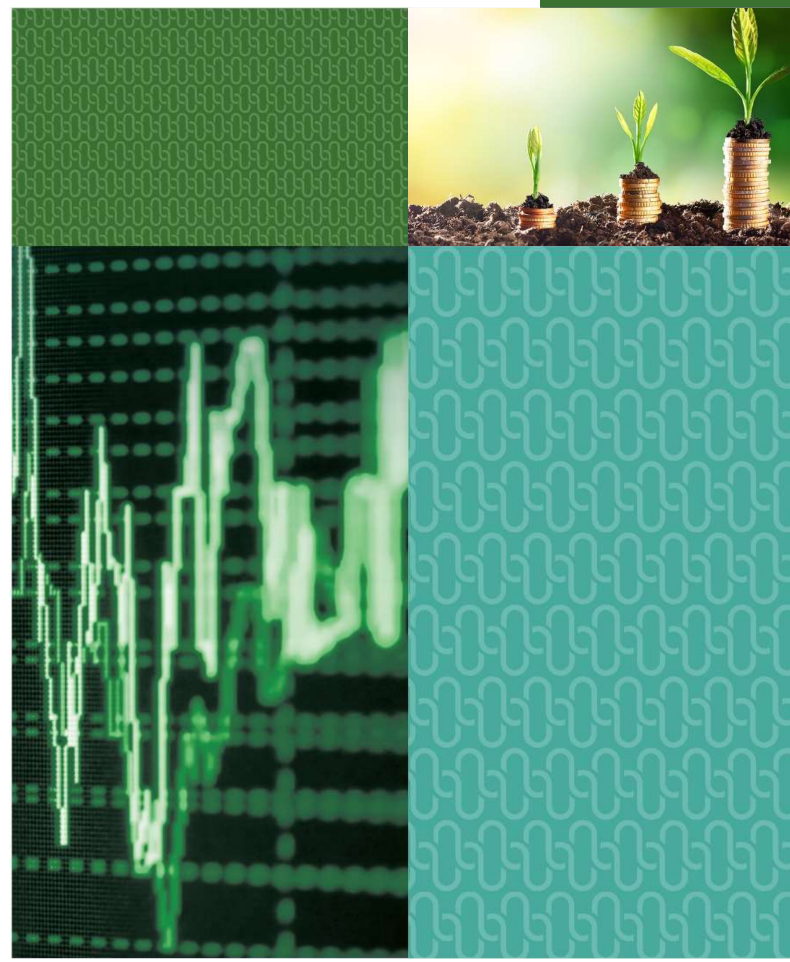
BANK OF ENGLAND

Investment Association Viewpoint



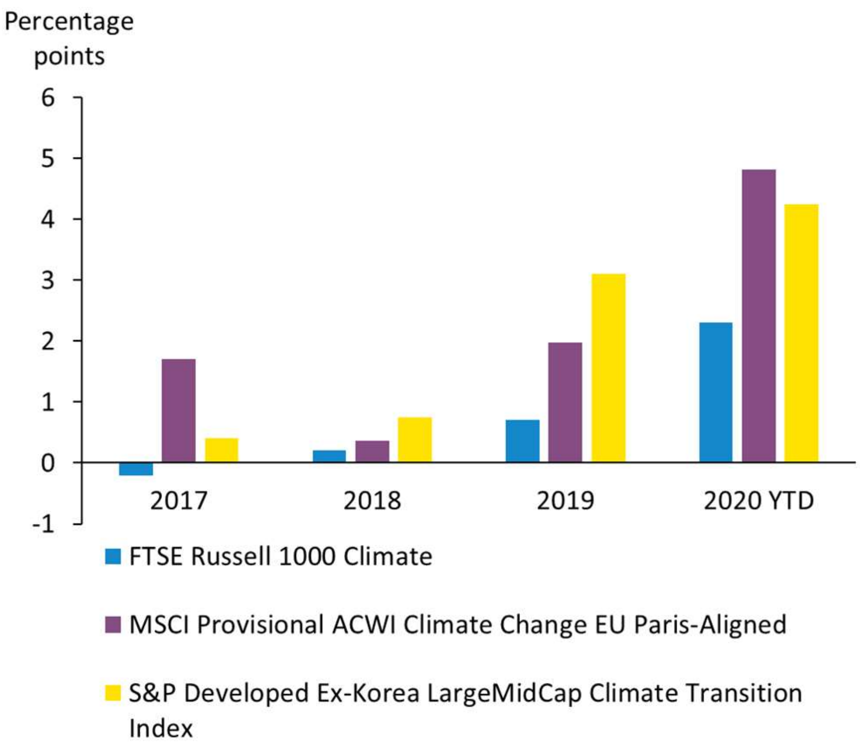
From hot air to cold hard facts:

