 are in the market.

16 CHAIR RIEGER: Adam?

17 MR. CRUM: Curiosity's sake.

18 The federal infrastructure bill. More and
19 more funds from that are starting to come into
20 states.

21 Are you seeing that -- how's that
22 projecting overall in the work that you do seeing
23 as how there's a limited amount of talent,
24 workforce, and equipment to do all the work that
25 was funded by the government?

1 MR. ALEXANDER: It is -- we are
2 seeing -- we're hearing from our managers that as
3 they are -- as they are funding projects and as
4 they are buying assets that the talent piece is,
5 you know, difficult.

6 MR. CRUM: Uh-huh.

7 MR. ALEXANDER: And it is -- it is
8 just driving those costs up more.

9 Whether it's on, you know, the -- the
10 personnel side or, you know, on -- also see it on
11 the commodities side.

12 But it is -- it is having in impact, which
13 is, you know, changing how we think of the space a
14 little bit, you know, from a discount rate and
15 what the return expectations are.

16 MR. CRUM: Okay.

17 MR. ALEXANDER: So, we won't spend
18 a lot of time on this slide.

19 But, you know, there's a couple of ways
20 that we can play infrastructure. And we -- we do
21 a little bit of everything on this page. Well,
22 most of it on this page, I guess.

23 We can go public or private. We do invest
24 a little bit of our portfolio in publicly traded
25 stocks. There's about 400 stocks out there that

1 qualify as infrastructure. Really about 100 of
2 them that are pure play and not services oriented.

3 So, 10 percent of our portfolio today is
4 in publicly traded stocks, but the bulk of our
5 time is spent on the private side.

6 You know, the -- the main way to do that
7 is through commingled funds. You also could be a
8 direct investor. But we are not -- we are not
9 resourced to be a direct investor.

10 You know, there's -- myself as the only
11 full-time employee covering infrastructure, we
12 don't have time to -- or resources to go out and
13 do it.

14 MS. RUBENSTEIN: Are you really?

15 MR. CRUM: Just point -- didn't you
16 say this was a \$6.1 billion --

17 MS. RUBENSTEIN: Are you --

18 MR. ALEXANDER: This is 3.3.

19 There's -- Logan covers --

20 MR. CRUM: Oh, okay.

21 MR. ALEXANDER: -- private credit
22 with me.

23 And we do have a -- we are in the process
24 of recruiting for an associate.

25 But for --

1 MR. CRUM: Okay. I was, like, wow.
2 Nice job.

3 Key man at risk is what I was getting at.

4 MR. RICHARDS: That's a good point.

5 MR. ALEXANDER: We've been a
6 three-man team in private income for --

7 MR. CRUM: Okay.

8 MR. ALEXANDER: -- a long time. I
9 mean, that's how it was originally staffed.

10 We've been at two for a couple years now.

11 MS. RUBENSTEIN: So, how do you
12 have the bandwidth for co-investments?

13 MR. ALEXANDER: We do -- so, about
14 three-quarters of the dollars that we'll deploy in
15 a given year will be to funds -- 25 percent.

16 We -- it's not a -- yeah -- firm target,
17 but that's about kind of what we shoot for and
18 where we've been at -- how we've actually
19 deployed.

20 But it's -- the bulk of our time is
21 spent -- you know, diligence and co-investments.

22 But we do have to rely pretty heavily on
23 consultants. And we have a good relationship with
24 a number of our consultants that does facilitate
25 that process -- allows us to get up to speed quite

1 quickly.

2 And if we think about sectors,
3 geographies, asset types -- we're not active on
4 the co-investment side on all of those. We've
5 kind of picked a couple of areas where we think
6 there's the best value, where we have the best
7 knowledge already, and where we can act quick and
8 not have as much of an information disadvantage.

9 So, we don't get to do everything and
10 see -- that we see. We have to say no to a lot of
11 good opportunities, partially because of that
12 resource constraint.

13 But we think it -- that our current model,
14 you know, is a relatively efficient way to
15 approach the market.

16 So, most of what we do is in that closed
17 end commingled fund space. 25 percent or so is
18 co-investments in.

19 And, you know, the last slide that we'll
20 show here at the end of the packet -- you know,
21 we'll see the returns --

22 MR. FRAMPTON: John, you have a
23 question?

24 MR. ALEXANDER: We -- we've had
25 good outcomes from that co-investment --

1 CHAIR RIEGER: John, go ahead.

2 Sorry. I missed you.

3 MR. SKJERVEM: Through the Chair.

4 Not so fast, Ross.

5 One of the things I worry about on the
6 previous slide with the commingled close fund
7 structure --

8 MS. RUBENSTEIN: Uh-huh.

9 MR. SKJERVEM: -- and infrastructure
10 is that when you boil it all down, you're paying
11 private equity fees for mid-single, maybe upper
12 single-digit returns.

13 MS. RUBENSTEIN: Uh-huh.

14 MR. SKJERVEM: And it's also a
15 question for Sebastian on how that models.

16 And, unfortunately, Stanford just came out
17 with a paper that corroborated that with some
18 empirical work.

19 And so is that something you guys think
20 about, wrestle with?

21 And if you're coming to a somewhat similar
22 conclusion, does it make sense to either abandon
23 the asset class -- which would be draconian -- or
24 instead staff up and really focus your efforts on
25 direct and co?

1 MS. RUBENSTEIN: Yeah.

2 MR. SKJERVEM: That's the punch in
3 the -- punch in the nose question.

4 MR. ALEXANDER: So, I guess to --
5 I'll throw up this next slide just because it kind
6 of hits on some of what you were saying.

7 We -- you know, as you can -- you can look
8 at infrastructure. And it's -- it's a -- you
9 know, it's a very broad bucket.

10 And within any of those asset types or
11 regions, you know, that you may choose to invest,
12 there's different approaches to investing. You
13 can do core investments. You can do core plus,
14 value add.

15 We have chosen to focus more on the core
16 plus and value add where you are actively
17 repositioning or improving an asset and then
18 looking to exit.

19 So, we are not focused solely on operating
20 assets that are kicking off yield.

21 So, as we think of, you know, what's the
22 structure to invest through -- whether it's a
23 closed-end fund or an open-end fund -- the
24 strategy that we've chosen to follow, having that
25 repositioning or value enhancement fits with the

1 closed-end fund.

2 They're long life funds. You know, 10 to
3 12 years. Have 1 to 3 years of extension.

4 So, you could potentially hold an asset
5 for 15 years, which gives you enough time that,
6 you know, you can -- you can wait through, you
7 know, a bit of a cycle.

8 So, you aren't forced to exit at, you
9 know, a discount because you're running up to the
10 end of the life.

11 But if we were looking to hold core
12 assets, closed-end funds would be the complete
13 wrong way to go.

14 So, because we're looking for that, you
15 know, value enhancement opportunity and hoping
16 that we -- and trying our best to back managers
17 that have demonstrated track record in doing so
18 and have the ability to drive that improvement --
19 whether it's just from growing the business
20 organically, add-ons, development, whatever the --
21 you know, the tool kit that you're using -- we're
22 not shooting for mid single digits or single
23 digits.

24 Our target -- as we think of the
25 infrastructure space, we're kind of starting in

1 that mid-teens as our baseline and going up or
2 down depending on perceived risk.

3 So, I think if we were -- if we were
4 actually returning single digits, we need to
5 rethink what we're doing because it does not work.

6 MR. SKJERVEM: I guess I'm feeling
7 particularly surly today.

8 But even there -- even in core plus or
9 value add -- unless Sebastian tells me that over
10 that longer period of time that correlation is
11 distinctly different, we're still better off doing
12 LBOs.

13 Because you're still illiquid. You're
14 still paying the same private equity --

15 MS. RUBENSTEIN: That's fair.

16 MR. SKJERVEM: You're still in the
17 same private equity structure, and you're still
18 getting a discount to what you otherwise would.

19 MS. RUBENSTEIN: That's fair.

20 MR. SKJERVEM: Unless there's a
21 beta that's different. And, therefore, you have a
22 correlation that's different, and you can
23 rationalize it from portfolio construction.

24 MR. FRAMPTON: I mean --

25 MR. ALEXANDER: Thoughts?

1 MR. FRAMPTON: -- one way to think
2 about it is, like -- like, if you think about a
3 contracted renewables deal -- like, a utilities
4 scale wind farm -- like, once it's producing power
5 and has a utility contract and you go out to buy
6 that -- I mean, it's a pretty competitive process,
7 and it's probably 80 percent leverage and, like,
8 6, 7 percent returns for the equity.

9 And that's probably the bulk of the
10 market.

11 And then, like, you'll hear from -- I
12 mean, it's great, I think, that we have these
13 managers coming in too.

14 Because, like, EnCap is, like, coming
15 in -- that same wind project, they'd be coming in
16 earlier and targeting, like, a mid-teens return.

17 And then your question is, like -- I think
18 that it doesn't correlate to LBO risk because
19 LBO -- I don't think there should be a cycle to --

20 Like, if you're backing a portfolio of
21 wind developers and have tied up the land, have
22 purchased contracts for turbines, and have a PPA
23 from the utility but just haven't built anything,
24 I mean, you're definitely taking some risk on the
25 construction side.

1 And I'm -- you may be taking some
2 financing risk because when you put the permanent
3 debt in, that could correlate a little bit to LBO
4 risk as I'm thinking through it.

5 Like -- like, cost of capital goes way up.
6 LBOs trying to finance themselves could have
7 similar issues to a wind farm trying to finance
8 themselves.

9 So, I think there's -- part of what you're
10 saying is correct, and then part of it I think
11 would be uncorrelated to --

12 MR. SKJERVEM: I hope -- I hope --

13 (Indiscernible crosstalk.)

14 MR. SKJERVEM: CIO to CIO, I hope
15 so.

16 MR. FRAMPTON: Yeah.

17 MR. SKJERVEM: Because otherwise --

18 MR. FRAMPTON: It's definitely --

19 MR. SKJERVEM: We're better off
20 just moving money --

21 (Indiscernible crosstalk.)

22 MR. FRAMPTON: It's not just free
23 money that we're getting the teens and not the mid
24 single digits.

25 And that's, like, the art of it is, like,

1 is -- is that risk you're accepting to get that
2 mid-teens --

3 MR. SKJERVEM: Different.

4 Because otherwise, we just --

5 MR. FRAMPTON: Well, is it
6 acceptable and is it different?

7 I think it's acceptable.

8 And is it different?

9 I -- a little different, but not
10 completely different.

11 It is kind of like private equity. You're
12 right. Like, I've thought that same thing --

13 MR. SKJERVEM: Same fees.

14 MR. FRAMPTON: -- at times.

15 MR. CENTER: Fee structure, yeah.

16 MR. FRAMPTON: But, you know,
17 like -- remember the chart I had that had the
18 spread between multiples on public companies and
19 multiples on LBOS, and there's this big gap?

20 I think that big gap still exists in
21 infrastructure and, like, narrowed in private
22 equity to some extent.

23 But accessing that gap is part of both of
24 those things. And that gap -- those gaps probably
25 move together. They probably, like, blow out

1 in --

2 I don't know. I'm kind of, like, going
3 all over the place now.

4 It's a -- it's not, like, an unfair point.
5 I don't know.

6 What do you think, Sebastian?

7 MR. VADAKUMCHERRY: I think John's
8 right in that there is -- I mean, the correlation
9 is higher than we would think it is.

10 But on the flip side, Ross's point about
11 we don't target returns below -- we don't target
12 returns -- single-digit returns.

13 I think it's more private equity than the
14 typical infrastructure that you're referring to,
15 John.

16 So, I think that's an important
17 distinction.

18 But let me caveat all of this by saying
19 modeling private infrastructure correlations and
20 morbidities is hugely challenging. There's not a
21 whole lot of data out there.

22 And so we need to take public coms to do
23 that, which is putting in an approximation.

24 So, I'm sort of trying to -- you know, I
25 think both of you are right in some ways because

1 there is a higher correlation to private equity.
2 We, for example in risk, look at it almost as
3 private equity.

4 I've had these discussions with Marcus
5 several times that --

6 You know?

7 MR. FRAMPTON: Well, like, we don't
8 like the core infrastructure risk return.

9 MS. RUBENSTEIN: Uh-huh.

10 MR. FRAMPTON: Yeah.

11 MR. SKJERVEM: But if you --

12 MR. FRAMPTON: But, like --

13 (Indiscernible crosstalk.)

14 MR. SKJERVEM: If you could own it
15 directly, you would, right?

16 MR. FRAMPTON: What's that?

17 MR. SKJERVEM: If you could own it
18 directly, you would.

19 Because it's the --

20 MR. FRAMPTON: Oh.

21 MR. SKJERVEM: -- perfect asset --

22 MR. FRAMPTON: Oh, I see. Okay.

23 MR. SKJERVEM: So, if you put
24 that --

25 MR. FRAMPTON: If you -- well,

1 would I like that?

2 I don't -- I don't know. I don't think I
3 would like -- I don't think I would like -- I
4 don't like the strategy the Canadian pensions have
5 of hire big -- a bunch of dealmakers --

6 MS. RUBENSTEIN: Uh-huh.

7 MR. FRAMPTON: -- and then they go
8 out and buy that wind farm at a 7 percent return.

9 Like, I think -- I think that's kind of
10 not a great --

11 MR. VADAKUMCHERRY: Not
12 something --

13 MR. FRAMPTON: -- return.

14 MR. VADAKUMCHERRY: -- we've done
15 in the past.

16 MR. FRAMPTON: Like, I mean, what's
17 the -- so, if you hire a core infrastructure fund
18 to go do that --

19 MS. RUBENSTEIN: Uh-huh.

20 MR. FRAMPTON: -- and let's just
21 say you pay them 80 basis points or something,
22 you're -- I don't think that's attractive.

23 But you're saying does that become
24 attractive if you're doing it internally and not
25 paying the 80 basis points?

1 I would say it's still unattractive.

2 MR. SKJERVEM: My point is I -- I
3 love the asset -- the asset class. Especially as
4 a pension.

5 MR. FRAMPTON: Okay.

6 MR. SKJERVEM: Because I -- if I
7 can hold it for a long time, it's inflation
8 indexed.

9 MR. FRAMPTON: Right.

10 MR. SKJERVEM: In a lot of ways,
11 it's the perfect asset to de-fees a liability
12 stream.

13 MR. CENTER: Uh-huh.

14 MR. FRAMPTON: Got it.

15 MR. SKJERVEM: But if you put it in
16 a private equity structure --

17 MR. FRAMPTON: It loses some of
18 those characteristics.

19 MR. SKJERVEM: Then I'm -- then I
20 have the illiquidity and the high fees.

21 MR. FRAMPTON: Right.

22 And you're sell -- you're flipping out
23 of -- you're selling out of the wind farm the
24 minute it's producing.

25 MS. RUBENSTEIN: Uh-huh.

1 MR. FRAMPTON: I think where we
2 differ -- I don't -- well, I don't know.

3 What do you -- I'll hand it back to, Ross.

4 MR. SKJERVEM: Sorry to go down
5 this rabbit hole.

6 MR. FRAMPTON: I don't -- I don't
7 know that I like the mature core infrastructure as
8 much as you do is one difference.

9 But you're -- you're right. When we --
10 when you flip out of the wind farm the minute it's
11 stabilized, it's a completely different animal.

12 MR. ALEXANDER: I don't -- I mean,
13 I think one of the common misperceptions -- and
14 I'm not saying that this is a misperception you
15 have -- of core infrastructure assets is that they
16 are truly low risk.

17 MS. RUBENSTEIN: Uh-huh.

18 MR. ALEXANDER: I think there is
19 still a substantial amount of risk in every one of
20 those businesses.

21 And I just don't think you're compensated
22 fairly for it because they are priced to
23 perfection. There is so much money that has
24 chased those assets that you are -- you --
25 everything has to go right for you to make an

1 acceptable return.

2 And if one thing goes wrong, you're in a
3 world of hurt.

4 We've -- you know, as the part of the
5 market that we've chosen to focus on, we think
6 that there is more room to create value and to
7 weather some of that risk.

8 And it's -- there's a lot of operational
9 complexity here.

10 MR. SKJERVEM: My point is not
11 about core versus value added.

12 My point is about direct co versus funds.

13 MR. FRAMPTON: Oh, right.

14 MR. ALEXANDER: Huh.

15 (Indiscernible crosstalk.)

16 MR. SKJERVEM: And that by default
17 we're in funds because we have one guy or one and
18 a half guys.

19 MR. FRAMPTON: Yeah.

20 MR. ALEXANDER: I mean, it would --
21 we would need more people on our infrastructure
22 team than we have in our whole organization.

