



# Financing Transition Track all members call

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NET-ZERO ASSET OWNER ALLIANCE

January 2023



# Agenda

1. Briefing from Anthropocene Fixed Income Institute
2. Welcome to the new FinTrack Co-Lead:  
Danielle Brassel, Director Responsible Investment, Zurich
3. Climate solutions platform
4. IOSCO consultation
5. AOA event calendar
6. Updates
  1. Update Net-Zero aligned climate benchmarks - GFANZ
  2. Track / working group / consultation group survey
7. AOB?

# Outlook and key themes on Fixed Income: Anthropocene Fixed Income Institute

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# AFII brief on 2023 and themes

Presentation to NZAOA, January 2023  
Anthropocene Fixed Income Institute

# Outlook 2023: General remarks

EXPECTING ANOTHER BOUT OF VOLATILITY IN 2023 BUT WITH STRONG LIQUIDITY BACKDROP

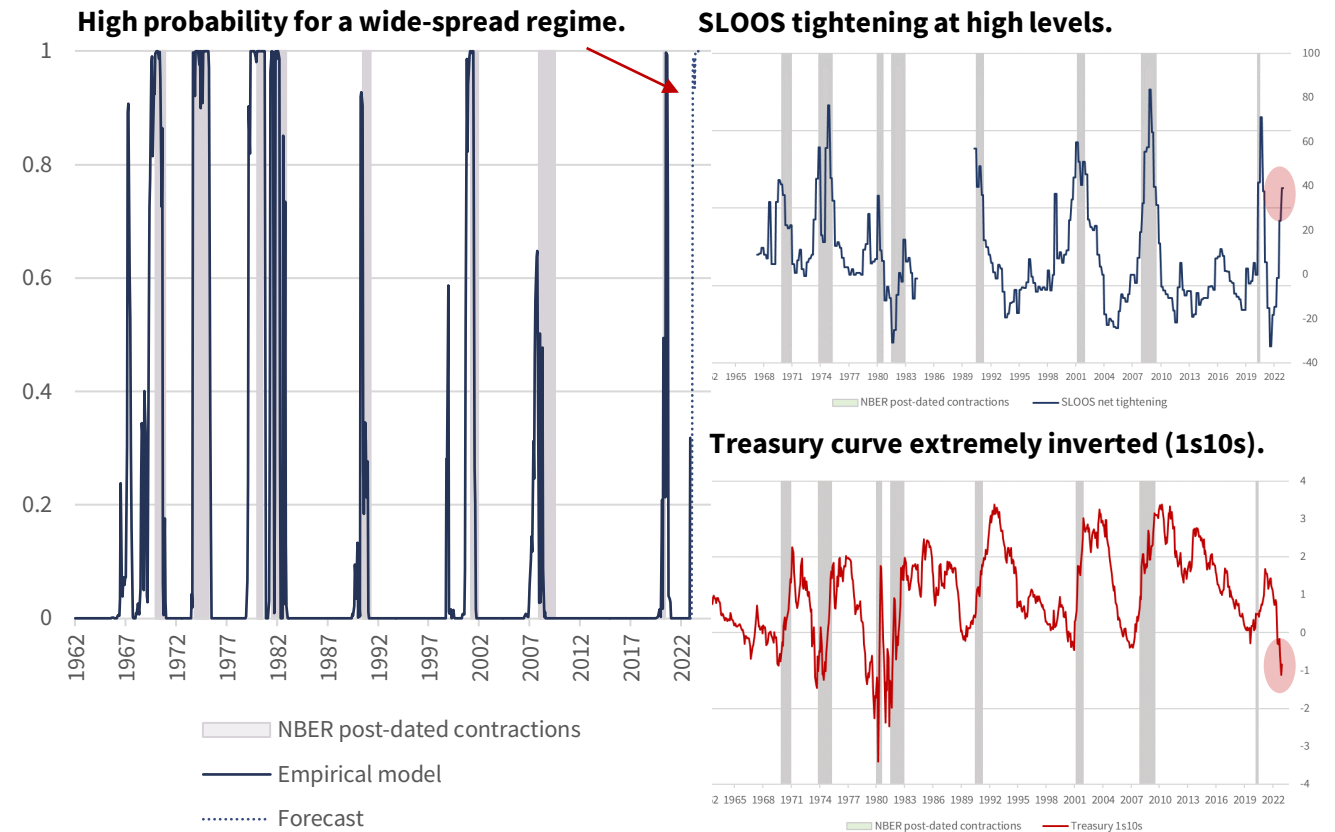
- Indicators/models suggest increasing default rates and another high-vol spread regime during 2023.
- Expectation on EM debt restructurings.
- Valuation of private/alternative assets: still shoes to drop.