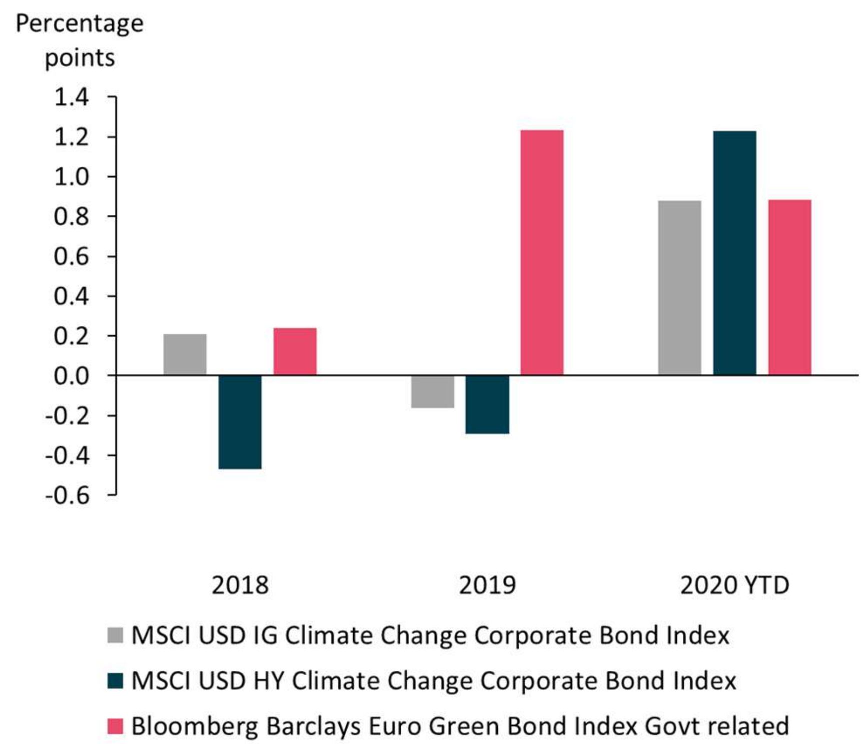
how financial markets are finally getting a grip on how to price climate risk and return – and what needs to happen next

16 October 2020

Andrew Hauser, Executive Director for Markets

Excess returns of green equity & bond indices vs market-wide benchmarks





Potential economic benefits of disclosing climate metrics (and costs of not)

		Potential issuer benefits from disclosing	Potential issuer costs from not disclosing
Financing terms and asset valuations	Credit rating	Improved rating	Worse rating
	Lower uncertainty risk premium	Higher asset valuations	Lower asset valuations
	Size of investor base	Access to more investors	Shrinking investor base
	Financing rate	Cheaper finance	More expensive finance as raters/investors apply a risk premium
	Fixed cost of investor engagement	Lower cost of engaging with investors	Confusion drives increasing costs of investor engagement
Business management	Management of own risks	Improved understanding and ability to manage risks	Weaker awareness internally and externally
	Retail consumer expectations / demand	Improved brand image and hence demand / revenues	Customer boycotts harm firms' positions in contested markets
	Supply chain expectations / demand	Awarded more contracts from firms seeking lower 'Scope 3' scores[14]	Cut out of contracts from firms seeking lower 'Scope 3' scores
	Human resources	Attracting, motivating, and retaining staff	Challenges in hiring and retaining key staff
Regulation	Regulatory compliance	Clean regulatory record	Fines + infractions