23 So, I mean --

24 MS. RUBENSTEIN: That's the point
25 about hiring methods.

1 It's, like, the thing that gets lost in
2 this whole discussion is co-investments is
3 cheaper.

4 Okay?

5 MR. SKJERVEM: Yeah.

6 MR. ALEXANDER: Right.

7 MS. RUBENSTEIN: It's -- it's --
8 it's less.

9 That's why some of these pensions and the
10 CalPERS of the world are -- are moving to that.

11 Because when you look at that \$187 million
12 in fees in the budget we submitted, that's because
13 we're in funds. That's 2 percent. Co-investments
14 are 1 percent or nothing.

15 So, it's -- it's a -- it's a risk reward
16 of do you spend the money to build up the team --
17 I believe the team is much cheaper than the fees
18 you're going to pay.

19 So, that's what Ken's point was earlier.
20 It's, like, it is also a fee-based discussion.

21 MR. FRAMPTON: Oh, yeah. Totally.
22 Yeah.

23 I mean, he'll get to his co-investment
24 track record in a second. It's outstanding.

25 And we don't pay fees on it.

1 MS. RUBENSTEIN: I mean, that's a
2 person.

3 (Indiscernible crosstalk.)

4 MR. FRAMPTON: I mean, that's why
5 the Fund -- it's the co-investment funds.

6 MR. ALEXANDER: Yeah. Exactly.

7 I mean, we'd still have to be growing the
8 total portfolio --

9 MS. RUBENSTEIN: Oh.

10 MR. ALEXANDER: -- so at what point
11 do we kind of hit that limit?

12 I don't -- we're saying no to a lot of
13 good stuff. But I don't think we're -- we're not
14 saying -- we're able to say yes to enough that we
15 really like that I think we are still deploying
16 appropriate amounts into co-investments, given the
17 size of our total portfolio.

18 MS. RUBENSTEIN: Okay.

19 MR. ALEXANDER: Because at the end
20 of the day, those are concentrated best,
21 basically.

22 MS. RUBENSTEIN: Uh-huh.

23 MR. ALEXANDER: So, you know,
24 portfolio construction --

25 MS. RUBENSTEIN: Uh-huh.

1 MR. ALEXANDER: -- we don't want to
2 be too overweight to something that it's going to
3 sink us.

4 Kind of hit on some of this already. But,
5 you know, as you think of infrastructure, core,
6 core plus, value add, we stole terminology from
7 real estate. Infrastructure's a newer asset class
8 for sure.

9 So, core, far left. Lower risk, lower
10 return. Not low risk but lower. Lower return.
11 These are the long-term holders of the asset.

12 So, as we said earlier, we tend to target
13 the core plus value add where there's some sort of
14 value creation potential.

15 There are, you know, higher risks and
16 complexities within a lot of these businesses if
17 they are a permanent core plus type asset.

18 So, maybe you have GDP sensitivity. Maybe
19 you have volume risk. Where, you know, if you own
20 a pipeline, you don't get to control how much oil
21 is flowing up and down. That's the -- you know,
22 up to the producer.

23 But as long as they -- there is volume,
24 you are getting a stable return.

25 You know, price -- our yields go down as

1 you go to the right. Returns go up. And risk
2 obviously goes up as well.

3 Probably skip over this one other than to
4 say, you know, we're an allocator. We're not a
5 direct investor.

6 So, most of our work is on the diligencing
7 of funds. Kind of picking the right groups, the
8 right places to -- to be active.

9 And then we're passive after that. We
10 don't get a say in the operations of an asset or a
11 fund. We don't get to pick when they invest
12 and -- and, you know, exit.

13 And kind of like Marcus mentioned in the
14 private equity, inflows and outflows for us are
15 about equal for a mature portfolio.

16 So, it's -- it's monitoring. It's -- it's
17 getting better information to make a better
18 decision in the future.

19 This slide was thrown in just to kind of
20 highlight that infrastructure has grown rapidly
21 and quite a bit over the past, you know, decade
22 and a half.

23 Over a trillion dollars of infrastructure
24 assets under management by fund investors -- or
25 funds today. You know, a lot of new money has

1 entered the space.

2 So, that's -- you know, just -- it's both
3 a good and bad for us. It creates new
4 opportunities on the exit. There's more capital
5 to purchase our assets or the ones that we already
6 have in our portfolio. But it does create a lot
7 of new competition.

8 So, the ability that we have to set
9 ourselves apart is we can be nimble. We don't
10 have defined buckets that we have to reallocate it
11 to certain types of assets or in certain
12 geographies. We can pick and choose our spots.

13 And some of that is based on, you know,
14 where others aren't willing to play or where
15 they're not looking today. And we can drive value
16 that way.

17 Common themes that we're seeing out there
18 today. Energy security and energy transition is
19 probably No. 1. You'll hear about that more from
20 EnCap later today.

21 But that is -- you know, every meeting we
22 ever attend, that is what is talked about today.

23 Supply chain issues are a big one. You
24 know, kind of geopolitical event over and across
25 the world.

1 You know, how do we firm up our supply
2 chain and not expose ourselves to greater risks
3 going forward?

4 Digitization is one that hits across all
5 asset types. That's not just new data being
6 produced in the telecom space. That's -- that's
7 how do we modernize a lot of these businesses.

8 A lot of opportunities that we see,
9 they're carve-outs from legacy asset owners.

10 And how do we take a business that was
11 maybe a cost center or inefficiently run and
12 improve it to then, you know, make it more
13 valuable at the end of the day?

14 And then obviously just demographics. You
15 know, whether it's in the western world in the
16 aging population or in emerging markets and a
17 growing middle class.

18 So, you know, good opportunities across
19 some jurisdictions to -- to build new, you know,
20 power generation plants where they didn't have
21 reliable power before.

22 A lot of places, they're skipping from 3G
23 straight to 5G. So, a big chance to roll out a
24 lot of big infrastructure projects to take
25 advantage of what's happening across the world.

1 And then, obviously, there are a number of
2 challenges. You know, we've got a couple listed
3 here. They're not unique to infrastructure, for
4 the most part.

5 You know, the leverage question you asked
6 earlier, Steve -- I mean, that is a big risk that
7 we see today is just is -- as the interest rates
8 have increased, you know, it's -- it's exacerbated
9 the impact that it's having. Especially when we
10 look through -- you know, there's multiple layers
11 of leverage here that can have a pretty big impact
12 on us.

13 So, you know, it's up to us as we're
14 building a portfolio to make sure that we
15 understand the risks that we're facing and plan
16 accordingly.

17 MR. MITCHELL: And, Mr. Chair, if
18 I -- maybe we're down to 15 minutes for lunch.

19 The schedule -- just --

20 CHAIR RIEGER: Yeah.

21 On our manager presentations this
22 afternoon, do they -- are they coming in tele --
23 telephonically?

24 Are they on a strict schedule?

25 MR. MITCHELL: Personally, I

1 thought they were coming in.

2 MR. ALEXANDER: There's --

3 MR. FRAMPTON: I believe so.

4 They're here now.

5 MR. ALEXANDER: Yes.

6 Although one of the managers, Stonepeak --

7 one of the individuals had a flight

8 cancellation --

9 MS. RUBENSTEIN: Oh no.

10 MR. ALEXANDER: -- in Seattle

11 yesterday -- or wasn't going to be able to make it

12 to Juneau at all today.

13 He was coming from the East Coast.

14 MR. MITCHELL: Do we have

15 flexibility, is that your point?

16 CHAIR RIEGER: That's the question.

17 Yeah.

18 MR. ALEXANDER: They have

19 flexibility. So, we can -- we can push them back,

20 they can take less time.

21 I am wrapped up.

22 CHAIR RIEGER: Let's -- you're

23 almost done.

24 Why don't you --

25 MR. ALEXANDER: Yeah.

1 CHAIR RIEGER: -- try to wrap up
2 in, like, five minutes, and we'll be a little
3 behind schedule.

4 MR. ALEXANDER: Oh. I will --

5 CHAIR RIEGER: How about that?

6 MR. ALEXANDER: I won't need five
7 minutes.

8 CHAIR RIEGER: Oh, okay.

9 MR. ALEXANDER: These last two
10 slides just kind of showcase just how we're -- our
11 portfolio's constructed and how we've performed so
12 far.

13 So, relatively diversified across sectors
14 and geographies. We think that this is an
15 appropriate mix, both for the opportunity set
16 where we find the best value and also how we're
17 benchmarked.

18 You know, we're in 31 funds, 11
19 co-investments today. So, there's a lot to -- a
20 lot to cover. But we make it work.

21 And then finally just performance. You
22 know, across all time periods, performance has
23 been strong.

24 The co-investment line on the -- the
25 graph -- or the chart on the right, you know, that

1 co-investment piece has really driven a lot of
2 outsized returns. And we think it's -- it's an
3 efficient use of our capital, a way for us to
4 create value for the fund.

5 And because of our structure, because of
6 how we're set up, we are a good partner for a lot
7 of these GPs where we are not so bureaucratic that
8 we have a very long, drawn out investment process.

9 We can move pretty nimbly and make
10 decisions that -- that people want our money for
11 co-investments.

12 So, we're trying to maximize how we can
13 participate there to maintain an appropriate level
14 of risk.

15 The last point I will make on this page is
16 just that three-year underperformance that we see
17 for the portfolio versus benchmark.

18 One is this wasn't our benchmark back
19 then. We had a public stock benchmark.

20 But that underperformance, it -- there's a
21 secondary sale that we completed kind of two years
22 ago. It was finished kind of right in the early
23 days of COVID.

24 We still think it's a good idea. We took
25 a slight discount on a couple of line items from

1 our portfolio. But allowed us to lock in good
2 returns that we thought, you know, those -- those
3 funds that we sold, we thought that the bulk of
4 the -- the positive return had already been baked
5 in.

6 So, there was less upside in our view
7 going forward, and it gave us some headroom.

8 So, we have a -- are .8 percent
9 underweight for private income today. So, it
10 gives us a lot of flexibility that if there is a
11 good repricing of assets that we haven't seen yet
12 in the current market -- but if there is, it gives
13 us the ability to -- to go in a little bit
14 stronger and be a little bit more nimble where we
15 don't think other groups have that flexibility
16 today.

17 I will leave it at that unless there's any
18 other questions.

19 CHAIR RIEGER: Yeah.

20 Thank you, Ross.

21 Are there other questions?

22 MR. CRUM: Ken.

23 CHAIR RIEGER: Ken.

24 MR. FRIER: Just for one -- if you
25 don't mind going back to the prior slide.

1 Ross, you said that you once had a public
2 equity benchmark but now we've abandoned it for
3 these benchmarks.

4 I mean, to get at the point that John
5 raised about it is really worth it to go through
6 all this complexity and the high fees of investing
7 in this way -- would it be fair and sensible to
8 devise a public equity equivalent to what you're
9 doing?

10 On the slide before this, you list, you
11 know, what your sector weights are. And it's
12 probably public companies that are in those
13 sectors that you could use in the same weights and
14 with the same leverage as in this private
15 portfolio.

16 Have you looked at that comparison of,
17 like, an apples to apples public equity benchmark
18 versus how this portfolio's been doing?

19 MR. ALEXANDER: I don't have that
20 number off the top of my head. It's remarkably
21 similar, the public equity benchmark that we used
22 to use to the private benchmark here.

23 So, over a long period of time, you know,
24 they come in relatively, you know, equal.

25 Obviously, there's far more short-term

1 volatility. And I think that was part of the --
2 the thought process of switching to a private
3 benchmark like this.

4 It's a better judge of our ability to pick
5 managers. But, clearly, not an opportunity cost
6 view.

7 But it did have a closer approximation of,
8 I guess, perceived volatility with a private
9 benchmark.

10 But Marcus and Sebastian were involved in
11 that exercise as well, so maybe they have
12 different thoughts.

13 MR. FRAMPTON: Well, yeah.

14 I mean -- and we owned some stocks in this
15 portfolio.

16 So, you see on that table there the
17 annualized return of the stock investments we have
18 are -- is 10.4, and the fund investments is 10.6.

19 But a big difference -- one of the big
20 reasons why that 10.6 is not higher is because we
21 started investing funds in, like, '06.

22 And, like, we had a \$500 million
23 commitment to a fund that did really poorly in the
24 financial crisis.

25 And so I'm really confident that -- and we

1 started listed infrastructure in 2012.

2 I'm really confident that if we excluded
3 the prefinancial crisis private funds, it would be
4 a materially higher number than 10.6. This is
5 approximate. It's mostly just to answer your
6 question.

7 But I -- my guess is it's probably, like,
8 13, 14 percent versus 10.

9 And then when Ross picks a co-investment,
10 that annual return is 17.

11 MS. RUBENSTEIN: Okay.

12 MR. FRAMPTON: So, I have some
13 confidence that the answer's a good answer, but I
14 don't have the exact number --

15 MS. RUBENSTEIN: It's not a fund
16 versus co-investment issue, then. Not really.

17 MR. FRAMPTON: Yeah.

18 I mean, I think the -- I'm just looking at
19 that 10 because it's a number on a page that
20 reflects what infrastructure stocks have done
21 since 2012.

22 MS. RUBENSTEIN: Okay.

23 MR. FRAMPTON: And actually, since
24 2012, our total program is 14 percent net.

25 So, I think we've outperformed a listed

1 comparison.

2 MR. FRIER: Okay.

3 CHAIR RIEGER: Okay.

4 Well, why don't we -- thank you, Ross.

5 Why we don't we take a break for lunch.

6 And let's come back --

7 Is it correct, Marcus, that we have

8 flexibility -- or Ross --

9 MR. ALEXANDER: Yeah.

10 CHAIR RIEGER: -- on the other two

11 presenters?

12 Let's come back at 1:30.

13 (A break was taken.)

14 CHAIR RIEGER: Okay. We'll come

15 back to order.

16 The next item of the agenda is a

17 presentation.

18 And maybe, Ross, I'll just let you do an

19 introduction, and we'll go from there.

20 MR. ALEXANDER: Yup. Thank you.

21 So, first of two manager presentations for

22 our infrastructure portfolio today is Stonepeak

23 Partners.

24 We've got Brenden Woods here with us

25 today. And Jack Howell is going to present

1 online. He was trying to make it in person but
2 had some flight difficulties. So, he couldn't end
3 up being with us today.

4 We backed Stonepeak for their fourth
5 flagship fund just last year. It's a global
6 diversified manager.

7 So, they kind of look across all parts of
8 the infrastructure market. Mainly OECD countries.
9 They do a lot in North America.

10 But I'll let them kind of talk a little
11 bit more about the -- the market that they look
12 at. You know, what they find attractive, what
13 they're looking out for.

14 And let them take it from here.

15 MR. WOODS: Thanks, Ross.

16 So, my name's Brenden Woods. And as Ross
17 mentioned, Jack is on the line.

18 I'm the head of our investor relations
19 team, and Jack's the head of our business in the
20 Americas.

21 Jack's going to do most of the talking
22 today. But given we're a newer relationship, I
23 thought I might just take 30 seconds just to sort
24 of tell you -- Ross did a great job. I'm not sure
25 I can add too much more -- but 30 seconds on us.

1 We've -- we're a North America focus
2 manager. We've been around a little over a
3 decade. Today, we manage a little over
4 50 billion. Most of that capital comes from U.S.
5 public pension funds that look, you know,
6 somewhat -- somewhat similar to yourselves.

7 We -- we do that across about 235
8 investors globally. So, you know, a good -- a
9 good group of partners.

10 And outside of that U.S. group, it's what
11 you would expect. It's -- it's Canada, Europe,
12 Australia, Asia, a little bit from Latin America.

13 So, I'll -- I'll shut up there and hand
14 over to Jack to -- to talk through some of the --
15 some of their market views.

16 And it'd be great to interact as well
17 throughout or -- or questions at the end.
18 Whatever you like.

19 CHAIR RIEGER: Okay.

20 MR. HOWELL: Yeah. Thanks for the
21 introduction, Brenden and Ross.

22 And apologies to folks in the room. The
23 airport gods were against me in the last 24 hours.
24 So, didn't -- couldn't make it to Juneau.

25 But, look. We -- we're thrilled to be

1 partners with you all. And as Ross can tell you,
2 it's a relationship that we've been going after
3 for a while. So, we're thrilled to have you guys
4 in our fourth flagship fund and are just excited
5 to continue the partnership from there.

6 I've got a hard copy of the deck in front
7 of me on my desk, which -- which I'll flip
8 through.

9 And maybe, Brenden, I can just kind of
10 give you the -- the go-ahead to -- to flip slides,
11 if that works from a logistics perspective.

12 But, look. I -- I think today the goal
13 was to give a bit of a macro overview in terms of
14 what we're seeing in the infrastructure market and
15 some of the changing dynamics, to be honest, that
16 we're -- we're kind of looking out for --

17 Sorry. Did somebody have a question?

18 MR. WOODS: No, Jack.

19 MR. HOWELL: Okay.

20 And some of the things we're looking out
21 for as well as some of the opportunities we see.

22 I -- I would note that from an
23 infrastructure perspective, we're a value-add
24 manager. So, we -- we kind of take an active
25 management approach of the businesses and the

1 assets we buy.

