

**BlackRock**<sup>®</sup>

# **Sustainable investing in fixed income**

**2023**

Our proprietary externalities profiler:  
'PEXT/NEXT'<sup>™</sup>



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# Sustainable investing in fixed income

## Foreword by Rick Rieder

A span of more than 35 years of investing in fixed income markets has taught me many important lessons, but one of the most vital is that the force of change itself represents one of the few constants in investing. Markets, and the economies that underlie them, are constantly evolving and shifting, and investors who do not adequately appreciate and respond to those changes are simply left behind. One of the more notable changes in fixed income markets in recent years, and indeed in markets of all kinds, is the growth of investor interest in, and issuer appreciation of, environmental, social and governance (ESG) factors. The growing importance of these factors when considering how to most effectively deploy client capital has necessitated both a considerable investment of resources and the development of new analytic frameworks to ensure that their analysis is clearly defined, transparent and holistic across a greatly varied universe of debt instruments.

To that end, beyond our rigorous analysis of securities on the basis of fundamental financial factors like leverage, liquidity and cash flow, for our ESG investment universe it is through the lens of the classic economic concept of externalities that we evaluate and analyze securities on ESG-related factors. Externalities are typically thought of in economic literature as unintended side effects of economic actions, which produce either benefits or costs for unrelated third parties that aren't reflected in the original price of the transaction. That said, the externalities profiler we have developed, abbreviated 'PEXT/NEXT™' (for Positive/Negative Externality) recognizes that these economic side effects are almost never a simple dualism, but rather exist along a continuum and need to be analyzed in their full complexity. This analytical structure offers BlackRock portfolio managers a realistic investor-driven tool that can be applied practically with a degree of varying magnitude across the asset class.

Finally, we think that it can be said that today's externalities can be closely linked to tomorrow's macroeconomic conditions, and therefore a greater understanding of their relationships can likely lead to better risk-adjusted returns in the long run. As more and more investors consider the sustainability of their capital allocations, it's incumbent upon asset managers to develop conceptually rigorous, transparent and holistic ESG solutions for their clients, and we think the paper that follows outlines a formidable step in that direction. Thanks for taking the time to read it, and as always, we'd like to receive feedback and thoughts.

Rick Rieder<sup>1</sup>



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<sup>1</sup> Rick Rieder, Managing Director, is BlackRock's Chief Investment Officer of Global Fixed Income, Head of the Fundamental Fixed Income business, and Head of the Global Allocation Investment Team.

Opinions expressed represent an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results, and should not be relied upon by the reader as research, investment advice or a recommendation.

# Executive summary

We present a classification system which we believe offers a transparent and quantifiable means of measuring and discerning sustainability characteristics [or considerations] across the Fixed Income universe. Our approach acknowledges that fixed income cannot be treated in the same way as other asset classes such as equity. It is deliberately designed to address some of the shortcomings of more traditional methods of assigning ESG scores or classic business revenue approaches. ESG analysis across our different Fixed Income sector specialist teams is brought together in one centralized and consistent classification system, measuring the impact of ESG factors on portfolios. We recognize that sustainability data is continuously evolving, including new areas of focus ranging from biodiversity to temperature alignment. Likewise, our approach is dynamic and evolving. We leverage our embedded ESG data and analytics in the Aladdin® platform's suite of portfolio and risk management tools for access to the latest and most topical sustainability data points.

We consider the ESG profiles of all Fixed Income issuers with an emphasis on the externalities of these holdings through our PEXT/NEXT™ externalities profiler. There are four broad categories in which names are bucketed: PEXT (positive externalities), BEXT (baseline externalities), DEXT (discussion on externalities) and NEXT (negative externalities). PEXT issuers are highlighted as preferred holdings, e.g. green or social bonds. BEXT issuers do not have any explicit positive impact characteristics but also do not have any associated negative externalities and are defined as neutral, e.g. some government bonds such as US Treasuries. DEXT issuers are tagged for discussion, where active engagement with the issuers will happen alongside sector specialists. NEXT issuers are generally restricted from purchase in ESG portfolios and include all screened names, e.g. a name with a negative social or environmental impact. Through our PEXT/NEXT™ profiler, we seek to understand, measure and report the externalities of our holdings on broader society and the environment.