However...

- Liquidity: pent up demand for yield, huge appetite at the start of -23.
- Sustainability bond market issuance to recover. [S&P: \\$1trn sustainable bond market could return in 2023](#)

And...

- Lessons learned from 2022? [Notable fixed income fossil funding deals 2022](#)



See [“Yield curve inversions, bank credit tightening and the credit cycle”](#), [“Empirical analysis of the credit cycle”](#), [“Fed rate cuts and the default cycle: Assessing the empirical evidence”](#)

# ECB climate policy

## MARKET IMPACTS FROM ECB'S ACTIVE REALLOCATION OF ITS BOND PORTFOLIO

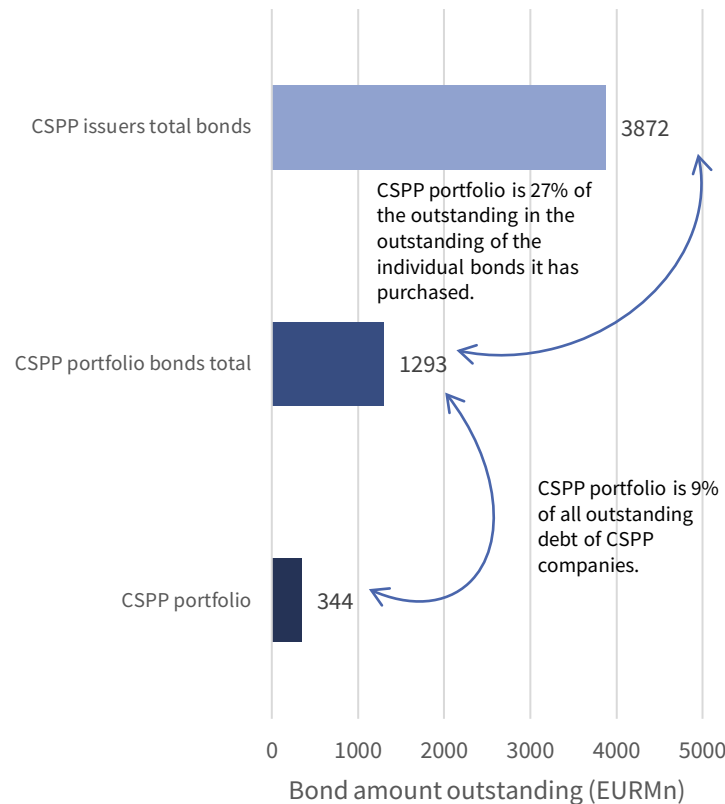
Isabel Schabel, [speech](#) 10 Jan 2023:

*“Although our current actions in relation to climate change are ambitious, they are still falling short of the Paris objectives as they are not sufficient to ensure a decarbonisation trajectory that is consistent with carbon neutrality of our operations by 2050.”*

*“For example, assuming full reinvestment, we would achieve only half of the total decarbonisation of our corporate bond holdings by 2030 if firms were to stop taking steps to few high-emitting companies [..]”*

*“A flow-based tilting approach is thus insufficient to achieve our goal. [...] We therefore need to move from a flow-based to a stock-based tilting approach for our corporate bond portfolio. This means that, absent any reinvestments, actively reshuffling the portfolio towards greener issuers would need to be considered.”*