2 Which I think is a little bit
3 differentiated than maybe some of the historical
4 infrastructure investing where you're effectively
5 just buying a stream of cash flows and kind of
6 holding that to maturity.

7 So, I -- I would note that for folks that
8 are less familiar with the -- with the Stonepeak
9 story.

10 But maybe just to start on this slide from
11 a macro perspective. I note that it's an
12 incredibly interesting time from a macro
13 perspective. The ground is moving quite quickly,
14 I think, on a couple of themes, and today I'm
15 going to talk through these kind of four key
16 drivers.

17 But, look. From an overall macro
18 perspective, there's obviously a heightened
19 recession risk complicated by, you know, the
20 central banker fight against inflation right now
21 and the fact that, you know, these central bankers
22 really don't have a ton of arrows in their quiver
23 when it comes to a recession right now, given the
24 fight against inflation.

25 You've also got the European energy crisis

1 right now, which has been maybe inflamed or
2 exacerbated by the situation in Ukraine. You have
3 the shifting geopolitical dynamics as it relates
4 to U.S., China, Europe, and Russia.

5 You know, specifically, that's been, I
6 think, heightened around the U.S./China
7 relationship where you've even started to see a
8 rift between the U.S. and Europe.

9 You know, I think this week I read some
10 things going on between Macron in France and Biden
11 just around kind of the latest Inflation Reduction
12 Act bill and how Europe is really claiming that
13 that's making some of the European companies less
14 competitive in favor of the U.S. companies.

15 So, there's a lot of things going on from
16 that perspective.

17 And then last but not least, you know,
18 energy policy, energy transition. Obviously
19 something I think we -- we all see in the
20 headlines on a daily basis.

21 So, it's a real time of flux, I think,
22 with the potential to create even greater
23 disruption than what we've seen to date.

24 I think that can be very good from an
25 investing perspective. We're obviously excited

1 about it. Our fourth fund is not even halfway
2 invested right now. So, we have a ton of dry
3 powder to take advantage of that feel great about
4 the portfolio and where it stands at the moment.

5 I think we've been very focused on kind of
6 downside protection going into this disruption.

7 So, with that, I'll dive into these themes
8 in a little bit more detail.

9 So, Brenden, you can do a page flip there.

10 Great. Thanks.

11 Look. We don't talk about demographics
12 that often. It's a really slow burn. And a lot
13 of these things take a while to really play out.

14 But I did want to draw everyone's
15 attention to this chart. I think specifically
16 when you look at it -- well, first off, it's
17 showing demographics across obviously kind of
18 the -- the major global economies.

19 And you can see we're really at a turning
20 point in terms of the decline in the working class
21 population for the world's really kind of driving
22 economies, U.S. being the big exception here.

23 Most everyone is projected to go into
24 decline except the U.S. And that's a theme that
25 I'll probably hit on a couple of times today just

1 around U.S., you know, I guess exceptionalism and
2 part of the reason we focus the majority of our
3 investing in North America and specifically in the
4 U.S.

5 Brenden, can you do a -- flip to the next
6 one?

7 We really like at Stonepeak the Shiller
8 P/E metric. And for those of you not familiar
9 with it, it's just a simple price earnings ratio.
10 Except in this case, for the earnings, you take a
11 10-year average, which allows you take some of the
12 cyclicalities out of the ratio.

13 So, it smooths out that cyclicalities. It
14 gives you a sense maybe historically where you sit
15 in terms of where companies are being valued and
16 the multiples at which people are paying for these
17 companies.

18 So, you can see over time, obviously, the
19 10-year Treasury yields going down. You can see
20 also fluctuation generally over time in that
21 Shiller P/E metric.

22 And I think the key here is that the
23 artificially low interest rates and fiscal
24 stimulus we've seen really over the last decade
25 has driven valuations -- or drove valuations to

1 effectively where they were during the .com boom.
2 Which is maybe kind of staggering when you think
3 about where things were at that point and what
4 people were paying for -- for cash flows.

5 Well, we got there again. And,
6 obviously -- I think the second point I'd make
7 here is that when markets do correct, they tend to
8 overcorrect to the downside. And you kind of see
9 this here. That -- that red line is the 40-year
10 average. It may be an oversimplification.

11 But when there is a correction -- either
12 to the upside or to the downside -- it always
13 tends to overshoot and kind of revert to the mean
14 or somewhere around the mean.

15 You know, I think from a Stonepeak
16 perspective, the way we're looking at the world
17 today, we expect things to get worse from where
18 they are today. And we also expect things to
19 overshoot to the downside.

20 Which, again, I think when you're buying
21 the right assets and the right businesses, it
22 should create quite a bit of opportunity for us.

23 And I think within the infrastructure
24 market -- and I'll go into this in a little bit
25 more detail -- but you've seen asset prices

1 continue to go up and up and up and up and
2 valuations kind of get to nosebleed levels.

3 You know, what we're seeing right now,
4 what we're seeing today, is actually the
5 opportunity to buy into some of these assets --
6 kind of crown-jewel-type assets at increasingly
7 interesting multiples.

8 And so, again, I think that dry powder
9 comment I made earlier -- you know, we expect to
10 be pretty active here in the next 12 to 24 months
11 as things do get worse -- or at least in our
12 estimation.

13 Moving to the next slide here -- and this
14 maybe goes to a little bit of that infrastructure
15 investing point.

16 This chart's pretty interesting. It shows
17 the utility discount rates paid over time by
18 infrastructure investors.

19 So, these are effectively kind of the
20 equity returns that people acquired in the private
21 markets when they were buying utility assets
22 against the 30-year mortgage in the U.S.

23 Now, a 30-year mortgage maybe isn't the
24 perfect comp due to the negative convexity in that
25 market, but it's a long duration bond.

1 And relative to equity pricing, there
2 should be a pretty big premium, obviously, paid --
3 or -- or achieved for equity risk over that
4 30-year mortgage.

5 You can see here that in the early days,
6 infrastructure investors were not only earning a
7 higher absolute return when they're investing in
8 things like utilities, but also a significantly
9 higher spread over treasuries.

10 As time passed -- you know, there were a
11 couple dynamics of this. But as time passed, that
12 spread tightened up and the absolute return,
13 obviously, went down significantly.

14 We've been watching this for -- all
15 we've -- we've all kind of spent our careers
16 investing in infrastructure in and around the
17 space. And, in our opinion, this tightening of
18 the spread and the absolute return was in a lot of
19 ways due to long duration risk being overlooked --
20 i.e., people would say, "Look. There's a stream
21 of cash flows -- long-term stream of cash flows.
22 What could go wrong?"

23 And I think in a world where interest
24 rates kept going down, you were getting paid a lot
25 of money to continue making that bet.

1 And if you made that bet, you were -- you
2 know, you were showing great returns year in and
3 year out.

4 I think folks that made their bed with
5 that bet more recently, though, are probably in
6 for a world of pain because as you've seen, cap
7 rates move upwards, valuations are going to react
8 as well.

9 You see some of these last couple of deals
10 done in the utility sector. You'd be feeling sick
11 to your gut today if you look at kind of where you
12 paid from an equity return perspective versus kind
13 of where -- where long duration debt trade is
14 trading.

15 And, in our view, that risk premium is
16 coming back. And I think we're -- we're obviously
17 prepared to take advantage of that.

18 But, anyways, we'll -- we'll go into that
19 in some more detail here as well.

20 Brenden, can you do a flip to the next
21 one?

22 So, to follow up on that thesis around
23 valuation risk and try to quantify it, I thought
24 this was a decent way to do it.

25 This is the price of a 30-year Treasury

1 over time. And so if you look down at the bottom,
2 if you bought a 30-year Treasury at the lowest
3 point in the yield curve there, you've lost over
4 30 percent of your principal on a market-to-market
5 basis.

6 And, again, treasuries -- since we -- we
7 submitted this chart have -- have come back a
8 little bit.

9 But I think the point stands that risk is
10 complicated -- well, risk is more complicated than
11 simply looking at the volatility and the stream of
12 cash flows. There's other things that go into it.

13 And I think when you have a situation
14 where cap rates are expanding, these long duration
15 kind of safe cash flows can get hit quite hard,
16 and I think people have forgotten about that just
17 given where interest rates have trended over the
18 last decade plus.

19 And so I think what we're trying to do in
20 the infrastructure sector and the assets that we
21 like, you know, we're looking for situations where
22 we have a lot of levers to pull. You know,
23 there's -- you know, the business is being run
24 incorrectly, we think we can expand margins by a
25 couple hundred basis points. We think there's a

1 market that they're -- that they're not attacking.
2 We think there's customer contracts -- things that
3 they can do to that.

4 You know, instead of charging
5 month-to-month contracts, moving to long-term kind
6 of inflation-linked contracts to take out some of
7 this longer duration risk that I'm talking about
8 today.

9 I think that's how we've set up the
10 portfolio, and we're getting the benefit of that
11 as some of these macro trends play out.

12 Maybe one more on the macro side. The
13 U.S. consumer is obviously a really important part
14 of the overall global economy. So, I think a
15 couple of charts just to dig into that and kind of
16 how we're viewing it would be a little bit
17 helpful.

18 First off, you've got personal consumption
19 on the left-hand side of the page. You can see
20 that during the GFC -- the financial crisis in '09
21 and '08 -- there was a quick stepdown, and it
22 never really reached back to trend line. It
23 increased from there, but you can see the slope of
24 the -- the upward movement never really got back
25 to where it was.

1 And then you can see COVID -- where you
2 had a blip during COVID.

3 And then with all the fiscal stimulus and
4 low interest rates, they really kind of fuelled
5 the market. Not only did it bounce back to above
6 trend line, but it kind of got to where it was
7 pre-GFC -- which is a little bit scary to look at.

8 And then maybe an even scarier portion of
9 that is when you go to the second side of this
10 page and you look at the personal savings rate.

11 And it's pretty clear that what's going on
12 to kind of fuel that increased personal
13 consumption is people are dipping more and more
14 into their savings. That's obviously
15 unsustainable, and it's going to have to correct
16 at some point.

17 And the knock-on effects for U.S.
18 consumers declining their personal consumption or
19 even flattening out their personal consumption are
20 going to be kind of felt across the spectrum.

21 Obviously for us, that hits -- that hits
22 on a couple points. That hits on energy; that
23 hits on transportation; that hits on digital
24 infrastructure. So, several of the key sectors
25 that we look at.

1 Again, maybe another marker for us that
2 suggests we are at the precipice of something
3 quite negative playing out in the economy.

4 Just really quickly in terms of how we're
5 seeing this play out in the market today. There
6 are public company valuations in some of the
7 sectors we look at. So, data centers, towers,
8 rail assets, toll roads, utilities.

9 I think what you'll see here is anything
10 that had any type of interest rate sensitivity has
11 gotten hit incredibly hard.

12 And, you know, what's even more
13 interesting I think is these are all public market
14 valuations.

15 One of the surprising things we've seen is
16 you're still seeing folks in the private markets
17 pay those pre-stepdown multiples for assets.
18 That's obviously going to have to change, I think.

19 But I think there was a little bit of a
20 bet in the private markets. You know, I'd almost
21 compare it to the public markets where people talk
22 about buying the dip.

23 I think you're kind of seeing that in the
24 private markets where people thought there would
25 be kind of a quick reaction.

1 That kind of has not been our view of the
2 situation. We've been kind of sitting back and
3 watching.

4 But I think any of these sectors, if you
5 look over time -- and maybe an even more
6 interesting chart to look is if you look at what
7 these multiples have stepped up to over time. You
8 saw it in the utilities chart.

9 Obviously these are multiples, that was
10 discount rates. Maybe take the inverse of that.
11 But that's exactly what's happened.

12 And so this -- this pullback, I think, is
13 going to create interesting opportunities not only
14 from a big private perspective, but just where
15 these assets should be trading.

16 And last but not least, what I'd say is
17 these enterprise values that people were paying
18 and the multiples that they were paying, they were
19 levering these assets up. You know, it's not like
20 leveraged stayed the same, you know, where --
21 where -- you know, 10 years ago people were
22 levering towers assets to, you know, 4 and 5 times
23 cash flow. Where the enterprise value multiples
24 stepped up, leverage crept up.

25 And so you're going to have a lot of

1 businesses that don't function in a world where
2 interest rates have jumped by several hundred
3 basis points. Again, creating opportunity for
4 fresh capital to go in and take advantage of that.

5 Maybe pivoting a bit to the European
6 energy crisis side that I mentioned earlier.

7 This is a pretty compelling chart, in my
8 view. It's the total amount of energy cost in
9 excess of last year as a base line.

10 So, if you look at the chart in
11 September -- and, again, this is compared to a
12 2021 base line -- excess energy costs had risen to
13 15 percent of GDP.

14 So, if you compare that, you're sitting
15 there looking at a European economy that is, you
16 know, again, paying 15 percent of overall GDP just
17 for the step-up in energy prices. The knock-on
18 effects of that are huge.

19 And I think -- again, we'll talk about
20 that a little bit. But it makes the European
21 economy very difficult for them to compete.

22 And it's retraced a bit since September,
23 to be clear. You've got energy prices that have
24 pulled back. Oil prices are back in the 70s. Gas
25 prices have -- have come back a bit.

1 But that's just a staggering amount of
2 European GDP spending that has had to happen
3 because of the Ukraine/Russia situation.

4 And then maybe diving into Germany as a
5 specific example here. Germany is obviously kind
6 of the manufacturing powerhouse of Europe, and
7 they're seeing it in spades.

8 So, what these charts show -- so, the --
9 just maybe starting with the chart on the left.
10 You have the producer prices in Germany. They've
11 gone up this year as much as they did in the
12 30 years prior in total.

13 And you can see that on the right-hand
14 chart too -- this is again overall Euro zone --
15 but the energy trade balance has gone farther
16 negative. That's maybe obvious because they're
17 spending more and more on energy.

18 But the nonenergy balance is almost
19 neutral now. And what's going on there is you're
20 seeing a lot of this manufacturing moving out of
21 the region and coming to places like the U.S.
22 where you have cheap and secure energy to be able
23 to compete.

24 You know, one of the examples that we
25 heard from one of our European counterparts is

1 that -- you know -- you know, BMW, for example,
2 manufacturers the X5 SUV. It's one of the most
3 popular, you know, high-end SUVs on the planet
4 and -- and a huge portion of BMW's revenue.

5 The cost for them to manufacture an X5
6 when you compare 2020 to 2022 is up something like
7 45 percent, and it's completely eaten away their
8 margins on production of that vehicle.

9 Again, I think Europe's done a lot to try
10 to figure out this energy crisis that they're in
11 today.

12 But you sit back and you look at that
13 European dynamic and you look at maybe Germany on
14 a standalone basis, it's pretty terrifying from an
15 investment perspective.

16 So, I think we -- we are thanking our
17 lucky stars we have little to no European exposure
18 at the moment.

19 And, again, I think there will be a time
20 to put money to work there. But I think we're
21 looking for some of the wreckage to play out just
22 in terms of what's -- what's happened over there.

23 Moving on but staying with that theme,
24 this is just some tidbits and commentary that we
25 pulled -- actually from Twitter -- but from some

1 of the big European, you know, voices, I guess, on
2 the topic.

3 And there's a lot of different viewpoints
4 on here. And Europe's clearly having a bit of
5 identity crisis, as some of these quotes would
6 point out.

7 But I think a lot of that is just driven
8 by the fact that Europe's livelihood has been
9 based on three things. You know, one was cheap
10 energy from Russia; two was, you know, access to
11 the Chinese markets, both from an import and
12 export perspective; and three was subsidized
13 security from the U.S.

14 And I think the Europeans are sitting
15 there today wondering, you know, how do we
16 reposition ourselves given all of this going on?

17 Because effectively, kind of three of the
18 main tenets that they held their hat on have all
19 kind of stepped back or started to crumble away
20 completely.

21 So, again, that's -- that's going to be
22 something really interesting to watch, from our
23 perspective, over the next bit.

24 Moving on to the next chart. Again, just
25 some touch points on U.S. and China relations

1 specifically.

2 And I think -- you know, everyone sees
3 these headlines. But there's a big push from the
4 U.S. to onshore more of our technologically
5 sensitive areas like semiconductors.

6 You know, one of the big investments that
7 we have in Fund IV which -- which -- that you guys
8 are obviously partnered with us on, we bought into
9 a chip manufacturing logistics company.

10 So, we -- we are the largest logistics
11 providers for Intel and TSMC globally. It's a
12 U.S. based company. It was family owned forever.
13 We approached the family and bought the business
14 at we feel like is a very good multiple.