TCFD-aligned disclosures

Recommendation	Recommended Disclosure	% Change 2016-2018	Year	% of Companies that Disclose Information Aligned with TCFD Recommended Disclosures
Governance	a. Board Oversight	8%	2016	23%
			2017	25%
			2018	31%
	b. Management's Role	7%	2016	24%
			2017	27%
			2018	31%
Strategy	a. Risks and Opportunities	10%	2016	35%
			2017	38%
			2018	45%
	b. Impact on Organization	10%	2016	37%
			2017	39%
			2018	47%
	c. Resilience of Strategy	3%	2016	6%
			2017	7%
			2018	9%
Risk Management	a. Risk ID & Assessment Processes	8%	2016	24%
			2017	26%
			2018	32%
	b. Risk Management Processes	6%	2016	25%
			2017	26%
			2018	31%
	c. Integration into Overall Risk Mgmt	6%	2016	11%
			2017	12%
			2018	17%
Metrics and Targets	a. Climate-Related Metrics	9%	2016	37%
			2017	41%
			2018	46%
	b. Scope 1,2,3 GHG Emissions	4%	2016	29%
			2017	30%
			2018	33%
	c. Climate-Related Targets	7%	2016	32%
			2017	36%
			2018	39%

0% 20% 40% 60% 80% 100%

Correlations between environmental scores from different rating providers

Key
Each matrix displays correlation coefficients between Environmental ratings given by five rating providers (labelled P1 – P5 in the charts) on a sample of 924 firms (2017 data).
Right: Correlation coefficients between aggregate Environmental ratings.
Below: Correlation coefficients between ratings of a selection of more granular environmental categories.

Aggregate Environmental Ratings

	P2	P3	P4	P5	P6
P1					
P2	0.70				
P3	0.66	0.69			
P4	0.59	0.59	0.61		
P5	0.33	0.35	0.26	0.19	

Greenhouse Gas Emissions

	P1	P2	P3	P4	P5
P1					
P2	0.25				
P3	n/a	n/a			
P4	0.28	0.47	n/a		
P5	n/a	n/a	n/a	n/a	