### ECB is a key investor in € markets.



### CSPP high carbon intensity top 50-list.

Rank	Ticker	Sample CSPP bond	Issuer name	Sector	AFII CO2 estimate	Euro domiciled	Num bonds	CSPP est. amt. (EURm)
1	RDSALN	XS1048529041	Shell International Finance BV	Energy	677	No	15	4 058
2	TTEFP	XS0418669429	Total Capital S.A.	Energy	427		17	4 205
3	REPSM	XS2361358299	Repsoil Europe Finance	Energy	362		7	1 291
4	BPLN	XS2270147924	BP Capital Markets BV	Energy	339	No	2	399
5	GLENLN	XS228892860	Glencore Capital Finance DAC	Basic Materials	280	No	3	546
6	ENIM	BE6321718346	ENI Finance International S.A.	Energy	237		16	3 699
7	FUMVFH	XS1956027947	Fortum Oyj, Helsinki	Utilities	190		3	665
8	OMVAV	XS0834371469	OMV AG	Energy	171		11	1 863
9	ENGALL	FR0000475758	Engie Alliance GIE	Utilities	167		1	266
10	NTGYSM	XS0875343757	Naturgy Finance B.V.	Utilities	150		12	2 011
11	MITNA	XS1730873731	ArcelorMittal S.A.	Basic Materials	147		5	797
12	BASGR	DE000188WW1	BASF Finance Europe N.V.	Basic Materials	123		13	2 661
13	CTEFRA	FR0013264405	Coentreprise de Transport d'Electricité	Utilities	114		3	777
14	EDF	FR0010800540	Electricité de France (E.D.F.)	Utilities	114		14	4 777
15	RWE	XS2351092478	RWE AG	Utilities	112		6	1 357
16	EOANGR	XSO162513211	E.ON Intl Finance B.V.	Utilities	108		27	4 936
17	ENBW	XSO207320242	EnBW International Finance BV	Utilities	78		8	1 091
18	BNRGR	XS1689523840	Brenntag Finance B.V.	Basic Materials	72		2	293
19	HEIGR	XS1589806907	HeidelbergCement Fin.Lux. S.A.	Industrial	70		7	1 437
20	IBESM	XS1116408235	Iberdrola International B.V.	Utilities	66		14	2 804
21	LIN	DE0001R07P5	Linde Finance B.V.	Basic Materials	59		11	1 903
22	AMPRI0	DE000A30VPL3	Amprion GMBH	Utilities	58		3	692
23	AIFP	FR0011439835	Air Liquide S.A.	Basic Materials	57		12	1 756
24	VIEFP	FR0010033881	Veolia Environnement S.A.	Utilities	51		25	4 019
25	BRLS	AT0000A24UJ3	Borealis AG	Basic Materials	39		1	80
26	SOLBBB	BE6315847804	Solvay S.A.	Basic Materials	37		1	160
27	ORANOF	FR0013532031	Orano S.A. Chatillon	Basic Materials	35		1	133
28	EVKGR	DE000A185QA5	Evonik Industries AG	Basic Materials	30		3	532
29	SLB	XS2010044209	Schlumberger Finance B.V.	Energy	29	No	6	1 304
30	EUROGR	XS1243251375	Eurogrid GmbH	Utilities	25		5	865
31	LYB	XS2052310054	LYB International Finance II	Basic Materials	24		2	266
32	EDPPL	PTEDPNOM0015	EDP - Energias de Portugal SA	Utilities	21		12	2 011
33	LXSGR	XS1501367921	LANXESS AG	Basic Materials	20		5	719
34	ESBIRE	XS1239586594	ESB Finance DAC	Utilities	18		7	1 025
35	EWE	DE000A3E5L98	EWE AG	Utilities	17		2	266
36	SCRSBE	BE0002850312	Sifflin NV, Antwerp	Basic Materials	16		1	93
37	AKZANA	XS1134519120	Akzo Nobel N.V.	Basic Materials	15		5	785
38	AKEFP	FR0012452191	ARKEMA SA	Basic Materials	15		4	639
39	ESTONE	XS1292352843	Eesti Energia AS	Utilities	15		1	133
40	LHAGR	XS2049726990	Deutsche Lufthansa AG	Consumer, Cyclical	14		1	133
41	HERIM	XS0880764435	Hera S.p.A.	Utilities	13		7	817
42	DSM	XS1041772986	Koninklijke DSM NV	Basic Materials	12		5	732
43	RTEFRA	FR0011565555	RTE EDF TRANSPORT	Utilities	12		15	2 462
44	UPMFH	XS2257961818	UPM-Kymmene Oyj	Basic Materials	11		3	466
45	IAGLN	XS2020580945	International Consolidated Airlines Group	Consumer, Cyclical	11	No	2	266
46	STERV	XS1624344542	Stora Enso Oyj	Basic Materials	11		3	293
47	VWSDC	XS2449928543	Vestas Wind Systems Finance B.V.	Energy	11		2	266
48	CKHGT	XS2056572154	CK Hutchison Grp Tele.Fin. SA	Communications	10		4	1 131
49	SOGFP	XS1577586321	Compagnie de Saint-Gobain S.A.	Industrial	10		12	2 194
50	AEMSPA	XS1195347478	AZA S.p.A.	Utilities	9		10	1 211
51	RYAID	XS1199964575	Ryanair DAC	Consumer, Cyclical	9		4	971

Read more:

[ECB climate policy and EUR bond dynamics](#)

[ECB climate policy: Paradigm shift](#)

# Carbon footprint arbitrage

## SEMBCORP “DIVESTMENT” TRANSACTION – A CASE STUDY

*“Given the limited availability of funding for coal-related projects due to ESG considerations of financial institutions globally, bidders were given the option of vendor financing via a deferred payment note, in addition to the options of using an all-cash bid or a combination of the two.”*

Sembcorp [letter](#) to shareholders.