15 And then all of this stuff happened. And
16 we'd always kind of had a view that the chip
17 manufacturing would move more -- further and
18 further onshore just as there were deteriorations
19 in the relationship between the U.S. and China.
20 Especially with what's going on in Taiwan --
21 which -- which today -- you may or may not know --
22 is the largest chip manufacturer in the world.

23 That has expedited and sped up. I don't
24 think we saw this much of a wave of onshoring
25 coming.

1 But, again, I think logistics assets in
2 the U.S., especially as it relates to these
3 specialty chemical providers and manufacturers --
4 I think it's going to benefit from this onshoring.

5 Again, just another example I think of
6 safety in the U.S. and the fact that people are
7 moving a lot of these things to an area where they
8 can get cheap -- cheap energy, cheap access to --
9 well, cheaper access to capital and -- and,
10 obviously, kind of a security dynamic as well.

11 Brenden, you can do a flip.

12 Thanks.

13 You know, last but not least, I think, on
14 this topic. When things are in crisis, people
15 flock to the U.S. You can see the U.S. dollar
16 performance over the last year. This obviously
17 isn't all good to have a very strong U.S. dollar.

18 But I think the point about U.S.
19 exceptionalism shines true here as it relates to
20 where you want to have your capital at the moment.

21 And, again, we -- we -- we focus on USD
22 investments, which has protected us quite well.

23 Maybe jump again to one of the other
24 topics I hit up front which is just energy policy
25 and the energy transition.

1 And I'm probably going to approach this
2 from a different angle than where you see some of
3 the more popular headlines or maybe some of the,
4 you know, talking heads when you turn on the news.

5 But I think it's very -- maybe to start, I
6 think it's very obvious we have a CO2 problem.
7 But I think the energy transition is going to be
8 far more difficult than people would lead you to
9 believe.

10 And if you look at the chart here on the
11 left-hand side, this is per capita consumption.
12 Well, it's -- it's the relationship between GDP
13 and -- and CO2 emissions.

14 And it's a pretty clear direct
15 relationship that the more CO2 you emit, the
16 higher your GDP is.

17 And it's not that simple, and there's
18 exceptions. But it's a pretty clear trend line
19 when you look at that.

20 And then if you go to the chart on the
21 right, this is GDP per capita against life
22 satisfaction. So, how happy people are.

23 And I think the pretty clear trend line
24 here shows you that the more GDP you have per
25 capita, the happier people are.

1 And so there's a pretty direct
2 relationship, in our mind -- maybe pretty clear
3 extraction from these two charts is that the more
4 CO2 produced, the happier people are because --

5 (Indiscernible crosstalk.)

6 MR. BRUNE: I think --

7 MS. RUBENSTEIN: What?

8 Wait a second.

9 MR. HOWELL: There -- sorry. Was
10 there a question?

11 CHAIR RIEGER: No. Just a
12 reaction.

13 MR. HOWELL: I think it's very easy
14 to forget how intricately connected our lives are
15 with oil and gas.

16 And, look. We invest in the energy
17 transition, and -- and we're -- we are actively
18 investing in that. And we've done quite well, you
19 know, in that sector for a long time, to be
20 honest. Probably -- I think we probably didn't
21 call it energy transition, but it was something we
22 were focused on.

23 But, you know, it's not just, you know,
24 getting in your car and driving to work. It's
25 cement. It's plastic. It's steel. It's

1 everything that goes into our daily lives.

2 And I think one thing that you've found
3 and what evidence shows is that convincing people
4 to go backwards in life satisfaction is
5 impossible. Nobody ever does it.

6 I mean, if you look through history, it's
7 just not going to be possible to do, which --
8 which I think leads us to believe that there's a
9 huge opportunity in energy transition, but I think
10 we have to start thinking about it more broadly.

11 You know, for us, when we look at energy
12 transition, it's not just investing in solar and
13 wind and hydro. But it's taking parts of the
14 hydrocarbon value chain and cleaning up these
15 businesses. You know, reducing methane emissions
16 if you own a gas pipeline. Reducing leaks. Like,
17 effectively canceling leaks if you own an oil
18 pipeline. You know, it's things like that. The
19 low-hanging fruit.

20 And you look at the cost of that versus
21 kind of the expenditures you're seeing on some of
22 these incredibly complex and, to be honest, very
23 unproven technologies. You know, we think there's
24 a much easier way to -- well, not an easier way.
25 I think it's a much broader approach to the energy

1 transition.

2 And Ross can probably tell you, but, you
3 know, we spent quite a bit of time at our annual
4 meeting talking about this.

5 And we kind of view the energy transition
6 as an "all of the above" approach. But at the
7 same time, keeping and monitoring the fact that,
8 you know, it's -- it's oil and gas is -- is
9 just -- it's in every aspect of our life, and it's
10 something that's easily going to be taken away.

11 Brenden, if you do a quick page flip.

12 Just one more on energy transition here,
13 and then I'll move on. But this is a regional
14 depiction of CO2 emissions and then CO2 emissions
15 per capita.

16 Obviously, the U.S. is still the highest
17 per capita. But the China -- the China growth in
18 emissions over the last bit is what has really
19 driven kind of the -- the global CO2 output.

20 And I think the thing that, again, people
21 oftentimes forget is that, you know, if you look
22 at the U.S., you look at China, you look at the
23 Middle East -- you know, you forget about places
24 like Africa.

25 Look at the total CO2 emissions per capita

1 in Africa. I mean, if you want these economies to
2 grow up and come into where -- well, first off,
3 these economies want to grow up, and these people
4 want to have a better life.

5 But you imagine kind of the CO2 emissions
6 that will come from these places as they develop
7 their economies, and they increase that life
8 satisfaction and happiness. The CO2 emissions are
9 going to be very broad and -- and far reaching.

10 And I think it's -- again, just goes to
11 the fact to we need to have an "all of the above"
12 approach.

13 And you can't kind of take the perspective
14 that, "Oh. We're just going to drop everything
15 we're doing today and completely convert to this,
16 you know, green economy."

17 Again, I'm not trying to be too negative,
18 but I think it's a -- I think we try to have a
19 pretty realistic approach to what needs to be done
20 here.

21 Maybe just talking about kind of how we
22 view investing at Stonepeak so folks have a bit of
23 a sense of Stonepeak versus, you know, I think
24 maybe what -- what you categorize as the broader
25 infrastructure market.

1 This is a pretty simplified framework on
2 this page, but it gives you a good idea, again,
3 how we think about things. We like to think about
4 investments over a 5- to 7-year time horizon.

5 Oftentimes, you'll have infrastructure
6 investors talk to you about 20- and 30-year hold
7 periods because they're hard assets with, you
8 know, long duration cash flows, and that's the way
9 you need to think about those things.

10 But I think when you do that -- when you
11 think about investments over a 20-year time
12 horizon, it allows you to kind of forget valuation
13 risk.

14 And maybe to explain that a different way,
15 if you're looking at a -- let's go to a utility
16 example.

17 If you look at a utility and you say,
18 "Well, I'm going to value the utility based on
19 kind of a -- a 20-year cash flow model or a
20 20-year kind of hold to maturity model," and you
21 pay a 30 percent premium to what that asset is
22 worth today -- so, let's -- let's say there's an
23 agreed-upon fair market value, you pay a
24 30 percent premium for that, but you run it over a
25 20-year hold period. It looks like you only took

1 a hit to -- you know, a 1.5 percent hit to your
2 higher R. You can amortize that over a payment
3 over such a long period by -- I -- I think
4 that's -- you know, we kind of view that as a
5 pretty nonsensical way to look at it.

6 Because you -- if you're starting from
7 scratch, you paid 30 percent more than you needed
8 to for the asset.

9 And so I think it gives people false
10 comfort when they look at these returns over these
11 much longer time horizons.

12 We always run our analysis on kind of a 5-
13 to 7-year basis. Again, that probably pays a
14 little bit to the value add approach we have where
15 we kind of take an asset that may be higher on the
16 risk factor and doing some things to it -- you
17 know, lowering -- you know, effectively trying to
18 lower that discount rate and then exiting that
19 investment once we've fixed it up or improved the
20 outlook for it.

21 But it's still the same thing. I mean,
22 it's the -- again, I think people kind of use this
23 in the infrastructure market to get around, you
24 know, overpaying for things.

25 And then secondly, we -- we estimate an

1 earnings cash flow profile and then, maybe more
2 importantly maybe, an exit multiple profile.

3 And the way we do this is we look at very
4 long-term averages. You kind of saw the Shiller
5 metric that we like to look at. You know, we look
6 at kind of 30-, 40-year data on these assets and
7 where these things have traded.

8 There's obviously going to -- as interest
9 have continued to come down, there's been an
10 upward trend. But I think if you look at a
11 30-year average, you tend to take a much more
12 conservative approach on where you will sell these
13 assets.

14 I think a pretty simplistic approach --
15 and one that is used oftentimes both in
16 infrastructure investing and private equity more
17 generally -- is you buy in at this multiple, and
18 you exit at this multiple. So, it's the same
19 multiple at entry and exit, and that's kind of a
20 commonly used approach.

21 Well, look. I think if you look at that
22 on a short time horizon -- like, over the last
23 couple years -- and you pick those multiples as
24 kind of your exit multiple, I think what's going
25 to happen to a lot of folks is you look at these

1 multiples -- so -- so, maybe the top chart -- and
2 you're going to end up kind of getting dragged
3 back to the average over the last 30- or 40-year
4 time horizon. Which, again, is a pretty bad
5 thing.

6 Because if you assume -- you know, let's
7 say, you know, you look at the last 5 years. The
8 X, Y, Z asset was trading at 14 or 15 times. You
9 buy in at 14 or 15 times, and you sell at 14 or 15
10 times.

11 Well, look. Again, it's -- if cap rates
12 are moving up, exit multiples are coming down.
13 Then you migrate that exit multiple more to kind
14 of that P50 case over the last 30 or 40 years,
15 you're going to -- you can end up losing a ton of
16 money.

17 And similar thing with the cash flow
18 profile -- you know, and that -- that's more
19 complicated looking at kind of cash flow profiles.
20 There's a couple more, you know, bells and
21 whistles that go into that.

22 But kind of a similar approach. We try to
23 be quite conservative in the way we look at this
24 stuff, and I -- it's benefitted us. I mean,
25 we've -- we have a 0 percent loss ratio since

1 inception. And I think our -- our conservatism
2 here really kind of drives our investing overall.

3 Anyways, thought it was helpful to note
4 just where we -- where we see kind of that
5 valuation risk.

6 And then last but not least, I was just
7 going to step through our three key sectors that
8 we invest in within infrastructure. So, transport
9 and logistics, energy, and communications.

10 So, transport and logistics, I think over
11 last couple years, we've been a beneficiary of the
12 supply chain backups that have happened. We've
13 heavily invested in logistics assets in and around
14 the U.S. We own the largest marine chassis
15 business at the ports. We own the largest cold
16 storage business in the world, a business called
17 Lineage.

18 And, again, we've -- we've, I think, taken
19 advantage of what -- what's happened over the last
20 couple of years. That's all starting to turn,
21 though. And I think we're -- we're kind of
22 battening down the hatches for what we view to be
23 probably a pretty difficult time within the
24 logistics sector.

25 Because you're seeing kind of this supply

1 chain backup clear out. You're seeing more kind
2 of -- you know, inventories are sitting in stores
3 versus nobody having any inventory.

4 Again, I think there's going to be a lot
5 of pain in this sector. Mostly due, I think, to
6 the leverage that's been applied to the transport
7 sector within infrastructure.

8 Again, just -- just -- leverage can kill
9 you in these things, and I think the -- when we
10 look at the sector, it's -- it's wildly
11 overlevered and due for kind of quite a
12 correction.

13 Moving to the energy sector. Energy's
14 probably our biggest investing sector within
15 infrastructure. And within energy, just so folks
16 know, I mean, we invest in mostly pipelines and
17 processing plants and export facilities. I think
18 we're the largest, you know, private investor in
19 LNG exports the U.S.

20 We've obviously seen a huge benefit in the
21 energy sector. I think we -- we were heavily
22 investing in this sector back in 2015 in the first
23 oil downturn and then again during COVID. Made
24 several investments here.

25 I think when we look at the energy sector

1 right now, we don't see a ton of opportunity
2 simply because these companies have really fixed
3 up their balance sheets. They don't need our
4 capital.

5 We're always looking for situations, I
6 think, where -- I don't want to say there's
7 distress, but you've got some sort of forced
8 seller. You've got a balance sheet issue where we
9 can come in and -- and price capital at a level
10 that is, you know, probably off market.

11 You know, energy is probably a -- look.
12 It's benefitting the existing portfolio,
13 obviously. But probably the least interesting
14 right now from a new investment perspective, in
15 our minds, just given these companies are doing so
16 well.

17 On the communications sector, next --
18 look. I think communications has had one of the
19 biggest hits to the trade multiples. And, again,
20 I think that goes to interest rates.

21 So, these are assets like cell phone
22 towers, data centers, fiber networks, broadband
23 businesses.

24 Again, pretty interest rate sensitive.
25 And things like cell phone towers trade kind of in

1 lockstep with interest rates, given it is a --
2 it's a yield investment.

3 So, you've seen the multiples come down
4 here. But, again, that -- I think we're probably
5 more excited than anything about that because
6 multiples just got out of control in this sector.

7 I'll give you a bit of an anecdote. But
8 when we first started investing in cell phone
9 towers back in Fund I, you know, we were kind of,
10 I'd say -- you know, doing green field cell phone
11 towers. Then we started buying cell phone towers
12 as kind of a roll-up strategy. And we were
13 holding our nose buying these things at 14 and 15
14 times EBITDA.

15 We sold our cell tower platform in 2021
16 for 40 times EBITDA. Just a -- you know, just a
17 staggering multiple of cash flow.

18 And, again, all of that has started to
19 come back, which excites us because we're hoping
20 we can kind of get back into some of these areas
21 that we really -- you know, in our mind, have been
22 uninvestable for several years just given where --
23 where multiples have gone.

24 But I would just note, on this chart, you
25 know, one trend that continues to, I'd say,

1 surprise to the upside is just the demand for data
2 and the demand for speed. And that benefits all
3 of these communications assets.

4 And just one more here on communications.
5 Brenden, if you could do a flip.

6 And, you know, I -- I would note that
7 within the sectors we covered, when you compare it
8 to energy or you compare it to transportation,
9 communications is pretty resilient through
10 downturns.

11 I think what you see is that one of the
12 last things people turn off for -- or stop paying
13 for is their Internet service and their cell phone
14 service.

15 And so when you have hard assets that
16 support those two areas of the economy, you feel
17 pretty good about owning those things, even
18 through -- even through a downturn.

19 And then just quickly -- last slide here,
20 and then I'll open up for -- for any questions
21 folks might have.

22 This is Fund IV. We are partnered with
23 you guys. 13 deals in the fund. We've got 4
24 communications assets, 4 transport and logistics
25 assets, 2 energy assets, 2 social infrastructure

1 assets, and then 1 diversified infrastructure
2 platform. So, again, 13 deals where it sits
3 today.

4 You know, we're really kind of just under
5 50 percent deployed. So, a lot of work to do from
6 the deployment standpoint but pretty excited about
7 where the market is today and where we think it's
8 probably headed over the next 12 to 24 months.

9 So, thank you, guys.

10 But with that, I'll maybe open it up to Q
11 and A.

12 CHAIR RIEGER: Thanks.

13 Well, I have a question to -- a couple --
14 two of -- one --

15 Could you talk -- on your infrastructure
16 Fund IV, the two energy investments that you
17 listed are listed as energy transition.

18 Could you -- what -- what -- can you be
19 more specific?

20 Is that something you can disclose?

21 What kind of industry is that exactly, the
22 energy transition?

23 MR. HOWELL: Yeah, sure.

24 And -- and I'll blame -- I'll blame
25 Brenden for the labeling on this slide.

1 But it would be specific -- WTG, which --
2 well, I guess that's the second one you see. That
3 is a pipeline -- well, it's a natural gas pipeline
4 and natural gas processing business in the Permian
5 Basin. It's also connected to a gas utility.

6 Family-owned business. Owned by the same
7 family for 75 years. They had a -- they had a
8 death in the family, it passed town to 6 heirs.
9 We bought the business off those heirs when they
10 needed liquidity in 2020 during COVID.

11 I think we label it as energy
12 transition -- honestly, I think it's just a broad
13 label on here. Anything that isn't energy on here
14 is energy transition.

15 There is an energy transition component.
16 We've -- we've -- we hired a -- a fleet of drones.
17 We did flyovers for all the pipelines.

18 And since owning the asset for about, I
19 guess, 18 months -- or a little under 18 months --
20 we have reduced 80 percent of the methane leaks on
21 the pipeline and will have reduced that by 100
22 percent by end of Q1 2023.