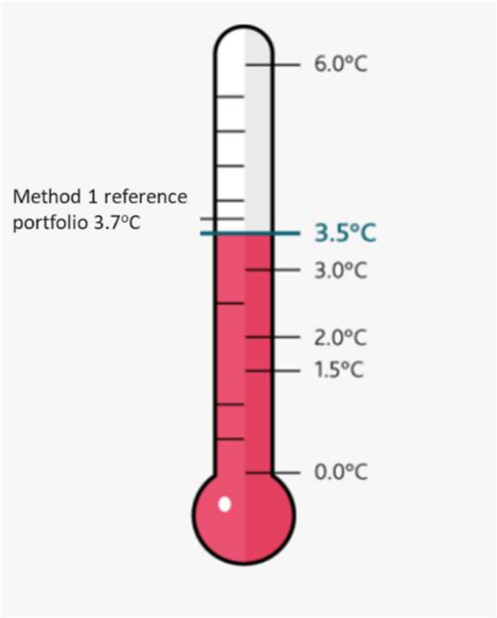
Energy

	P1	P2	P3	P4	P5
P1					
P2	0.40				
P3	0.22	0.19			
P4	0.26	0.33	0.02		
P5	0.37	0.05	0.17	0.36	

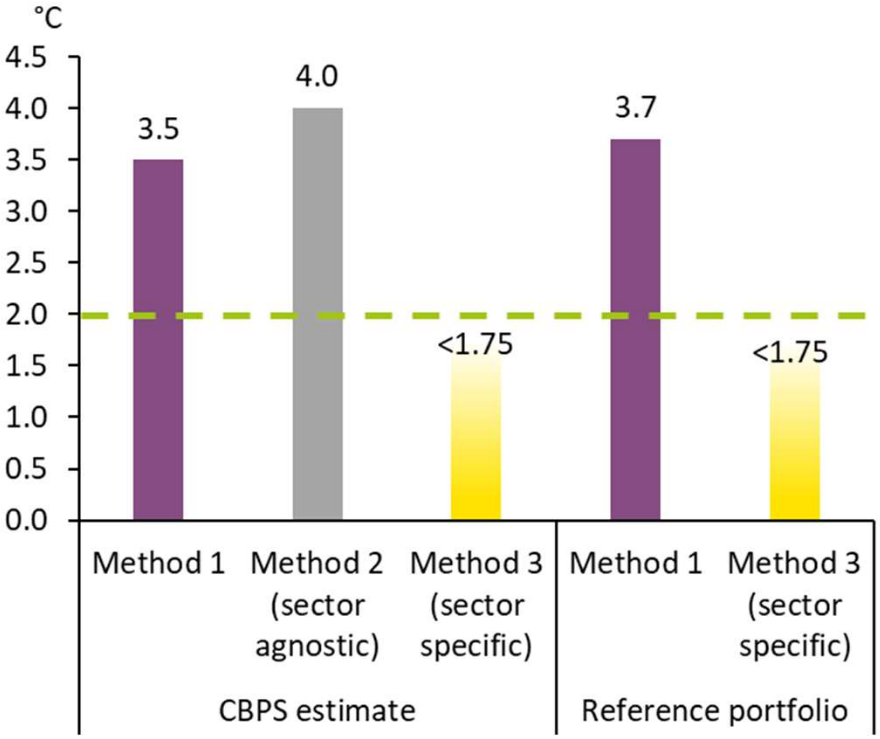
Green Buildings

	P1	P2	P3	P4	P5
P1					
P2	n/a				
P3	0.22	n/a			
P4	0.19	n/a	0.18		
P5	0.55	n/a	0.34	0.34	

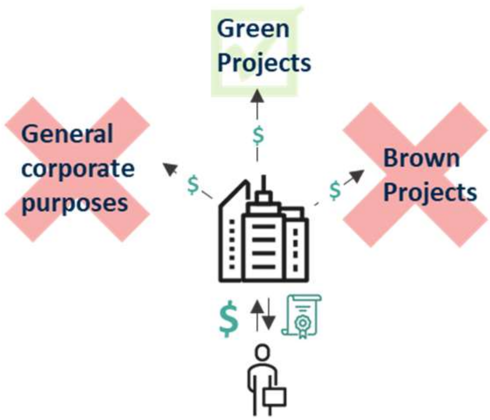
Estimate of APF corporate holdings 'portfolio warming potential'



Alternative warming potential metrics for same portfolio



A selection of 'green bond' structures

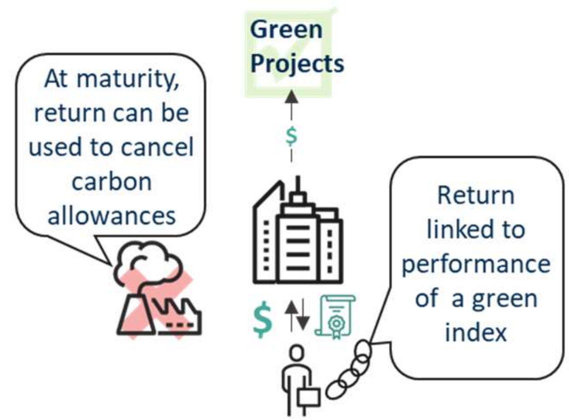


'Use-of-proceeds' Green Bonds

Bond proceeds are earmarked for green projects, but carry the same credit rating as the issuer's conventional bonds.