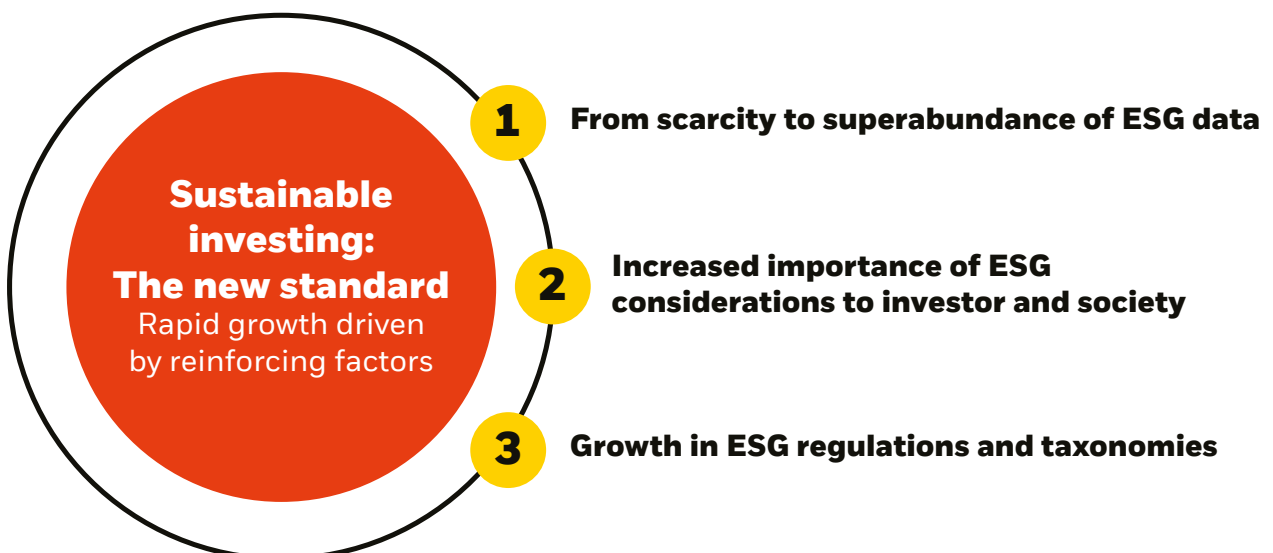
# 01. Introducing our sustainability approach

Responsible investment is a varied, evolving, and growing practice encompassing a wide range of diverse approaches and products designed to meet investors’ different responsible investment goals. Approaches to help achieve this are varied. For example, seeking to maximise long-term returns through supporting and challenging companies to identify and manage ESG risks or opportunities that are deemed to have an impact to their long-term future. It can also reflect a particular set of values or beliefs, or – and perhaps what is most crucial in the context of this paper – seek to achieve sustainability outcomes.

“Sustainability” itself is understood to refer to certain goals to which responsible investment approaches can contribute. Sustainability could be used to refer to environmentally sustainable goals, socially sustainable goals or goals associated with economic sustainability, including the resilience of financial systems.

**“Sustainability” itself is understood to refer to certain goals to which responsible investment approaches can contribute”**

Therefore, in our proprietary externalities profiler: PEXT/NEXT™, we seek not to identify indicators or tilts that would highlight market-based risk of holdings. Rather, we seek to pool the various tools at our disposal to look at the externalities (or impact of) our holdings across fixed income. In other words, our approach to ESG integration is to assess how the pricing in of risks and rewards of ESG factors has an impact on portfolios. It is then necessary to establish a system based on sector taxonomies which can form the basis for understanding the impact of our investments throughout the investment process. Our PEXT/NEXT™ profiler seeks to provide the infrastructure for achieving this effectively and holistically across the Fixed Income universe. Sustainable portfolios tilt towards holdings with positive externalities, while restricting exposure to holdings with negative externalities.



# 02.

## Why look at externalities?

As societal expectations and behaviours change, many environmental and social externalities are now under scrutiny. Many investors have taken it upon themselves to invest in businesses and services that generate positive externalities while avoiding investments in those creating negative externalities. Longer-term investors have begun to link today's externalities with tomorrow's macroeconomic conditions and their effect on forward returns.