23 So, look. I mean, again, that's something
24 we view as energy transition. Some folks might --
25 might view it something differently. It's a

1 traditional oil and gas asset, but it's -- it's
2 improving emissions.

3 And then the other one on here, which
4 is -- you can't really see the logo, but it's
5 Seapeak. That is an LNG transportation asset.

6 We label that as energy transition because
7 a lot of where we are taking that natural gas --
8 we are taking that gas from U.S. export
9 facilities, for example, taking it to Asia. We're
10 taking it to Latin America. And we are displacing
11 coal with that natural gas.

12 And so, in our view, that is very much
13 middle of the fairway energy transition as we
14 reduce CO2 emissions through people using natural
15 gas instead of coal.

16 Maybe a bit of a longwinded answer to your
17 question.

18 VICE CHAIR RIEGER: No. I
19 appreciate it.

20 Are there any other questions?

21 Just -- since we have a couple minutes,
22 the -- the one chart that got the response --
23 the -- page 14 of your presentation -- or I think
24 in the fine print it says 146, maybe. 148.

25 So, those arrows at the top of the slide

1 kind of suggesting a causality. But I just wanted
2 to make sure that that's what you meant to say.
3 GDP towards quality of life.

4 I could see why GDP would be causality
5 towards quality of life, but wouldn't it be the
6 GDP is causality towards the cost of fuels rather
7 than price -- or are we actually making a point
8 that there was a causality in that direction?

9 MR. HOWELL: I mean, I think -- I
10 think we're simply making the point that, you
11 know, the countries with strong GDP production
12 tend to have a use and reliance on fossil fuels to
13 get there.

14 And I don't think it's kind of a -- it is
15 maybe a less of one thing causing the other
16 causing the other versus it all being fairly
17 interconnected, in our minds.

18 CHAIR RIEGER: Okay. Thanks.

19 Are there other questions?

20 MR. MITCHELL: Mr. Chair, just an
21 observation.

22 CHAIR RIEGER: Yes. Yeah.

23 MR. MITCHELL: Natural gas is
24 definitely known in the circles I've roamed in as
25 a transition fuel, and I think that's why it's

1 correctly categorized that way.

2 Despite saying some of the improvements
3 that they're making to that, I think it's -- at
4 its -- on its own two legs, a transition fuel or
5 transition investment.

6 So, I know that's how we would categorize
7 a natural gas pipeline from the North Slope to
8 tidewater in Alaska.

9 CHAIR RIEGER: All right.

10 MR. HOWELL: Yup. Yeah.

11 We'd -- we'd agree completely.

12 CHAIR RIEGER: Well, okay. Well,
13 thank you for your presentation today.

14 If there's no other questions, I think
15 just, again, thank you both for your -- for coming
16 and presenting today.

17 MR. CRUM: Appreciate it.

18 MR. WOODS: Thank you.

19 MR. HOWELL: Thank you, guys.

20 And apologize I couldn't be there in
21 person. Look forward to seeing everybody soon.

22 MR. CRUM: Thank you.

23 MS. RUBENSTEIN: Thank you.

24 (Indiscernible crosstalk.)

25 MS. RUBENSTEIN: Jason.

1 Jason, I really wanted to hear your
2 reaction to the happiness score.

3 MR. BRUNE: I -- you heard me
4 laugh. That was absolutely spot on.

5 MS. RUBENSTEIN: That was a good
6 one.

7 MR. BRUNE: We're on the record,
8 right?

9 CHAIR RIEGER: So, welcome
10 everyone.

11 I'll think that, once again, I'll just
12 call on Ross to make the introductions.

13 MR. ALEXANDER: So, I'd like to
14 introduce you to three gentlemen from EnCap
15 Investments.

16 Chuck Bauer is their IR individual.
17 Morriss Hurt works on the EnCap Flatrock team.
18 Leads that. That's their midstream focus
19 platform. And then Tim Rebhorn is one of the
20 partners on the energy transition fund.

21 We've been partnering with EnCap for -- I
22 don't even know how long we go back on the private
23 equity side on their upstream platform -- but have
24 also been active in infrastructure portfolio back
25 in their midstream fund. We did a co-investment

1 with them there as well as now in their first and
2 second -- soon hopefully we can get it across the
3 line -- energy transition funds.

4 So, longtime partners of ours. We think
5 they have a very thoughtful approach to the
6 market.

7 But they'll kind of focus more on the
8 energy side of things.

9 So, I'll turn it over to Chuck to --

10 MR. BAUER: Perfect.

11 MR. ALEXANDER: -- introduce his
12 team.

13 MR. BAUER: Thank you. It's great
14 to be here.

15 I have to tell you a -- maybe what I found
16 to be an amusing story. I'm not sure y'all will
17 find it amusing.

18 But I was in Seattle yesterday, and I
19 boarded the airplane to fly here. And got on the
20 board -- on the plane -- and there have -- there
21 will be a rationale behind this story in a second.

22 But -- and the -- and the flight attendant
23 comes on and says, "Hey. We're -- we're -- this
24 is Flight 69 to Ketchikan."

25 I said, "Wait a second. I thought -- I'm

1 going to Juneau. Like, where -- where is
2 Ketchikan, and how far is that to Juneau?"

3 Right?

4 So, I stand up, and I go talk to the
5 flight attendant.

6 I'm, like, "Hey. This plane's going to
7 Juneau, isn't it?"

8 And she's, like, "Oh, yeah. We're just
9 stopping in Ketchikan. Then we're going to make
10 our way to Juneau."

11 I was, like, "Okay."

12 But the important part of that was I got a
13 chance to sit next to a young woman from Ketchikan
14 who happened to be an air traffic controller.

15 And so she was asking me, "Why in the
16 world are you going to Juneau, Alaska?"

17 And I said, "Well, I've got a -- I do some
18 work on behalf of the Alaska Permanent Fund, and
19 we're making a presentation to them tomorrow."

20 And we got to talking about the importance
21 to her of the annual check that she receives. And
22 it just was a fresh reminder to me -- sometimes
23 when we look through who our investors are and
24 what we do and -- and the important role that we
25 play and you play in providing value to the

1 citizens that live here -- or, for us, the
2 foundations we work on behalf of --

3 And so it was just a healthy reminder that
4 there are people behind this, that y'all play a
5 good role, and makes -- reminds us of the
6 importance of the work we do.

7 And we just appreciate the opportunity to
8 invest capital on behalf of the State of Alaska.

9 As Ross mentioned, it's been a very long
10 relationship. Preliminary initially through the
11 Pathway -- relationship you had with Pathway on
12 the discretionary side. And then about four years
13 ago, it moved into the direct side where we
14 interact with Marcus to -- and Steve Moseley at
15 the time -- to begin investing directly through --
16 in our midstream funds. And then more recently on
17 our energy transition fund.

18 So, just a couple quick minutes of
19 background on EnCap just to set the stage. We're
20 34 years old. Always been focused on North
21 American energy opportunities.

22 We had three platforms. Alaska is
23 invested across all three of these platforms;
24 upstream, midstream, and energy transition.

25 Today we're going to talk about midstream.

1 We're going to start with energy transition, which
2 is a platform we established about three years ago
3 to take advantage of the opportunities that we see
4 emerging as more and more states move to
5 increase -- decarbonization of the power grid, add
6 wind, solar, energy storage, biofuels to that
7 portion of it.

8 But yet we still remain true to our roots
9 as well on the energy side, the oil and gas side.
10 Still see tremendous opportunity there.
11 Particularly as the globe grows, as the population
12 grows.

13 And -- and as the world continues to have
14 an insatiable demand for energy, we think it's an
15 "all of the above" equation, not an either/or
16 equation.

17 And so we see -- you know, as EnCap, we
18 have 35 rigs running across the country right now.
19 We're actually the largest oil and gas producer
20 in the U.S. in terms of the number of rigs
21 running, primarily in the Lower 48 -- or all in
22 the Lower 48 in the Permian, Bakken, Eagle Ford,
23 and other places.

24 So, it's been a -- you know, but
25 importantly, when we decided in nineteen -- or

1 2008 to begin expanding our franchise away from
2 midstream -- we were founded in 1988 -- the key
3 was we wanted to go out.

4 And as we thought about going into
5 midstream initially and then energy transition
6 three years ago, it was not walk up and down the
7 halls and identify people within the organization
8 and say, "Hey. Go -- go learn the midstream
9 space."

10 We actually went out and partnered with
11 people who have been in that business, operators
12 their entire careers, and brought them in to
13 manage the capital and build a franchise around
14 that.

15 And so, today what we're poised to do --
16 and we'll hopefully make this an interactive
17 dialogue over the next 45 minutes to an hour -- is
18 just talk through what is the -- what's the
19 current state of play is in the energy markets.

20 It seems to be on the headlines of every
21 paper and -- across the world. Particularly with
22 what's going on in Russia and Ukraine. And -- and
23 anything and everything that's going on here in
24 the U.S.

25 So, you know, we can take this any

1 direction you want to take it.

2 We're going to start with Tim Reborn,
3 who's one of the managing partners of our energy
4 transition strategy. And we'll talk a little bit
5 about the evolution of that market and the
6 opportunity that's going on there today.

7 MR. REBHORN: Thanks, Chuck.

8 Hi, everybody. Thanks for -- for giving
9 us the opportunity to come up and present to you.

10 So, just a little bit about our fund. As
11 Chuck said, we started with EnCap in 2019.

12 But the four managing partners were -- we
13 had an existing team. We were with Yorktown
14 Capital. And in a very short period of time, we
15 essentially outstripped their ability to continue
16 to fund us.

17 And in Fund I, they actually came
18 alongside us when -- when EnCap stepped in. So,
19 they've had a right to participate at a -- in a
20 minority stake in all of our Fund I companies.
21 They've elected to do that.

22 As we moved to Fund II, they -- that --
23 they won't have that right.

24 We've got 10 investment staff right now.
25 Before April 1st, we'll be adding another vice

1 president and then two additional associates.

2 The four of us all have a pretty long
3 nexus together. We've all known each other since
4 the '90s. Jim and Shawn actually went to law
5 school together. All four of us had a nexus at
6 one point or another at Enron. And then Jim and I
7 were at First Solar together before -- before we
8 started this.

9 Green button?

10 MR. HURT: Probably that one right
11 there (indicating).

12 Yes.

13 MR. REBHORN: Yeah. Okay.

14 So, we use this slide at our AGM.

15 Always great to start with technical --

16 MR. MITCHELL: I just admired how
17 Ross didn't act like he was going to come help at
18 all.

19 MR. REBHORN: And I'm the engineer,
20 right?

21 So, we -- we showed this slide in our AGM,
22 and I wanted to -- to put this up again because I
23 think it really demonstrates around -- from around
24 the time of our fund inception in Fund I, just
25 what a wild ride it's been and really continues to

1 be -- not just in the renewable space, but across
2 some of these broader commodity markets.

3 You know, one -- one note on the slide is
4 that, you know, we expect softening. And I think
5 that's true, but I think with respect to --
6 certain -- some commodities like -- like
7 polysilicon and lithium, I don't expect to see
8 softening. I expect to see continuing stress in
9 lithium with the -- with increase in EVs and with
10 increase in lithium in energy storage.

11 You know, I was telling Chuck this
12 morning. I read an article this morning that said
13 we maybe me applying the Uyghur Forced Labor
14 Protection Act [sic] -- and I'll talk a little bit
15 about -- more about that.

16 But it's an act to prevent import of
17 materials from a certain province in China where
18 they're using forced labor. But they're actually
19 talking about applying that to lithium now in EVs.

20 So, it's -- it's created a bit of a mess
21 in the supply chain. I think we'll continue to
22 see some headwinds here.

23 But over the -- the course of the fund, we
24 started our fundraise, you know, immediately went
25 into COVID. Raised our first fund through COVID

1 through April 2021.

2 The supply chain constraints both -- just
3 with respect to COVID and shutdowns of factories
4 but also the regulatory uncertainty that's created
5 some of these supply chains constraints: tariffs
6 on material, rules like the ULFPA [sic] that are
7 restricting availability and materials; populous
8 governments in countries that supply copper and --
9 and iron and other raw materials for the power
10 business, generally, have created a lot of
11 constraints and uncertainty about supply. Really
12 for the first time in -- in my 39-year career in
13 the energy business. I've never seen anything
14 like this before.

15 MR. BRUNE: Mr. Chair?

16 MR. BAUER: The --

17 MR. CRUM: We've got a question.

18 MR. BAUER: Excuse me. Sorry.

19 CHAIR RIEGER: Go ahead, Jason.

20 MR. BRUNE: I'm fascinated by that.
21 I have -- I have a history in the mining industry.

22 So, I just want to know: Are any of those
23 regulatory issues you're seeing coming from the
24 United States, or are they from -- sounds like
25 they were from foreign countries -- China --

1 MR. REBHORN: No. That's a great
2 question.

3 So, it's a combination. But the factors
4 that are driving issues here in the U.S. are
5 entirely self --

6 MR. BRUNE: Inflicted.

7 MR. REBHORN: -- self-inflicted.

8 So, two examples --

9 MS. RUBENSTEIN: You guys --

10 MR. REBHORN: If I want to go to
11 Australia to buy solar panels right now, I'll pay
12 27 cents a watt. If I want to buy them here for
13 '23 or '24 delivery -- if I can find them, which
14 is difficult -- it's 45 cents and up for the exact
15 same panel.

16 And most -- a lot of the manufacturers --
17 major manufacturers have just turned boats around,
18 and they're sending panels to other countries
19 right now because of the uncertainty.

20 You may have read this week that they just
21 released the results of the anti-dumping analysis.
22 This was supposed to have been released in
23 August -- at the end of August.

24 So, there are certain companies where
25 they'll be applying tariffs and others were --

1 were free. And this was from Thailand, Malaysia,
2 Vietnam, and Cambodia. Those were the countries
3 that were subject to these tariffs.

4 But the uncertainty over the past five or
5 six months around that -- and, in fact, since --
6 since March when they announced it, has had a big
7 impact on the market.

8 So, that -- and then on UFLPA, there are
9 upwards of 13 gigawatts of solar panels that have
10 either been turned around or are stuck in U.S.
11 customs in the last 8 months.

12 So, that's almost the entire supply that
13 was installed in 2020 and 2021 in the U.S.

14 So, it's largely self-inflicted. So,
15 it's -- it's uncertainty. And then where there is
16 certainty, it's just creating higher prices for
17 the market.

18 MR. BRUNE: Thank you.

19 MR. REBHORN: Just -- I'll just
20 continue down the list quickly.

21 But the -- the impact of the
22 Russia/Ukraine war and the European energy crisis
23 has affected U.S. gas prices. I'll address that
24 as we go forward.

25 But it's -- it's also -- it's also

1 impacted where materials are going in the supply
2 chain.

3 So, the -- what we're hearing from
4 suppliers is that, you know, there is uncertainty
5 around contracted capacity. And so they are in a
6 position where they have an obligation to supply,
7 but they're not quite sure if they have -- if the
8 off-taker is going to honor the agreement.

9 It's a -- it's inverse of what we had seen
10 previously from some of these markets.

11 And then inflation and interest rates.
12 I'm going to touch on that as well.

13 But given all that, there's still a
14 tremendous demand for renewable energy and
15 renewable fuels and what's driving that.

16 So, it's largely across -- across the
17 globe. It's mandates from -- not only from
18 governments but now largely from large commercial
19 entities like Google and Amazon and Microsoft that
20 are -- are demanding additional sources of
21 renewable power.

22 And RECs aren't working anymore. So, what
23 they're now demanding is a 24/7 renewable product,
24 which is very difficult to supply with -- with
25 intermittent supply.

1 We're seeing -- as a result of that, we're
2 seeing a lot of capital in the space. There is
3 smart capital coming into the space, and then
4 there is other capital coming into the space.
5 It's causing further disruption in the markets.
6 It's being -- that's being deployed perhaps not
7 so -- not so wisely.