Sustainability-Linked Bonds

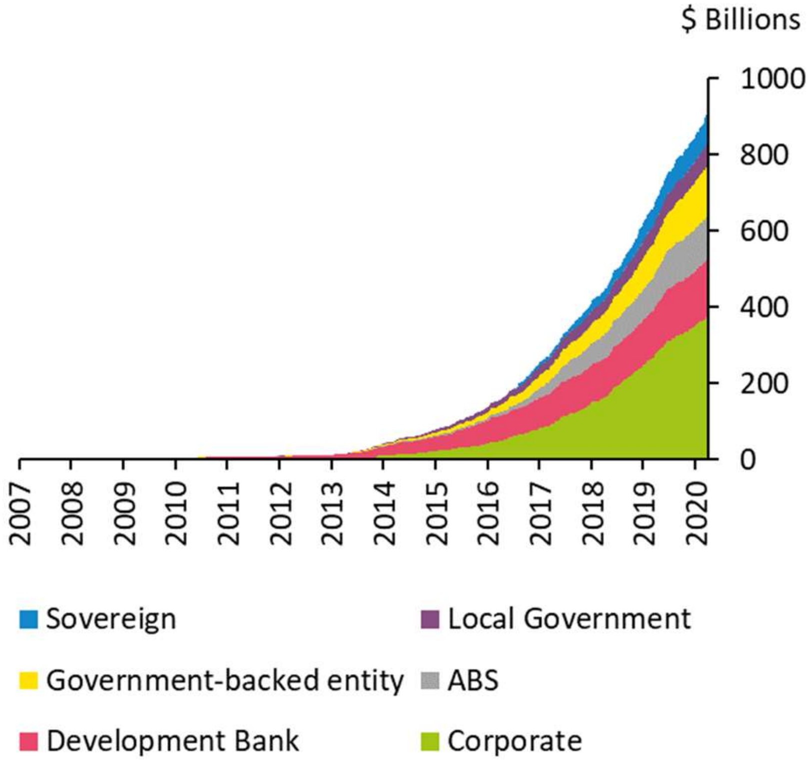
Structural characteristics of the bond, typically the coupon rate, vary according to the issuer's performance against organisation-wide sustainability metrics.



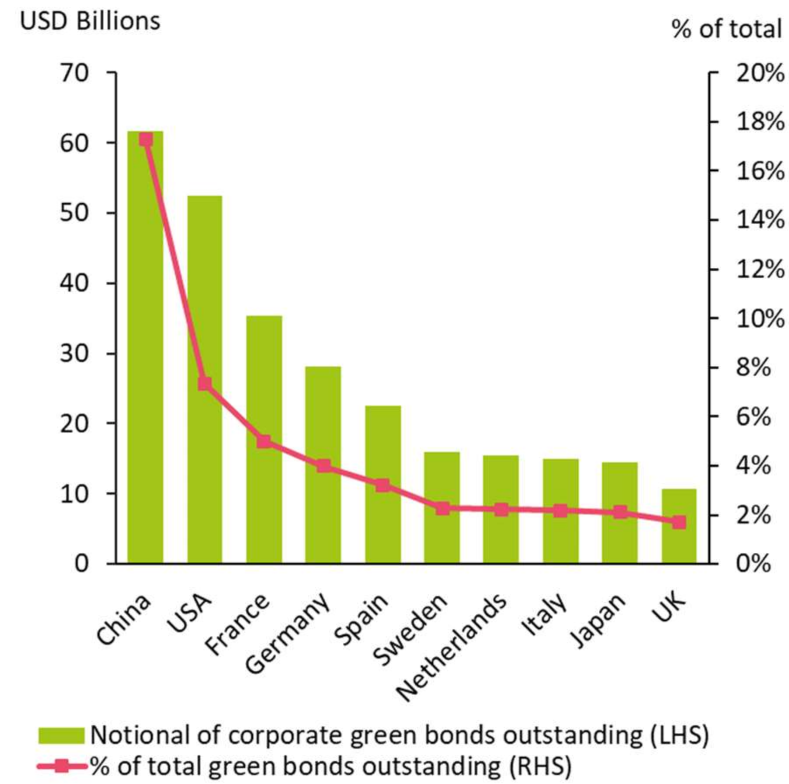
Inaugural EIB climate bond

Use-of-proceeds combined with a return linked to the performance of the FTSE4Good Environmental Leaders Europe 40 Index. Investors also have the option to use their return to buy and cancel CO_2 EU allowances, reducing the room for future emissions.