**“Large institutions have cited their wish to maximize long term investment returns from their portfolios by minimizing negative externalities.”**

Externalities in general parlance is defined as the cost (or benefit) to a third party from an action undertaken by a different party. While they can be intended or unintended by the party taking action, those bearing the costs

(or the benefits) generally have no say in the matter. In our view, the parties taking action are companies/issuers and the third parties bearing the cost (or benefit) are the broader society and environment.

We look to identify and classify investments based on such externalities. A key facet to our approach of incorporating sustainability within Fundamental Fixed Income is to ensure in-depth, bottom-up ESG integration across sectors. Climate change and ESG considerations are engrained in investment analysis. ESG factors are clearly identified by sector and research teams so that investors can target themes. Clearly, a myriad of factors are crucial to consider in the context of sustainability. Externalities provide a common language for measuring sustainability outcomes [or characteristics] across the fixed income universe, and in a way that provides a measurable and discernible means of quantifying impact. This, in turn, enables us to better position portfolios to achieve their sustainability outcomes.



### Positive externality

**Where there is an environmental and social benefit to the third party. Often times referred to as ‘impact’, specifically when it can be quantitatively measured, e.g. a green or social bond.**

**Example:** A green bond's proceeds are used for environmental projects that benefit the entire planet by either directly or indirectly reducing carbon emissions.



### Negative externality

**Where there is a cost to society, either an environmental or social cost of the action undertaken by the company or issuer, e.g. tobacco.**

**Example:** Tobacco investments not only fund tobacco production but also have a social cost associated with increased healthcare costs and public health concerns as a result of tobacco consumption.

**Externalities provide a common language for measuring sustainability across the fixed income universe**

2 Source: Institute for Energy Economics and Financial Analysis, Government Pension Investment Fund (GPIF), May 2017. <https://ieefa.org/ieefa-asia-japans-1-3-trillion-pension-fund-approaches-climate-risk-crossroads/>.

# 03.

## Our PEXT/NEXT™ profiler

The Fixed Income universe is extensive and includes a variety of sub-asset classes that require their own ESG approach. Traditional measures of assigning ESG scores or classic business revenue approaches cover only a fraction of the investable universe and ultimately fall short. Our PEXT/NEXT™ externalities profiler brings together rigorous bottom-up sector work into a broad but concise infrastructure that forms the basis of our active sustainability approach, alongside active financial management. Within the profiling tool, we seek to understand, measure, and report the externalities of our holdings on broader society and the environment.

PEXT issuers are highlighted as preferred holdings. These include, for example, companies rapidly decarbonizing, green/social bonds or other holdings with associated positive environmental and social impact. Sustainable funds actively seek to tilt towards these securities. BEXT issuers do not have as powerful explicit positive impact characteristics but also do not have any associated negative externalities, and are defined as neutral. Examples might include government bonds such as US Treasuries or municipal bonds, which are used for liquidity purposes and broader efficient portfolio management.

For holdings where we cannot determine either a clear positive or clear negative externality, through for example a lack of disclosure or parts of their business model, we created a discussion category, DEXT, where Fixed Income specialists debate views on an issuer. These issuers are prime candidates for engagement. In partnership with the BlackRock Investment Stewardship (BIS) team, our credit analysts participate in individual company engagements. The process of company engagement is deliberately designed to promote the discussion and evaluation of sector views and materiality considerations, before ultimately aligning with the BIS team around specific recommendations with, for example, reporting frameworks and disclosures. As a manager with one of the largest and most diverse array of fixed income solutions<sup>3</sup>, we believe we have a responsibility to use our footprint to advocate for standards for ESG orientated fixed income issuance, as well as disclosures on use of proceeds issues. This ranges from direct engagement with issuers to sovereign relationships with debt management offices.