8 MR. BRUNE: Mr. Chair.

9 CHAIR RIEGER: Go ahead, Jason.

10 MR. BRUNE: I'm sorry. I've never
11 heard of a renewable 24/7 -- I mean, if you
12 classify hydro -- which some people do not -- I
13 just --

14 Unless you have battery technology,
15 that -- that doesn't exist.

16 So, maybe I'm misunderstanding the
17 demand --

18 MR. REBHORN: No. You're --

19 MR. BRUNE: -- for such a --

20 MR. REBHORN: -- understanding it
21 correctly.

22 So, this is a -- it's a new requirement.
23 And it -- 24/7 is a -- is a target.

24 But we're -- in ERCOT right now, we're
25 talking to companies like Google or Meta about a

1 virtual product where we're selling a combination
2 of wind, solar, and then have battery storage
3 available that's augmented by gas --

4 MR. BRUNE: Wow.

5 MR. REBHORN: -- that gives them
6 24/7 capacity.

7 So, you are signing agreements to
8 guarantee essentially 24/7 renewable power.

9 MR. BRUNE: That -- but -- I'm
10 sorry. Follow-up, Mr. Chair.

11 I --

12 CHAIR RIEGER: Yeah. Go ahead.

13 MR. BRUNE: I don't see that gas is
14 renewable.

15 And --

16 MR. CRUM: That was my --

17 MR. BRUNE: And I --

18 MR. MITCHELL: It's a transition
19 fuel.

20 MR. BRUNE: Well -- indeed.

21 But, I mean, I -- I've seen it. And we
22 worked on it -- you know, like, a pumped hydro
23 where you use renewable energy to pump water up a
24 hill when the blades are turning or the sun is
25 shining.

1 And then when it's not, you make that
2 water go down the hill and you run a turbine and
3 you're able to get it that way.

4 But even some definitions of renewable
5 power don't include hydro.

6 So, I mean --

7 MR. REBHORN: The gas -- the gas
8 sits as a backup.

9 So, the way that the -- so, in the market
10 that we're -- we're looking at these types of
11 arrangements at ERCOT, we have a -- a --
12 essentially an oversubscribed wind resource in the
13 West with very cheap wind power.

14 We have solar -- a regular solar day in
15 ERCOT that we -- and then we can fill the evening
16 hours and the peak hours with four-hour battery
17 products.

18 So, it gives us --

19 MR. BRUNE: Oh.

20 MR. REBHORN: -- essentially -- on
21 many days during the year, it gives us 24/7 of
22 supply across that contract.

23 And now it's not necessarily coming from
24 one solar plant or one wind plant.

25 MR. BRUNE: Sure.

1 MR. REBHORN: Or one battery
2 storage facility.

3 You can -- you can --

4 MR. BRUNE: Use them all together.

5 MR. REBHORN: -- buy these
6 virtually and supply it virtually into the market.

7 And then the gas sits on the side during
8 times when the renewables are intermittent and --
9 and allows us to fulfill the contract
10 requirements.

11 MR. BRUNE: Thank you.

12 MR. REBHORN: So -- yeah.

13 And it's not -- you can't do that in every
14 market right now.

15 ERCOT has some -- there's some flexibility
16 in ERCOT that allows us to contract that way.

17 But...

18 CHAIR RIEGER: Adam.

19 MR. CRUM: Yeah. Thank you,
20 Mr. Chair.

21 So, just to be clear, with that contract,
22 Google and Meta are acknowledging that gas is a
23 transition energy?

24 MR. REBHORN: You'd have to ask
25 them that question.

1 The Europeans certainly have.

2 MR. CRUM: Yes, they have.

3 MR. BRUNE: They have to.

4 MR. REBHORN: If you're asking me,
5 personally, I -- I would love to see gas in our
6 Fund III --

7 MR. CRUM: Uh-huh.

8 MR. REBHORN: -- as a renewable
9 energy source.

10 I think you could do more by just
11 eliminating coal faster and substituting it with
12 gas than you could with solar and wind and
13 battery.

14 So...

15 MR. CRUM: Yeah. But...

16 CHAIR RIEGER: Just --

17 MR. REBHORN: And all of us are --
18 are ex gas power plant developers, so we -- we
19 understand the business pretty well.

20 CHAIR RIEGER: I just need to back
21 you up for a second.

22 On the comments about Europe and the
23 energy contracts -- the futures -- or the future
24 contracts.

25 Did you -- were you saying -- I just have

1 to make sure I digested what you said right --
2 that there were contracts entered into in the past
3 few months, back when the prices spiked -- really
4 spiked, and there is a fear that the -- the buyer
5 is the side that will default on them?

6 Is that what you were saying?

7 MR. REBHORN: This is -- this is on
8 batteries -- and --

9 CHAIR RIEGER: Just --

10 MR. REBHORN: Primarily on
11 batteries.

12 But --

13 CHAIR RIEGER: Just on batteries.
14 Okay.

15 MR. REBHORN: But on -- on wind
16 turbines as well.

17 Not on solar panels, but batteries and
18 wind turbines.

19 CHAIR RIEGER: Okay.

20 So, it had nothing to do with gas?

21 MR. REBHORN: No, sir.

22 CHAIR RIEGER: Okay. It was just
23 batteries.

24 Okay. Got it.

25 MR. REBHORN: So, the other things

1 that are driving this are -- aside from the
2 regulation is just that the prices have been
3 coming down.

4 Despite the inflationary environment,
5 we've seen, you know, a continued drop over the
6 long term in prices of both solar panels, on wind
7 turbines, in batteries, and to -- to a certain
8 extent, some of the other infrastructure.

9 Means and methods of construction for
10 larger utility scale plants and in commercial and
11 industrial sized plants have also contributed to
12 reduction in cost for delivered power as well.

13 So...

14 CHAIR RIEGER: Adam.

15 MR. CRUM: Sorry.

16 CHAIR RIEGER: Sorry to keep
17 interrupting you.

18 MR. CRUM: I apologize.

19 So, on that -- to that point -- going back
20 to your earlier comment. Government regulation is
21 actually delaying green energy transition?

22 MR. REBHORN: It -- it is -- it's
23 creating significant headwinds in the U.S.

24 MS. RUBENSTEIN: Federal or State?

25 MR. REBHORN: Federal.

1 MR. BRUNE: Federal.

2 MS. RUBENSTEIN: All federal.

3 MR. REBHORN: Yeah.

4 MR. BRUNE: I could have answered
5 that question.

6 CHAIR RIEGER: Okay. Yeah.

7 Keep going.

8 MR. REBHORN: You know, I -- I
9 think uncertainty about the regulatory environment
10 always creates headwinds.

11 Right?

12 And it's -- I spent much of my career
13 developing power projects internationally. And
14 that's the hardest thing about working
15 internationally is that if you don't have a
16 regulatory environment or if you don't have an
17 environment where you understand how litigation is
18 going to work, it's very difficult. Especially to
19 get financing.

20 MR. CRUM: Yeah.

21 MR. REBHORN: And we're not there
22 in the U.S. yet.

23 But it's -- it's -- it's felt a little bit
24 second world this year --

25 MS. RUBENSTEIN: Interesting.

1 MR. REBHORN: -- in the renewable
2 business.

3 MR. BRUNE: Mr. Chair?

4 I would disagree. We are absolutely there
5 in the United States right now.

6 The federal government is -- I mean, you
7 talked about the impediments that have been put up
8 from actually doing -- on that first slide that
9 you showed with the metals, the minerals, the rare
10 earths that are required for many of these
11 products, the U.S. has put absolute road blocks up
12 for having that done here, subsequently pushing it
13 to third-world areas that don't have the
14 environmental oversight that many of us wish they
15 did.

16 So, it's already happening. And
17 litigation folks aren't investing here because of
18 that exact issue.

19 MR. REBHORN: It -- it certainly
20 makes it more difficult to -- to do what we do.

21 I think the -- having the four of us --
22 really been in the energy business for so long
23 makes it a bit easier than some of our
24 counterparts who are, you know, purely from a
25 financial background.

1 We understand the markets. We can see the
2 trends, I think, a little bit easier. But it's --
3 it's -- just doesn't feel like there's an easy day
4 at the office.

5 MR. BRUNE: I think I'm talking
6 from an upstream perspective. Like, on the
7 production of those raw materials.

8 MR. REBHORN: No. I mean, I agree
9 with you.

10 We -- we are looking at a few
11 opportunities with respect to lithium
12 domestically.

13 And it -- you know, it's -- it's very
14 difficult. It's just -- the answer is usually:
15 This isn't an investment we can realize within the
16 window of our fund.

17 MR. BRUNE: Okay.

18 MR. REBHORN: So, let me talk
19 quickly just about some of these other macro
20 headwinds. I think everybody here is familiar
21 with that.

22 The chart on the left is -- is natural gas
23 and power prices. The blue lines are 2021, and
24 the green lines are 2020.

25 And you can see on gas, the forward Henry

1 Hub is about 60 percent higher than it was this
2 time or at the end of Q3 last year.

3 What does that do to us?

4 Well, power prices in the U.S. are really
5 driven by natural gas prices as -- as that's the
6 marginal fuel source.

7 So, while we are seeing an increase in PPA
8 prices in many of the markets, we're also seeing
9 a -- a delay or an unwillingness to sign PPAs at
10 these higher prices.

11 And I think PPA signings over the last
12 year have dropped by about 25 percent. So, you
13 know, these are people in the market that
14 generally can wait.

15 But we're still seeing transactions now
16 that are, you know, in the \$45 per megawatt range,
17 like, on power contracts which -- I think if you
18 had asked me if we'd be seeing that a few years
19 ago -- particularly in Texas, as an example -- I
20 would have thought you were crazy.

21 On Treasury rates and inflation, those
22 both affect our businesses as well. So, inflation
23 obviously -- you know, with respect to the cost of
24 labor to build the projects that we're building,
25 the cost of the raw materials, the cost of

1 equipment, that's -- we've seen an -- an increase
2 in those.

3 But somewhat that's been offset by higher
4 power prices.

5 One other area that we typically see
6 impacts on Treasury rates is the cost of capital.

7 So, if we're selling a business with --
8 with the intent of selling to a lower
9 discount-rate buyer, you would expect that these
10 discount rates would be coming up and we'd be
11 seeing less margin compression.

12 But, in fact, what we've seen over the
13 last year is that the buyers are taking more of a
14 long-term view of the companies that we're
15 building.

16 And so they're not really pricing at these
17 current higher rates, but they're pricing based on
18 what they perceive to be a longer-term view of
19 what -- what the -- the Treasury rates are going
20 to be.

21 So, the other good news is that energy
22 demand continues to go up. You know, these
23 numbers are global, but I think they're
24 illustrative.

25 And the trend that you can see in the bar

1 chart on the right is that as energy -- as energy
2 demand is increasing, where is the increase in
3 demand coming from?

4 And I think it's -- it's the same in the
5 U.S. as it is globally. And I will note that this
6 does include transportation fuel. So, that's why
7 oil is such a big number on the bottom.

8 But you can see that the bulk of the
9 increases are coming from natural gas and
10 renewables.

11 And -- and in particular in the power
12 sector and in the U.S., the bulk of new energy
13 supply is really coming from renewables.

14 So, demand continues to be strong. You
15 know, they -- the -- the demand, in fact, in -- on
16 the renewable side is so strong I think it's --
17 it's going back to my earlier comment about supply
18 chain -- it's starting to affect the availability
19 of certain types of materials.

20 When we started this business in 2016 when
21 Jim and I left First Solar, the global battery
22 supply market was 50 gigawatts. So, that was how
23 much production of -- of 50 gigawatt hours --
24 excuse me -- of batteries a year.

25 It's currently 2500 gigawatts in less --

1 in roughly 7 years. That -- that supply is
2 beginning to be stretched.

3 So, with all this demand, where's the
4 capital going to come from?

5 So, this -- this chart is really
6 illustrative. And this is a -- an analysis that
7 was done by McKinsey but -- to talk about the --
8 what the available -- or what the required capital
9 would be to achieve net zero at 2050 -- which I
10 think the majority of first-world and second-world
11 countries in the world have announced.

12 And, you know, I read -- I follow Bjorn
13 Lomborg on -- on LinkedIn. I don't know if any --
14 any of you have read him, but he's very good.

15 He's an environmentalist, but he calls
16 himself the skeptical environmentalist. So, he's
17 very pragmatic about how we should be addressing
18 these issues.

19 And he said, you know, if you look at net
20 zero for 2050, it would essentially take about a
21 quarter of the world's GDP every year to achieve
22 that.

23 So, with that in mind, what -- what I'm
24 trying to illustrate on this slide is -- is really
25 the -- the scope of the capital investment and the

1 opportunity set that we have in the fund to -- to
2 invest in renewables.

3 The chart on the right, the boxed green
4 sections are what we're targeting in both Fund I
5 and Fund II.

6 So, low carbon mobility, circular
7 products. We really don't invest in EV or EV
8 infrastructure currently. And then water --
9 wastewater and in ag -- in green ag, we haven't
10 really invested in those sectors as well.

11 But if you take a small fraction of the
12 \$6.4 trillion a year, there are still ample
13 opportunities in this market to -- to invest.

14 So, we're still -- despite the headwinds,
15 we're still very bullish on opportunities to come
16 into the market, to deploy capital, and to hit --
17 hit our metrics.

18 So, I wanted to talk a little bit about
19 the IRA before I turn it over to Morriss.

20 So, I -- you know, I -- I'm sure
21 everybody's heard about the IRA. The IRA came on
22 the heels of Build Back Better and came on the
23 heels -- which failed and which came on the heels
24 of the infrastructure bills, which also allocated
25 a lot of capital into the space.

1 But the IRA, I think, is -- has received a
2 lot of, I think, undue enthusiasm. I'm going to
3 walk through it a little bit about what the IRA
4 really contains, and then I'm going to talk about
5 some of the challenges that -- that having this
6 IRA creates for -- for us and for the rest of the
7 market.

8 So, essentially, what the Inflation
9 Reduction Act has done is it -- it has offered a
10 substantial amount of tax credits. So, the bill
11 says 400 billion, but many of the tax credits are
12 uncapped.

13 So, you know, we've taken some analysis
14 that said, "Okay. It's -- let's assume it's
15 800 billion."

16 But there is an investment tax credit and
17 a production tax credit that are the foundations
18 of the Inflation Reduction Act.

19 Traditionally, those had applied -- and
20 they were running out -- but they had applied the
21 investment tax credit to solar and the production
22 tax credit to wind. Those are allocated a bit
23 differently. The investment tax credit comes up
24 front and the initial investment, and the
25 production tax credit over the life of the

1 project.

2 Those have both been extended and reset to
3 the original amounts.

4 The production tax credit has now been
5 allocated to solar as well. Our view is that it
6 actually works on solar. But it generally only
7 works in sort of -- if you drew a smile across a
8 map of the U.S. -- in the warmer, sunnier climates
9 where you have a whole higher solar capacity
10 factor, the production tax credit will make more
11 sense.

12 It's also, for the first time, applied an
13 ability to get the ITC from standalone battery
14 storage. So, the value -- we have two battery
15 storage companies in Fund I. We've sold half of
16 Broadreach Power to Apollo last year, and we just
17 announced two weeks ago a sale of our other
18 battery storage company to BlackRock.

19 The value of those companies as a result
20 of this -- the pipeline value increased
21 significantly. So, that's been -- that's been a
22 big tailwind for the battery businesses.

23 I think the most impactful part of this
24 though is the part that you don't hear much about,
25 and those are the tax credits for hydrogen and CO2

1 and some tax credits for renewable fuel.

2 The tax credit for hydrogen has
3 essentially taken hydrogen from being completely
4 uneconomic to really within the range of
5 hitting -- hitting the bar on returns.

6 So, I think that's going to be interesting
7 to watch how that's applied.

8 And then the -- on carbon, the -- the
9 ability to monetize the -- the CO2 sequestration
10 has been a bit -- made a bit easier.

11 I think it's still very difficult to find
12 a -- and permit a Class 6 well to sequester CO2 in
13 the U.S. But, you know, the primacy issues -- so,
14 giving it to the states from the EPA -- I -- I
15 think is going to help significantly.

16 So, I didn't realize Alaska was -- was
17 that what were you saying, Alaska's looking at
18 that as well?

19 MR. BRUNE: Absolutely.

20 We're --

21 MR. CRUM: We've been trying for
22 years.

23 MS. RUBENSTEIN: He's the DEC
24 commissioner.

25 MR. BRUNE: Well, no. Not -- DNR,

1 DEC, AOGCC -- we are -- and Governor Dunleavy is
2 incredibly interested in that.

3 And there's huge opportunities for Alaska.

4 MR. REBHORN: Yeah. I agree.

5 And we're -- we're looking at the same in
6 Texas. Louisiana currently has primacy.

7 MR. BRUNE: Couple states have
8 primacy.

9 MR. REBHORN: You know, I think
10 you're going to see a big CO2 hub in the -- in the
11 U.S. gulf around all of that infrastructure that's
12 there.

13 It'd be great to see another one here in
14 Alaska.

15 So, why did I say that the IRA hasn't been
16 all sort of sunshine and -- and roses?

17 Part of the -- part of the issues that we
18 faced as an industry on the renewable side -- and
19 this goes back to 2015, 2016 when I was at First
20 Solar.

21 And Jim and I were actually going to
22 congress to lobby against tax credits because the
23 problem that we faced was that we felt like we
24 were already at parity with hydrocarbon fuels.