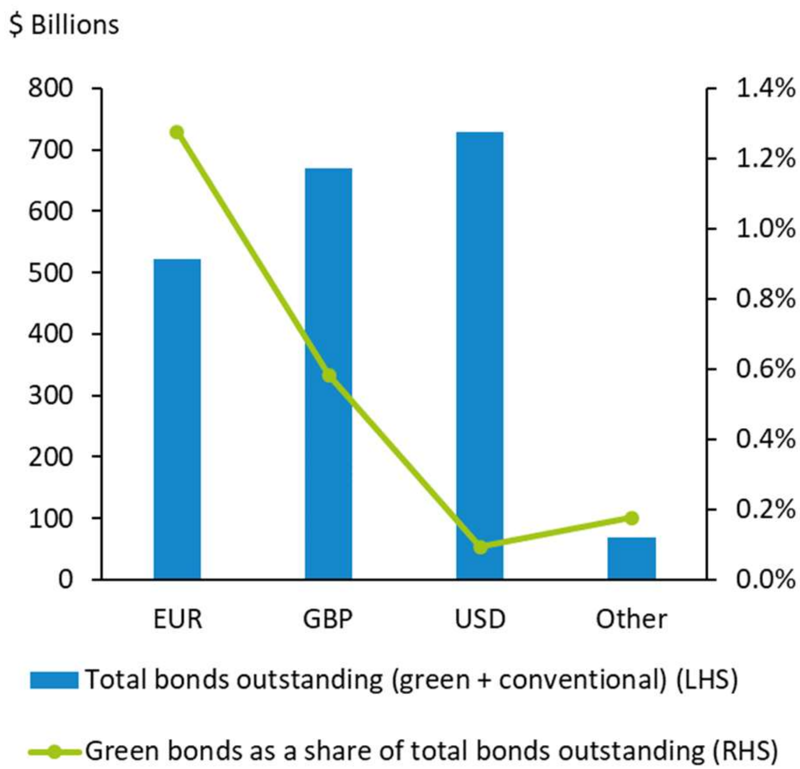
Total green bond issuance



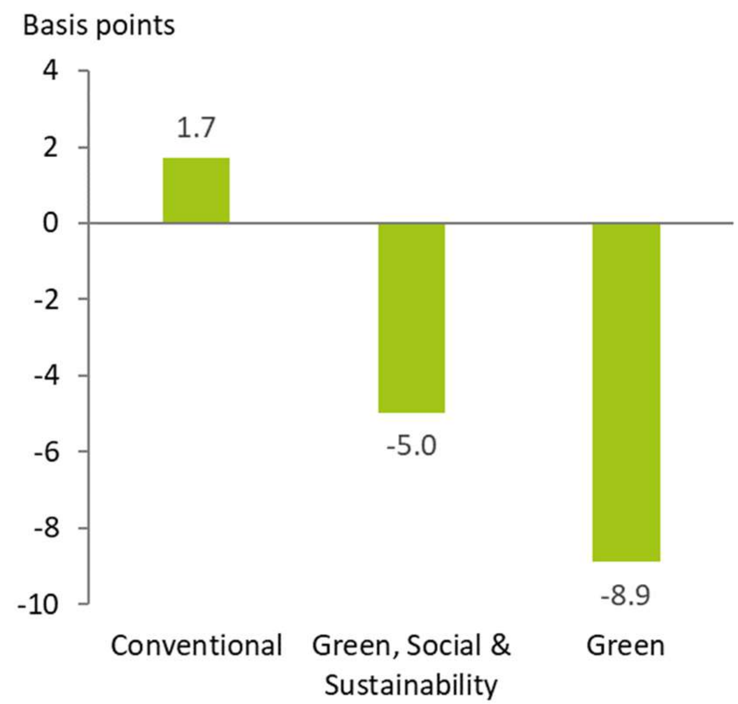
Corporate green bonds outstanding by nationality of issuer



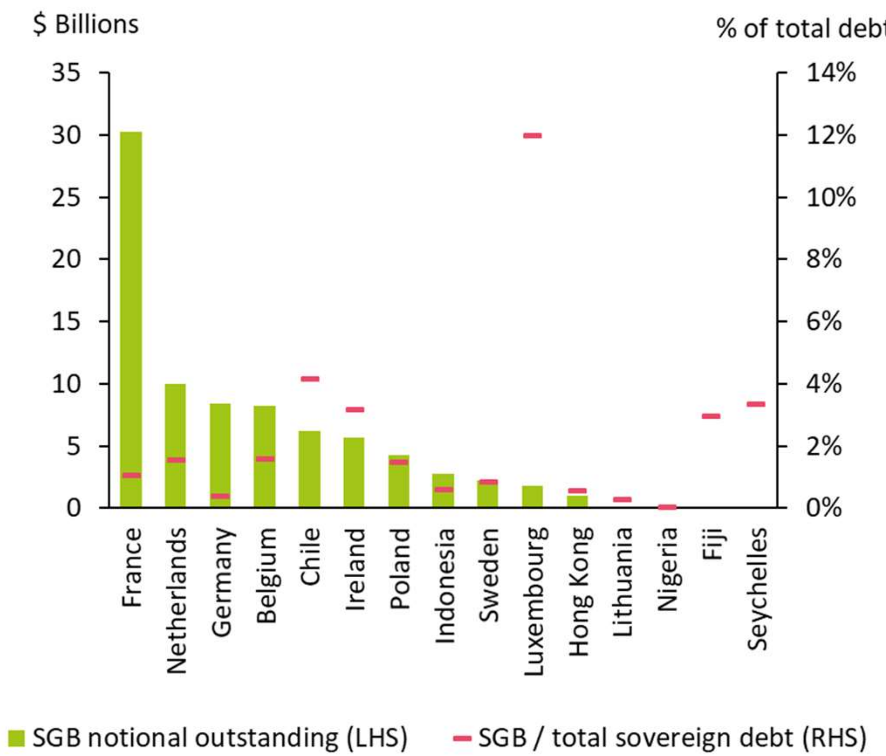
Currency composition of bonds by UK domiciled issuers (excluding gilts)