- Sembcorp “sold” coal assets to a private buyer, by providing finance for the purchase, retaining operational influence and residual economic risks.
- Arguably, this is simply a shift of coal from operational to financed assets on the balance sheet.
- Sembcorp motivates the transaction/accounts for a full divestment of the carbon footprint.
- This opens a dangerous precedent of faux divesting rather than decommissioning high-intensity assets.

AFII paper: [Sembcorp: “Carbon footprint arbitrage of a lifetime”](#)

Recent FT article: [“Accountants seek control of climate data as disclosure rules loom”](#)

### Bloomberg

#### Top-Performing Singapore Firm Accused of Greenwashing in India Coal Sale

If Sembcorp financed the deal, can it really claim a smaller carbon footprint?



[Top-Performing Singapore Firm Accused of Greenwashing in India Coal Sale](#)

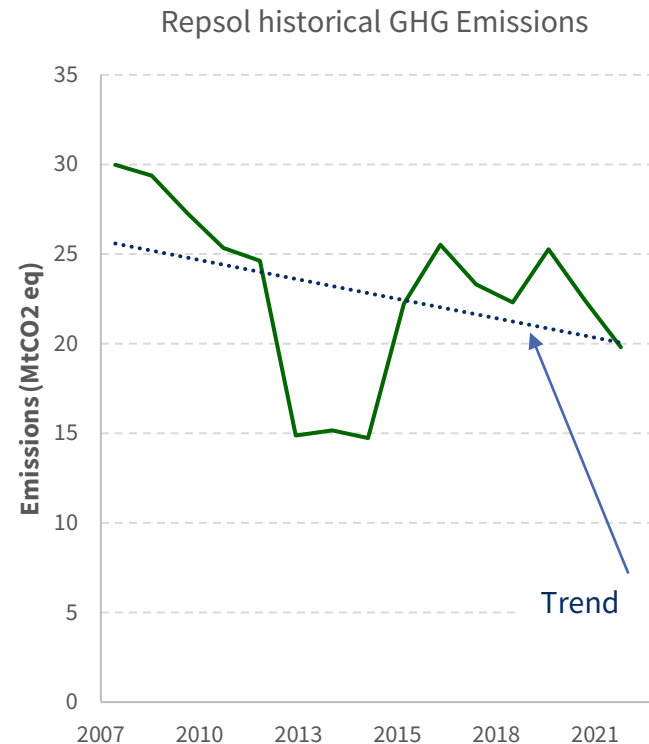
# Sustainability-linked bonds 2.0

## DRIVING AMBITION (AND FIDUCIARY DUTY ALIGNMENT) THROUGH OPTION PRICING

- During 2022, the nascent SLB market has been criticized for a lack of both sustainability as well as financial materiality: too-easy-to-achieve targets and too low pay-outs if not achieved.
- However, **using option pricing theory, a number of important conclusions can be drawn:**
  - › Ambition level is directly related to the option value in the SLB contract.
  - › A high-option value for investors means a lower cost-of-capital for the issuer.
  - › Providing “cheaper” capital to transitioning companies is aligned in a fiduciary duty context, as the bond still retains the option value.
- **SLB 2.0: Ambitious targets, financially material steps ⇔ High option value.**

=> “Greenback SLBs”

From probabilistic/statistical inference....



... to valuation of optionality.