25 And the -- but the availability of tax

1 equity was shrinking or it was very difficult to
2 capture. And it resulted in increased costs for
3 what we were supplying despite a 30 percent tax
4 credit or the inability to -- to do certain
5 projects.

6 So, today in the -- in the tax equity
7 market in the U.S., two companies -- Bank of
8 America and JPMorgan -- they have half the market.

9 So, unless you have an existing
10 relationship with one of those two companies --
11 or, No. 3, Wells Fargo; or No. 4, which is GIF,
12 the roofing company -- unless you have a
13 preexisting relationship, it's very difficult to
14 get tax equity.

15 So, now battery projects and hydrogen
16 projects and some solar projects are competing
17 against that same pool of tax equity to get these
18 credits that existed before the IRA was passed.

19 That -- that amount of tax equity in the
20 U.S. didn't go up through regulatory Fiat.

21 So, that's a problem. How did they
22 address it here?

23 Well, they -- they -- it's called
24 transferability. The Act enables a private entity
25 or a third party to step in and take that -- those

1 tax credits, which wasn't possible before.

2 So, now you may see additional players.

3 Some of the, you know, larger companies like
4 Google and Amazon and Meta have expressed an
5 interest to do it.

6 The transferability rules and the other
7 rules around the IRA are -- haven't been published
8 yet. So, we're expecting it to take 9 to 12
9 months around some of these transferability issues
10 and then perhaps another year for some of those
11 entities to really understand the rules, do the
12 tax equity structuring, and step into the market.

13 So, while it's been, you know -- there's
14 been unbridled enthusiasm about it. I think the
15 renewable energy conference in the U.S. this year
16 went from 13,000 to 27,000 people -- you know,
17 pre-COVID to post-COVID -- and a lot of
18 enthusiasm.

19 We've got some work to do around this.

20 So, if there aren't any questions, I'll go
21 ahead and pass it to Morriss.

22 CHAIR RIEGER: Go ahead.

23 MR. BRUNE: The IRA mandates in
24 order to get the -- many of the tax credits on
25 EVs -- that domestic production or at least North

1 American production of many of the minerals has to
2 transpire.

3 So, I think that there is some space --
4 assuming the federal government will have the
5 regulatory certainty for those companies to invest
6 here -- for opportunities to be able to meet those
7 demands.

8 I mean, the average time to permit a mine
9 in the United States is 15 years.

10 So, I hope that happens. But there -- in
11 order to get those tax credits, the companies have
12 to have domestic production.

13 And there's not a whole hell of a lot of
14 that going on here.

15 MR. REBHORN: No. I agree. It's
16 very difficult.

17 We -- we've -- over the last four of five
18 weeks, we've signed several NDAs with
19 international solar panel manufacturers that want
20 to manufacture domestically and with battery
21 manufacturers.

22 The solar panel manufacturers -- it's
23 somewhat interesting. I -- you know, it's not
24 really something that we typically do invest in.

25 We're -- we're a -- we're a buyer of

1 low-cost commodities like solar panels and
2 batteries. We're not -- you know, the
3 manufacturing businesses, we don't really think we
4 can achieve our target returns.

5 On the battery side, though, my first
6 question before we even signed the NDA is, "Can
7 you tell me how you're going to get to 40 percent
8 domestic content?"

9 And it's a -- it's been a very short
10 conversation.

11 MR. BRUNE: Exactly.

12 Thank you.

13 MR. CRUM: Thank you.

14 CHAIR RIEGER: Yeah.

15 So...

16 MR. HURT: Any other questions?

17 CHAIR RIEGER: Okay.

18 MR. REBHORN: Thank you.

19 MR. HURT: We'll switch over to
20 midstream.

21 My name is Morriss Hurt. It's great to be
22 here with you.

23 We started the firm 14 years ago, and I
24 joined just as it was coming together.

25 And we kind of do plumbing for the

1 hydrocarbon business. So, you know, think about
2 production as, you know, drilling a well and
3 downstream might be retail distribution or -- or
4 refining where you kind of cook the oil and turn
5 it into diesel or gasoline or jet fuel or asphalt.
6 We kind of do all the stuff in the middle.

7 Midstream basically -- you know, we
8 transport the hydrocarbons, and then we condition
9 them into a marketable state. Sometimes that
10 means removing impurities. Sometimes it makes --
11 you know, it's make sure it's methane that's
12 coming out of your stove and propane out of your
13 barbecue pit and not the other way around because
14 that's bad.

15 We've formed 42 teams. The -- the green
16 lines on the map are crude oil pipelines that
17 we've either built or bought or had a role in.
18 And then the red lines are natural gas.

19 So, you can see we've done natural gas,
20 natural gas liquids, crude oil.

21 The red -- excuse me -- the black circles
22 are terminal facilities. We just sold last year
23 the largest crude oil export facility in North
24 America right down the road from our office in
25 San Antonio in Corpus Christi, Texas.

1 So, we've been in Ohio, Pennsylvania, West
2 Virginia in the Marcellus. We've kind of been all
3 over the place with a lot of activity recently in
4 the Permian.

5 So, you know, I know you guys have been
6 sitting through all-day presentations, and that's
7 a lot of stats. So, I'm going to call an audible
8 here.

9 As I was flipping through the other
10 presentation -- just go to this slide first and
11 just kind of tell a story, really.

12 I mean, I could have picked any country.
13 I picked India because we -- last month we just
14 crossed 8 billion people on the planet, according
15 to the UN. And they expect -- probably the first
16 half of this coming year -- for the population of
17 India to exceed China. So, it's going to be --
18 pretty soon -- probably next year, the biggest
19 country in the world in terms of population.

20 So, really kind of start of talking about
21 the graph on the bottom right, the per capita GDP.
22 These are all current U.S. dollars.

23 In 1960, you know, you get barely
24 perceptible on the scale there. Per capita GDP in
25 India was \$82 a year. That's 22 cents a day on

1 average.

2 So, anything below a dollar, kind of a
3 widely accepted standard of abject poverty. You
4 know, you're -- you're -- you can't afford food.
5 You grow -- you eat what you can grow or forage.
6 You don't have access to clean water. Your kids
7 are not in school. They're probably helping
8 gather food and firewood and dung so you can, you
9 know, cook whatever you have in your house at that
10 kind of level of income.

11 Certainly don't have access to medicine.
12 If your children, you know, develop any lung
13 complications because of the indoor fire, you
14 know, they're probably not going to survive.

15 So, in 1960, the child mortality rate --
16 which is the measure of children who died before
17 the age of 5 -- was 25 percent in India. 1 in 4.
18 So, that's obviously kind of a staggering
19 statistic.

20 You fast-forward to 2000, and, you know,
21 we've seen -- they've -- they had seen dramatic
22 improvements.

23 The -- you know, increased by five times
24 to 443. That's \$1.21 a day, which doesn't sound
25 like much to anybody else in the room.

1 But, you know, certainly the quality of
2 life -- you have a little bit more of a safety
3 margin. You can maybe begin to buy food and
4 have -- have better access to water.

5 And the child mortality rate went to
6 9 percent from 25 percent. So, certainly a
7 dramatic improvement.

8 Now, I use the child mortality rate not to
9 be dramatic, but it's a really good measure of how
10 a society can provide for the very basic needs of
11 some of its most vulnerable, you know, citizens.

12 And all -- all these stats are from the
13 World Bank and UNICEF. So, you can look all this
14 up if you're curious.

15 And then -- so, fast forward to last year,
16 the last data we have -- the last year we have
17 these statistics available, 2021. You can see it
18 there on the graph.

19 You know, 2,277. It increased again by
20 five-fold from -- from 2000. And that's \$6.24 a
21 day. So, that's -- really would be considered
22 middle income for most of the world. Certainly
23 not here in the U.S. where we have, you know, the
24 darkest color there.

25 But, you know, you can -- your kids are

1 going -- probably able to go to school. You're
2 consuming shampoo and motorcycles and cell phones.

3 And, you know -- guess what -- but the
4 reason for all this story is this -- you know,
5 this has played out in what will soon be the
6 largest country in the world.

7 And as you move up that graph, a
8 near-perfect correlation is you consume more
9 things once you have more money.

10 Right now the child mortality rate is
11 3 percent in India. So, dramatic reduction. And
12 part of that is giving medicine and allowing them
13 to go to school and getting electricity as opposed
14 to burning -- burning firewood.

15 So, you've seen a dramatic increase in the
16 standard of living. But also with that comes
17 increased consumption and increased consumption of
18 energy.

19 You know, you have half of the world
20 population -- 4 billion people -- that are living
21 in countries that have below 5,000 per year per
22 capita GDP.

23 So, to continue on the example of India,
24 the IEA just released a report. And they said in
25 the next 20 years, India's going to have a power

1 system equivalent to the entire EU right now -- in
2 the next 20 years.

3 When you have 1.4 billion people, they're
4 going to continue to move up that quality of life
5 standard graph there. Per capita GDP's going to
6 continue, and they're going to keep consuming more
7 things.

8 So -- and, again, you've got 4 billion
9 people that are -- that are striving every day to
10 continue to move up that.

11 So, you know, the reason I share all this
12 is -- you know, this continued growth in
13 population and standard of living is going to
14 create a massive call on all forms of energy.

15 And so I think that's why we, as a
16 platform, are involved in upstream. We do the
17 midstream, energy transition. It's really -- it's
18 really going to be all of the above in -- in our
19 opinion, to meet these needs.

20 And so, you know, oil -- the IEA -- in the
21 same IEA report -- was expected to grow by 12
22 percent -- oil consumption between now and 2050.

23 You know, but as -- even as India will
24 continue to grow, you know, in this timeframe,
25 their coal -- their coal consumption is going to

1 increase by 40 percent.

2 So, it's going to be -- and their energy
3 minister gave some great interviews about two
4 weeks ago at the Top 27 conference.

5 And he said, "We're doing a lot of
6 renewable stuff. We're investing there. But it's
7 going to be a lot of coal too."

8 And if you follow that at all, there's a
9 big debate about, you know, who's going to pay
10 sort of this energy transfer?

11 The U.S. -- they would contend -- got to
12 benefit economically over -- on the back of
13 hydrocarbons. So, you know, there's -- there's a
14 bit of a transfer scheme that they're proposing to
15 help subsidize their -- their renewable because
16 they're more expensive in -- in some instances.

17 So, kind of with that as background to
18 kind of set the stage for -- you know, again, I
19 think -- you know, we -- we think that it's going
20 to be kind of all of the above in terms of our
21 continued -- continued use energy demand.

22 And I won't spend too much time on this
23 because this is really an overview of -- of the
24 rest of the slides.

25 But, again, I think it's our view here --

1 we'll talk -- talk on energy macro to begin with,
2 and then we'll go into, like, the specific
3 implications there with North American midstream.

4 Well, we think that, you know, the U.S. is
5 going to be critical to meeting, you know, the
6 hydrocarbon piece of the global energy demand.
7 And so that's going to create investment
8 opportunities and necessary -- necessitate it on
9 the upstream side and also on the midstream side
10 for us as well.

11 So, I'm sure you've heard about
12 Russia/Ukraine a lot today. But clearly
13 there's -- you know, we're in the middle of a bit
14 of debate in the dialogue between energy and
15 climate.

16 And, you know, Europe was a bit of a case
17 study of, you know, slowing down their domestic
18 hydrocarbon production, outsourcing that to
19 Russia -- which you can see here, this was sort of
20 their pre-Russia/Ukraine reliance on -- on Russian
21 gas. And that's where a lot of -- a lot of their
22 gas supply came from.

23 And of course we've seen what happened to
24 prices there on the graph on the right.

25 But I think, you know, the punchline here

1 I think Russia/Ukraine really refocused a lot of
2 people on, you know, the need for long-term, like,
3 clean, affordable, reliable, you know, safe
4 energy.

5 And -- and, you know, thankfully it hasn't
6 been too cold in Europe this winter. It helps
7 exacerbate -- excuse me -- it's helped mitigate
8 some of the problems that I think otherwise -- you
9 know, they could have been reaching.

10 But I think we've seen a renewable -- a
11 renewed appreciation for the role and the
12 importance of hydrocarbon.

13 You know, in terms of -- you know, as
14 we -- as we think about the world -- in our
15 opinion, again -- it's going to need more
16 hydrocarbons.

17 The U.S. is, you know, one of the largest
18 producers there. You see on the -- on the left,
19 you know, the top producers last year, natural gas
20 and oil. U.S. is the clear leader.

21 And then on the right, you'll see -- you
22 know -- on the -- on the liquid side -- you know,
23 on the natural gas side, Russia's leading there.

24 But you've seen -- you know, certainly
25 created -- that -- that's -- that's given Russia

1 some outsized influence that probably shouldn't be
2 happening.

3 But, you know, again, the U.S., in our
4 opinion, is -- you know, given that our -- our
5 production and what we're able to do and what
6 we've been able to do the last few years with
7 shale -- you know, we're going to be -- we're
8 going to be one of the leading sources of clean,
9 reliable energy for the world.

10 And it's going to create a -- you know,
11 we're just going to continue to play a critical
12 role there.

13 You know, but the -- the underinvestment
14 has not just been in the U.S. We've seen some
15 underinvestment globally as well.

16 And so, you know, that's -- that's one of
17 the big things that's led to the spike in
18 hydrocarbon prices that we've seen in Europe
19 recently.

20 You know, there's -- there's tremendous
21 societal and political pressure to decarbonize.
22 And you see this with the publicly traded upstream
23 companies in the U.S. We see it with the same --
24 with some of your public midstream counterparts.

25 And I think, you know, certainly that's a

1 commendable goal, and we are pro decarbonization.
2 We think it's coming, but it needs to be done in a
3 balanced, kind of more nuanced way.

4 And --

5 MR. RICHARDS: I have a question
6 for you.

7 MR. HURT: Yeah.

8 MR. RICHARDS: So, just going back
9 to the shale point.

10 Are there other large basins in the world
11 that have the same kind of shale opportunities
12 like you get in the U.S.?

13 MR. HURT: Absolutely.

14 MR. RICHARDS: Okay.

15 MR. HURT: China --

16 MR. RICHARDS: I -- I assumed there
17 were.

18 MR. HURT: You know, you think
19 about -- you think about -- shale really is the
20 underlying source rock for where a lot of the old
21 hydrocarbons --

22 MR. RICHARDS: Sure. Yeah.

23 MR. HURT: -- were produced.

24 And what would happen is the hydrocarbons
25 would migrate up to, like, a structural trap.

1 Like, maybe this was the shale (indicating), and
2 you had this (indicating).

3 And it would float up, and then I would
4 try to drill into that.

5 But the old way was I would drill here
6 (indicating) and miss, and I would drill here
7 (indicate) and hit.

8 But now, I drill down, and I go here and I
9 go here (indicating). So, that's why it's so
10 productive.

11 But anywhere you've had historic
12 hydrocarbon production, there's most likely an
13 underlying shale.

14 So, China, Argentina, Poland.

15 But the reality is -- is you -- again, you
16 have a sort of societal and political wheel that I
17 don't think maybe -- will that ever get produced?

18 Probably not would be my guess.

19 And then -- you know, they don't have the
20 technology. You think about China, you know -- or
21 I don't know -- or even Mexico, which is more
22 friendly, right down below. They've -- they've
23 tried to deprivatize it, and now it's kind of
24 being reprivatized.

25 I mean, I grew up in south Texas not far

1 from Mexico. And Eagle Ford shale, which is
2 producing tremendous hydrocarbon reserves -- it
3 doesn't stop once it goes into the Rio Grande.
4 But there's no -- there's no shale wells there.

5 So, you have to have a -- the U.S. has
6 such a unique combination of, you know, technology
7 and ownership rights and sort of stable
8 government -- back to what Tim was saying
9 earlier -- that I just think, you know, so far,
10 that hasn't been able to be replicated.

11 But that -- that's a great question,
12 though.

13 MR. RICHARDS: Thank you.

14 MR. HURT: Uh-huh.

15 We talked about that.

16 So, you know, just last thing on natural
17 gas.

18 If you're familiar with Toby Rice, he's
19 the CEO of EQT. He's got a great -- Senator
20 Warren sent him a letter -- actually to a lot of
21 the CEOs -- saying we need to stop exporting LNG
22 from the U.S.

23 And he sent a great response, and some of
24 his comments will be in there.

25 If you haven't read it yet, it's probably

1 worth, you know, 10 minutes of your time.

2 But in the last 15 years, the U.S. has led
3 the world in reducing CO2 emissions. Down
4 970 million tons a year. The second -- No. 2 is
5 Japan at kind of 250. So, 25 percent of what
6 we've done.

7 If you combine India and China and their
8 increase -- primarily because of coal -- it's six
9 times what we've been able to reduce.

10 So, they're just, like -- you know, we
11 could have done six times what we did last year --
12 I mean, over the last 15 years just to -- just to
13 kind of break even.