**There are four broad categories in which names are bucketed.**



NEXT issuers are restricted from purchase in fixed income portfolios that utilize the PEXT/NEXT™ profiler and create a minimum standard of all holdings in these portfolios. This typically includes all screened names, e.g. worst-rated ESG names, issuers with severe controversies, United Nations Global Compact (UNGC)<sup>4</sup> violators, thermal coal [5% maximum revenue threshold], tobacco producers, controversial weapons, civilian firearms, oil sands, gambling, adult entertainment and unconventional oil and gas names, amongst others.<sup>5</sup>

Where possible, we report on the tangible impact our portfolio holdings generate. All holdings covered by the PEXT/NEXT™ profiler are tagged in the Aladdin® platform, either at the security or issuer level, offering full transparency and allowing us to make adjustments as the ESG characteristics and data evolves. We also track our portfolio's ESG performance characteristics daily via the Aladdin® platform. The Aladdin® platform is our proprietary trading and portfolio system that connects the data, people and technology to help manage money and risk in real time, as well as the engine behind BlackRock's ESG analytics and reporting capabilities. This gives us the ability to start every day with a static snapshot of the portfolio exposure to ESG risks across products and asset classes, so that our investment teams can make informed decisions.<sup>6</sup>

<sup>3</sup> Source: <https://www.unglobalcompact.org/what-is-gc/mission/principles>.

<sup>4</sup> Source: <https://www.unglobalcompact.org/what-is-gc/mission/principles>.

<sup>5</sup> ESG considerations are evaluated alongside a number of other considerations, and/or would not be the sole consideration when making investment decisions.

<sup>6</sup> While proprietary technology platforms may help manage risk, risk cannot be eliminated

## Each individual security within the PEXT/NEXT™ profiler is tagged in Aladdin at the individual security level

### Summary of the PEXT/NEXT™ profiler:

	Positive Externalities (PEXT)	Baseline Externalities (BEXT)	Discussion on Externalities (DEXT)	Negative Externalities (NEXT)
	<b>Names held in this bucket are the most preferred holdings.</b>	<b>Acceptable holdings; not preferred as such.</b>	<b>Unclear externalities; review with Global Fixed Income ESG (GFI ESG) and BlackRock Investment Stewardship (BIS) team.</b>	<b>No-go zone!</b>
<b>Cash</b>	<ul style="list-style-type: none"> <li>• LEAF (Liquid Environmentally Aware Fund)</li> </ul>	N/A	N/A	N/A
<b>Government &amp; government related</b>	<ul style="list-style-type: none"> <li>• Dark, medium and light green sovereign bonds<sup>7</sup></li> <li>• Dark and medium gold social sovereign bonds<sup>8</sup></li> <li>• Sustainability bonds</li> <li>• Supra/agency/local green, social/sustainability bonds</li> <li>• SDG-Committed Supranationals</li> <li>• Muni green and social bonds</li> <li>• BSSI (BlackRock Sovereign Sustainability Index)<sup>9</sup> score &gt;= 8.0</li> <li>• UK social housing</li> <li>• Net Zero/Governance-leading EM Sovereign<sup>10</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Very light green sovereign bonds</li> <li>• Light gold social sovereign bonds</li> <li>• All agency</li> <li>• Top 2 quintile BSSI scores</li> <li>• EM sov. &amp; sov related: Top 3 quintiles JESG scores<sup>11</sup>, JESG score improvement over one year (&gt;1 quintile improvement)</li> </ul>	<ul style="list-style-type: none"> <li>• Catchall – anything not falling in any of the other lists</li> <li>• Individual teams to discuss direction of travel following the SDGs- Sustainable Development Goals</li> </ul>	<ul style="list-style-type: none"> <li>• BSSI score &lt;= 2.0</li> <li>• United Nations (UN) Sanctions (broad arms embargo)</li> <li>• EM Sov. &amp; Sov related: Bottom quintile JESG scores</li> </ul>
<b>Municipal bonds</b>	<ul style="list-style-type: none"> <li>• Dark, medium and light green bonds</li> <li>• Dark and medium gold social bonds</li> <li>• Sustainability bonds</li> <li>• Tax-backed school districts: Charter schools, public university, student loans</li> <li>• <b>Healthcare:</b> Hospital, nursing facility, retirement community, other healthcare</li> <li>• <b>Housing:</b> Multi-family, single-family</li> <li>• <b>Transportation:</b> Mass transit</li> <li>• <b>Utility:</b> Sanitation, water &amp; sewer public power (low carbon issuers)</li> <li>• <b>Other:</b> Resource recovery, state &amp; local – climate mayors issuers</li> </ul>	<ul style="list-style-type: none"> <li>• Very light green bonds</li> <li>• Light gold social bonds</li> <li>• State &amp; local: General obligation (GO) bonds, dedicated tax bonds, lease bonds</li> <li>• <b>Education:</b> Institutional bonds, private schools, private university, student housing, other education</li> <li>• Pre-funding</li> </ul>	<ul style="list-style-type: none"> <li>• <b>State &amp; local bonds secured by/for:</b> Hotels, stadiums</li> <li>• <b>Transportation:</b> Airport, parking, ports, other transportation, toll facilities</li> <li>• <b>Utility:</b> Cogeneration, gas, nuclear, public power</li> <li>• <b>Other:</b> Development districts (redevelopment &amp; housing projects), other industry</li> </ul>	<ul style="list-style-type: none"> <li>• <b>State &amp; local bonds secured by/for:</b> Correctional facilities, lottery, gaming, alcohol, public power &gt; 30% coal generation, tobacco, prepaid gas</li> </ul>
<b>US agency mortgages</b>	<ul style="list-style-type: none"> <li>• Rural housing</li> <li>• Manufactured housing</li> <li>• State Housing Finance Agencies (HFAs)</li> <li>• Federal Housing Finance Agency (FHFA) designated persistent poverty counties</li> <li>• HomeReady and HomePossible (Down Payment Assistance)</li> <li>• Modified or reperforming pools</li> <li>• Borrower focused customized Impact Mortgage-Backed Security (MBS) pools (FHFA designated)</li> <li>• MBS issued through Ginnie Mae's single-family program</li> <li>• Pools with 100% loans secured by Energy Star Certified Homes</li> <li>• Pools with 100% loans from FICO &lt;700 borrowers</li> <li>• Pools with 100% loans from first time homebuyers, capped at \$1.5k loan size</li> </ul>	<ul style="list-style-type: none"> <li>• All other agency mortgage</li> </ul>	N/A	N/A