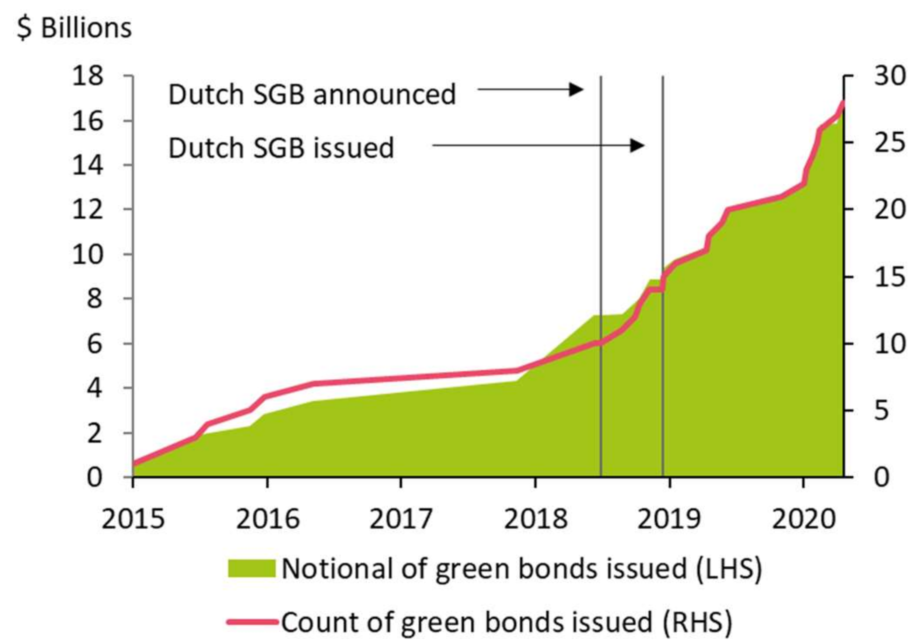
New issue premia for non-financial European-issued € bonds (Sep 2020)