14 So -- and I think a big part of our
15 ability to reduce CO2 emissions so quickly -- Tim
16 mentioned it earlier -- natural gas. We believe
17 it's a transition fuel.

18 It's coal to gas switching. Like,
19 switching a lot of our power plant fleet from coal
20 to natural gases has been 55 percent of the
21 reductions we've been able to make in the past
22 15 years.

23 So, there's just tremendous potential
24 there.

25 And, again, I -- when we look at the

1 countries like China and India and where there
2 might be not as much domestic natural gas
3 production, we think LNG -- especially in Europe
4 as well -- is going to play a critical role there
5 going forward.

6 So, that's -- in fact, that's some of the
7 big projects that we've kind of been working on.
8 We just kind of shifted gears a little bit.

9 In the Haynesville -- which is kind of in
10 Louisiana and in the east part of -- eastern side
11 of Texas -- one of our large investments that we
12 made this year was in a -- you know, a lot of the
13 gas from that part of the world, historically,
14 wanted to get up to the northeast -- Boston, New
15 York, those larger metropolitan areas. And now it
16 kind of wants to get down to the Gulf Coast where
17 it will be, you know, exported on -- in these LNG
18 facilities.

19 We had a few of them, but there's a
20 tremendous additional LNG capacity that's been
21 announced and is underway.

22 So, you know, translating from sort of
23 macro down to midstream fundamentals. You know,
24 the opportunity set is just really tremendous as
25 it relates to North American upstream. And also

1 that translates directly into what we're doing on
2 midstream side.

3 Rig counts across sort of our portfolio
4 companies is up 150 percent year to date. You
5 know, the resource is very well defined in a lot
6 of these basins. And, you know, the -- the
7 producers have had -- you know, there's
8 significant remaining inventory.

9 And in the midst of this, I think largely
10 because of these pressures to decarbonize, we've
11 seen a lot of the capital in our -- in our part of
12 the midstream sandbox has gone away.

13 The public players are focused on
14 returning capital to shareholders and reducing --
15 reducing leverage. They've done a good job of
16 that.

17 A lot of the private capital from some of
18 our other competitors has, you know, just pivoted
19 away from hydrocarbons.

20 So, we're seeing -- in the midst of an
21 exciting expanding opportunity set, we're seeing
22 sort of a shrinking set of competition capital
23 that's willing to invest in this hydrocarbon
24 infrastructure.

25 Of course LNG is a big part of that.

1 And then I think, you know, we -- as -- as
2 these large -- large publicly traded companies
3 have continued to delever the last five years, you
4 know, we've seen them back and healthy. And
5 they're, you're know, ready to make strategic
6 acquisitions again where those have been largely
7 sidelined because of sort of their financial
8 duress -- kind of being overlevered after the
9 prices fell in 2014.

10 So, you know, just to highlight again the
11 strength of the upstream community, which -- which
12 we kind of view as our customers in midstream.

13 You know, rig counts are up. Free cash
14 flow is up. It's included at 85 WTI, which is --
15 you know, we've seen that go down here recently.
16 But, you know, it's still really healthy margins
17 in free cash flow yields.

18 And that's resulted in increased
19 production, increased cash flow. But also you can
20 see there in the bottom left, dramatically reduced
21 leverage on the part of the upstream community,
22 which has put them in a position of tremendous
23 financial health.

24 So, you know, as we continue to need to
25 spend capital on the upstream side, you know, a --

1 a sort of rule of thumb that we say on the
2 midstream side is for every dollar you spend on
3 the upstream side, we need to spend 15 to 35 cents
4 of corresponding capital to build stuff to get it,
5 to transport it, and to condition it.

6 So, the -- you're just going to see a
7 tremendous ongoing capital need, we -- we would
8 think, in the coming decades on the midstream
9 side.

10 So, you know -- and when Chuck had his
11 introductory comments there, you know, kind of --
12 kind of how our model works is we're not doing
13 leveraged buyouts of existing companies.

14 We'll partner with, you know, maybe
15 executive teams -- three or four principals that
16 have had success in maybe a publicly traded
17 company. We'll spin that out. It'll be three or
18 four individuals and a PowerPoint slide deck in a
19 de novo company. And then we'll collectively go
20 out and -- and look for things.

21 So, we're seeing a lot of -- a lot of
22 talent. We're seeing a lot of opportunity.
23 We're -- we're very excited.

24 And so, you know, that's something -- on
25 the hydrocarbon side, we're seeing a lot of

1 opportunity. But I would also say, you know, we
2 think about midstream as we build long-lasting
3 infrastructure, we put a long-term contract around
4 that before we go build it, and then it's a fixed
5 fee arrangement. Sort of like a hydrocarbon toll
6 road, if you will.

7 So, you know, as -- as we think about some
8 of these -- what we're calling energy evolution
9 opportunities that we have kind of there at the
10 bottom -- CO2 sequestration, biofuels, hydrogen,
11 ammonia -- you know, some of that stuff very much
12 fits within our midstream model.

13 You know, we're not going to do batteries.
14 We're not going to do solar or wind power. Tim
15 and his group -- we'll leave that to those
16 experts.

17 But, you know, an example, the natural gas
18 investment that we made in the Haynesville to get
19 these incremental -- natural gas down to the Texas
20 Gulf Coast, you know, we're already doing -- we
21 already have an extensive set of infrastructure
22 doing -- we call it A, B, C.

23 Well, you know, a big part of that natural
24 gas stream also has CO2. It can be as little as
25 1 percent; it can be as high as 10 percent.

1 Historically, that would have been flared
2 under, like, air permits. And so now what we're
3 doing for a small, incremental amount of capital,
4 we'll spend -- and an incremental fee, we're
5 capturing that in a central location and
6 sequestering it.

7 So, I -- I think as Tim mentioned, you
8 know, we think in the Gulf Coast we're going to
9 have one -- there'll be a pretty massive CO2
10 storage opportunity there.

11 Again, it kind of fits really well with a
12 lot of what we're already doing. So, we're seeing
13 a lot of opportunity there as well.

14 You know, in terms of the capital that
15 needs to be spent -- you see a lot of investments
16 there. Tim had some.

17 It's, you know, trillions of dollars that
18 needs to be spent a year across all these.
19 Hydrogen, ammonia, CO2, biofuels.

20 And, again, this also needs to be spent on
21 sort of the upstream and the midstream as well.

22 So, that was a quick -- quick flyby at the
23 end of a long day. But I'm happy to answer any
24 questions or drill down -- no pun intended -- on
25 anything that would be helpful.

1 I didn't really mean to do that. I just
2 did.

3 So, any questions from anyone?

4 Yeah.

5 CHAIR RIEGER: Just curious.

6 You talked about taking a team of
7 executives and creating a spin-off new company.

8 MR. HURT: Uh-huh.

9 CHAIR RIEGER: What do you
10 typically try to do in respect to leverage on
11 those?

12 Is that all just an equity funded new
13 company?

14 MR. HURT: That's a good question.

15 I would say we're pretty conservative with
16 our use of leverage.

17 If -- if I could pull up somebody's
18 hydrocarbon, you know, price, it kind of looks
19 like that (indicating). So, I think we might
20 leave some return.

21 And this -- this goes back to the DNA of
22 the founders of EnCap. They were ex commercial
23 bankers and -- in the '80s sitting across the
24 table from folks, you know, having hard --
25 difficult -- having difficult conversations with

1 them.

2 So, we don't use a lot of leverage. And
3 it's all equity up front.

4 If we're going to build something -- green
5 field for sure -- it's going to be all equity up
6 front. In terms of the midstream side.

7 Because we're not going to have a 20-,
8 30-year power purchase agreement with a GE
9 turbine.

10 So, it's just a little bit of a different
11 approach.

12 But when we buy something, it's typically
13 two to three times EBITDA. We try to really --
14 half -- half of our firm built and ran and
15 operated these types of assets. And the other
16 half -- similar to myself -- kind of have more of
17 an energy/finance background.

18 So, we -- we really try to create, like,
19 operating value and strategy value. We don't
20 really do financial engineering.

21 MR. BAUER: I'd say, you know, from
22 an EnCap global perspective, the lack of leverage
23 used in the investment strategy is key.

24 And it's been key for the last 34 years
25 because it provides us adaptability and

1 flexibility in markets.

2 So, I think over the course of EnCap's
3 history, there's been 8 or 9 times that price of
4 oil's fallen greater than 30 percent.

5 So, the ability to not be locked into
6 leverage or having to meet credit obligations
7 allows you to ramp down rig, ramp rigs back up
8 quickly depending on -- on what's happening.

9 I think -- you look at the last four years
10 when we had COVID and the global oil demand went
11 from 100 million barrels to 80 million barrels,
12 price of oil went from \$100 down to negative \$37
13 on one day and back up to 10 or 15 -- you know,
14 our ability to -- to move quickly really helped
15 ultimately save a lot of value in the funds that
16 we manage.

17 I think we went from 25 rigs running in
18 the first quarter of 2020 to zero rigs running by
19 the second quarter of 2020. And now, as I
20 suggested at the onset, we're back up to 35 rigs
21 running.

22 So, you know, like Morriss said, leverage
23 can be used to juice returns and supplement
24 returns. But from a risk management perspective,
25 we've always felt like we're -- we're better

1 served not to include leverage in those. Or a
2 minimal amount of leverage until you have
3 production.

4 Once we have some production, we'll put
5 leverage on and we'll hedge through the life of
6 the facility.

7 MR. REBHORN: We're -- we're the
8 same. We -- we never underwrite on a levered --
9 on an unlevered -- sorry -- on a levered case. We
10 always underwrite on a, you know, medium term
11 return of capital, unlevered -- unlevered returns.

12 Interestingly -- for something Morriss
13 said -- our battery businesses don't have
14 contracted revenue. So, we've been able to go
15 hedge some of those returns.

16 But what we -- what we ended up doing was
17 as we build a portfolio of operating assets, we
18 went back and we put leverage on the entire
19 portfolio once the asset's up and running, had
20 demonstrated the revenue thesis.

21 But from an underwriting perspective, we
22 just -- as Chuck mentioned, we just stay away from
23 these -- you know, these optimistic levered cases.

24 CHAIR RIEGER: Okay.

25 Questions?

1 MR. BRUNE: Mr. Chair?

2 So, this may be a question for Marcus, but
3 what is our investment with them and what is your
4 total investment pool for -- did you say this is
5 investment three?

6 MR. FRAMPTON: Jeez. Chuck
7 probably has the better number because we've been
8 investing with these guys --

9 MR. BAUER: Don't put me on the
10 spot, Marcus. Come on.

11 MR. FRAMPTON: We've been in -- I
12 mean, we had several 100 million across the three.

13 MR. BAUER: To give you a sense,
14 we're -- on the upstream side of our business -- I
15 don't know how quickly I can get back to the back
16 of this -- but -- maybe too much.

17 Anyway, on the upstream side of our
18 business, we've raised 34 funds across the life
19 and history -- I'm sorry -- 34 years, 22 funds
20 across the life -- whoa -- across the life of
21 EnCap.

22 Oh, dang it.

23 MR. HURT: I'll get you.

24 MR. BAUER: There we go. There we
25 go.

1 So, as you can see, 17 funds on the
2 upstream side. Our last fund was \$7 billion. I
3 believe Alaska Permanent had about \$50 million in
4 that particular fund.

5 On the midstream side, our last fund was
6 \$3.25 billion. Alaska Permanent had \$45 million
7 in that fund, as well as a co-investment alongside
8 the crude oil export facility called Moda
9 Midstream that -- that Morriss described.

10 And then on our energy transition fund, we
11 raised that in 2021. Alaska Permanent had
12 50 million. That's in the last fund verticals.

13 Now, if you go back historically -- back I
14 believe to Fund VII on -- this would be on the
15 upstream side. We're on Fund XI right now, about
16 to be -- that will be the last vintage fund we
17 had. It was 2017.

18 And I think if you go back beginning in
19 2000 to Fund VII -- which would have been about
20 2006 -- Alaska participated in Fund VII, Fund
21 VIII, Fund IX, Fund X, but preliminary through the
22 discretionary capital that Pathway manages on your
23 behalf.

24 And then at -- and then we transitioned
25 into more of a direct relationship with the Fund

1 about four or five years ago.

2 So, I'd say -- I think Marcus is right.

3 Over the --

4 MR. FRAMPTON: Yeah.

5 It was over 100 million in the last
6 iteration, and hundreds of millions across the
7 beginning.

8 MR. BRUNE: So --

9 MR. FRAMPTON: And have had great
10 results.

11 MR. BRUNE: So, Mr. Chair, a
12 follow-up?

13 So, this is a -- I question whether I
14 should say this or not, but I'm going to.

15 I also serve on the Alaska Gasline
16 Development Corporation board.

17 MS. RUBENSTEIN: I knew it.

18 MR. BRUNE: And I -- I know that
19 it's not responsible for me to talk in my role
20 here of the Permanent Fund investing in such a
21 project.

22 But a lot of the things you talked
23 about -- about displacing coal from China --

24 MR. REBHORN: Uh-huh.

25 MR. BRUNE: -- and the -- natural

1 gas as a transition fuel and hydrogen -- studies
2 are being done by the AGDC that would be
3 consistent with what you're talking about.

4 And you may want to have a conversation
5 with them.

6 MR. HURT: Sure.

7 MS. RUBENSTEIN: You --

8 MR. MITCHELL: 50- or \$60 billion
9 midstream opportunity.

10 MR. BRUNE: 30. 30 to 40,
11 depending on who you talk to.

12 MR. MITCHELL: I was --

13 MS. RUBENSTEIN: 39 billion.

14 (Indiscernible crosstalk.)

15 MR. HURT: That might require a
16 larger fund size.

17 So, Ross is going to have to --

18 (Indiscernible crosstalk.)

19 MR. BRUNE: They're looking for
20 investors, but I'm not saying that we should do it
21 here.

22 MS. RUBENSTEIN: Do it as a
23 co-investment.

24 MR. BAUER: I was about to say,
25 that's a large co-investment pool.

1 MR. BRUNE: Yeah.

2 MS. RUBENSTEIN: There you go.

3 MR. BRUNE: Thank you. Great
4 presentation.

5 MR. BAUER: Thank you --

6 MR. BRUNE: Thank you for your
7 time.

8 MR. BAUER: Certainly.

9 MS. RUBENSTEIN: You guys flying
10 back out tonight?

11 MR. BAUER: Yes. Back to Seattle
12 tonight.

13 MS. RUBENSTEIN: Seattle tonight.

14 MR. BAUER: And no stop in
15 Ketchikan.

16 CHAIR RIEGER: Don't say that. You
17 don't know that.

18 MS. RUBENSTEIN: It's called the
19 milk run.

20 MR. BAUER: What's that?

21 MS. RUBENSTEIN: It's called the
22 milk run.

23 MR. BAUER: Okay. The milk run.
24 There you go.

25 MS. RUBENSTEIN: Yes.

1 MR. BAUER: Okay.

2 MS. RUBENSTEIN: You can actually
3 take --

4 MR. BAUER: I learned all about the
5 ferry --

6 MS. RUBENSTEIN: -- it further --

7 MR. BAUER: -- the ferry from the
8 island into -- and it takes -- it runs --

9 MR. REBHORN: If they had another
10 version of that that's the bourbon run,
11 I'd probably sign up for that.

12 MR. BRUNE: It's called -- the
13 bridge to nowhere that everyone talked about --

14 MR. BAUER: Yeah.

15 MR. BRUNE: -- was that.

16 So, you have to take a ferry to get from
17 the airport to the city of Ketchikan --

18 MR. BAUER: Yeah.

19 MR. BRUNE: -- because of that
20 exact issue -- when you're talking about
21 regulatory issues with building infrastructure --

22 MR. BAUER: And I will tell you
23 that sitting next to an air traffic controller on
24 a -- on a flight is good in some ways and
25 troubling in other ways.

1 She pulled up the weather and was telling
2 me all the stuff we were flying through and
3 approaches and what they're going to have to do.

4 And I was, like -- and then gave me a lot
5 of confidence about Alaska airways and their --
6 the approaches they have and their ability to fly
7 through inclement weather.

8 Which I --

9 MR. HURT: She was on the plane, so
10 that's a good sign.

11 MR. BAUER: Yeah.

12 She was -- I felt pretty good. She never
13 got nervous. So, I was -- I was all set.

14 So -- well, thank you for your time.

15 (Indiscernible crosstalk.)

16 MR. HURT: Thank you. Appreciate
17 it.

18 CHAIR RIEGER: Okay. I think that
19 concludes today's items.

20 So, unless there's anything in the -- but
21 I think let's do -- stand in recess until 8:30
22 tomorrow morning.

23 (Alaska Permanent Fund Corporation
24 Quarterly Full Board meeting recessed at 3:23 p.m.)

25