Modelling carbon emissions

$$\frac{dCE_t}{CE_t} = \delta dt + \sigma dW_t$$

Trend

Volatility

Black-Scholes formula

$$\text{Option price} = \phi(d_2) \times \sum_{t=\tau}^n \frac{CSU_t}{B(O, t)}$$

$$d_2 = d_1 - \sigma\sqrt{t_\tau}, d_1 = \frac{\ln\left(\frac{CE_\tau}{D \times CE_0}\right) + \left(\delta + \frac{\sigma^2}{2}\right) \times t_\tau}{\sigma\sqrt{t_\tau}}$$

with

Read more:

[An option pricing approach for sustainability-linked bonds](#)  
[Notes on risk-neutral pricing of SLBs and step-down structures](#)



# Thank you!

[AFII web](#)

[AFII in the media](#)

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A warm welcome to the new FinTrack Co-Lead:  
Danielle Brassel, Director Responsible  
Investment, Zurich

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# Track setup

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## Track Leads

Liza Jansen (Prudential): [Liza.Jansen@prudential.com.hk](mailto:Liza.Jansen@prudential.com.hk)

Danielle Brassel (Zurich): [danielle.brassel@zurich.com](mailto:danielle.brassel@zurich.com)

## Track Manager a.i.

Eliya Devay (UNEP FI): [eliya.devay@un.org](mailto:eliya.devay@un.org)

## Working Group Manager & Track Support

Rafael Silvestre (UN PRI): [rafael.silvestre@unpri.org](mailto:rafael.silvestre@unpri.org)

# Climate solutions investment platform

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# ESG Book- NZAOA Timeline

Q1

Deliverables:

- Productionalize company level data metrics
- Test company level data (off platform)
- Test and refine filters
- Test and interact with Dashboard
  
- We will start monthly calls in February to show in excel files the data we are gathering to power the filters this will be off platform.

Q2

Deliverables:

- Upload & connect data for fund level data
- Test fund level data (off platform)
- Test and refine filters on platform
- Test and interact with Dashboard (dev environment)
- Refine the output (downloadable report)
- Test tool access via UN and ESG Book
- Training session on company + fund directory
  
- Starting end of March early April we will move our monthly calls into bi-weekly calls to start testing the data we looked at previously on platform.

Q2/Q3

- Deliverables:
- Launch on Platform.

# IOSCO consultation

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# Feedback provided on Voluntary Carbon Markets

## Voluntary Carbon Markets (VCMs) – [link to paper](#)

The Board of the International Organization of Securities Commissions (IOSCO) has published this Discussion Report with the aim of advancing the discussion about what sound and efficient Voluntary Carbon Markets (VCMs) should look like and what role financial regulators may play in promoting integrity in those markets.\*

### Feedback

- Page 2: Why are only VERRA & Gold Standard named?
- Page 8: Avoidance/reduction credits should not be placed on the same level as removal/sequestration credits.
- Pages 13 and 14: 3.1.1.2. & 3.1.1.3. should ask for uniform standards regarding buffering & leakage with regard to credits derived from forest and/or agriculture projects.

## Climate Policy team

The PRI Climate Policy team is currently working on a response to the Compliance and Voluntary Carbon Markets papers. The CP team is working with the Carbon Markets/Carbon Credits Consultation Group to collect inputs or points of interest

# FinTrack Event calendar

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# FinTrack Webinar calendar

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## Upcoming

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Date	Time	Topic	Status
09/02/23	4-5pm CET	Transition Finance – CBI framework and application example by CDPQ	Invite will be sent before end of the week

## Recordings

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Date	Time	Topic	Status
27/09/22	4pm CET	Anthropocene Fixed Income Institute: Portfolio decarbonization framework	Recording available <a href="#">here</a>
05/10/22	4pm CET	Scaling blended finance for climate solution investment in emerging markets	Recording available <a href="#">here</a>
27/10/22	10am CET	Financing the Net Zero Transition in Emerging Markets – Africa Region	Recording available <a href="#">here</a>
29/11/22	4pm CET	PRI in Person: NZAOA side event - success over the last year, NZAOA and wider landscape, maintain credibility and engagement strategies	Closed door event
11/01/23	10am CET	<b>Blended Finance call to action: 3 Asset Managers present their vehicles</b>	Recording available <a href="#">here</a>

# Updates

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# Working group and consultation groups updates

## Update Net-Zero aligned climate benchmarks - GFANZ

- Call with various FIs working towards the same direction (NZFSPA, NZAM, NZAOA)
- Discussion to start a working group

**Survey on Tracks, Working Groups and Consultation Groups: Calendar invites will be shared shortly**





# Thank you

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[Net-Zero Asset Owner Alliance Website \(Link\)](#)





# Annex

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# Information sharing - Extranet

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- **New file sharing tool:** <https://www.unepfi.org/climate-change/united-nations-convened-net-zero-asset-owner-alliance/alliance-extranet/>
- Password: AOAprivate
  - Strictly confidential – only for Alliance members
  - Only download possible, no uploading