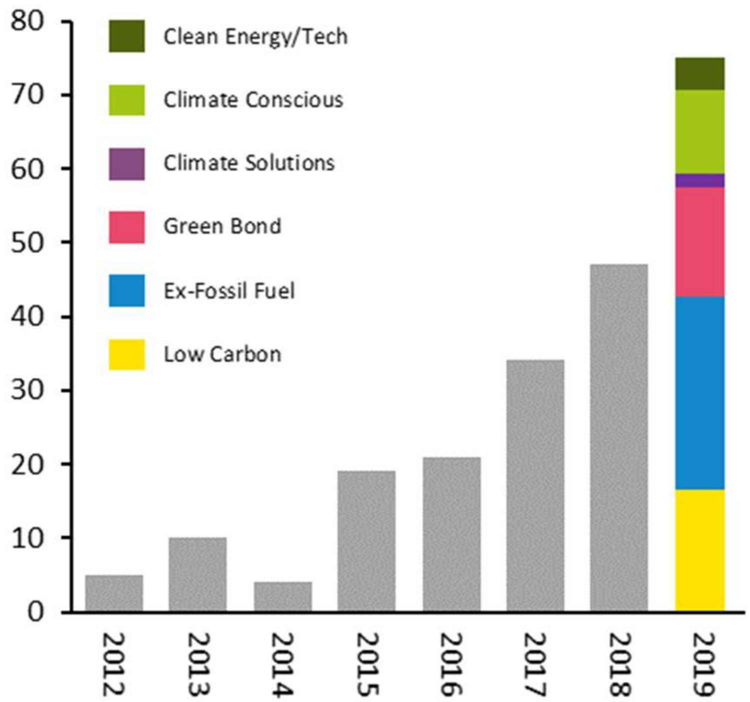
Sovereign green bonds in issue



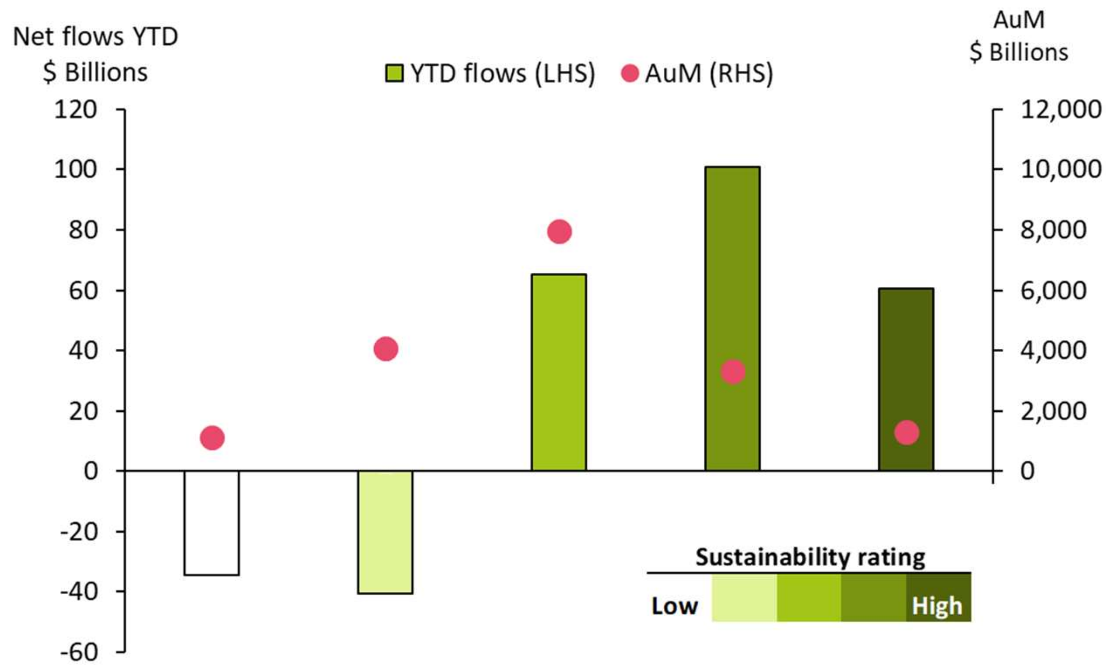
Dutch green corporate bonds



Number of launches of new 'climate aware' funds



AUM and flows into sustainability-rated open ended funds



ESG integration

Source: CFA Institute

Climate-based asset allocation strategies

Screen
Investment portfolio composition is adjusted versus the benchmark by either excluding (negative screen) or isolating (positive screen) certain companies or sectors.

Theme
Investment portfolio is constructed with the explicit aim of gaining exposure to specific themes.

Tilt
Company or sector weights within the investment portfolio are adjusted versus the benchmark in order to gain exposure to specific factors .

Unconstrained
Investment portfolio is constructed using any number of techniques in order to capture perceived investment opportunities.

Voting and engagement: where investors seek to influence the behaviour of the firms they invest in through active ownership and engagement on ESG matters.

Impact investing: investments made with the intention to generate positive and measurable social and environmental impact alongside a financial return (Global Impact Investing Network 2020).

	Screen	Theme	Tilt	Unconstrained
Examples	Exclude fossil fuels	Climate solutions	Low carbon	Fundamental
	Best-in-class	Clean energy	ESG leaders	Quantitative