Source: BlackRock, as of December 2023. For illustrative purposes only, subject to change.

<sup>7</sup> Source: Our green bond taxonomy shades each BlackRock-labelled green bond on a scale of Very Light Green to Dark Green based on the bond's intended use of proceeds, associated environmental benefits, and its issuers' ongoing commitment to allocation and impact reporting. We have built and actively maintain a BlackRock-labelled and shaded green bond universe. Further details can be found in the Appendix.

<sup>8</sup> Our social bond taxonomy shades each BlackRock-labelled green bond on a scale of Light Gold to Dark Gold based on the bond's intended use of proceeds and its issuers' ongoing commitment to allocation and impact reporting. We have built and actively maintain a BlackRock-labelled and shaded social bond universe. Further details can be found in the Appendix.

<sup>9</sup> BlackRock Sovereign Sustainability Index (BSSI). Further details can be found in the Appendix.

<sup>10</sup> This includes sovereigns that pass either the climate alignment criteria or are governance leaders, whilst advancing in Governance and Social Sustainable Development Goals (SDGs).

<sup>11</sup> JPMorgan JESG EMD Indices Methodology. Further details can be found in the Appendix.



**Summary of the PEXT/NEXT™ profiler (continued):**

	Positive Externalities (PEXT)	Baseline Externalities (BEXT)	Discussion on Externalities (DEXT)	Negative Externalities (NEXT)
	Names held in this bucket are the most preferred holdings.	Acceptable holdings; not preferred as such.	Unclear externalities; review with Global Fixed Income ESG (GFI ESG) and BlackRock Investment Stewardship (BIS) team.	No-go zone!
<b>US CMBS</b>	<ul style="list-style-type: none"> <li>Commercial Mortgage-Backed Security (CMBS) Green Bonds</li> <li>Freddie Mac CMBS pools where &gt;80% of loans are financing Green-Up/Green-Up Plus programs<sup>12</sup></li> <li>Fannie Mae CMBS pools where &gt;80% of loans are financing Green Rewards programs<sup>12</sup></li> <li>Fannie/Freddie/Conduit/SASB pools where &gt;80% of loans are financing low income/very low-income housing</li> <li>Conduit, SASB and CML where &gt;80% of loans are financing LEED, GBI, or other green certified collateral</li> </ul>	<ul style="list-style-type: none"> <li>Freddie Mac CMBS pools where between 50-80% of loans are financing Green-Up/Green-Up Plus programs</li> <li>Fannie Mae CMBS pools where between 50-80% of loans are financing Green Rewards programs</li> <li>Fannie/Freddie/Conduit/SASB pools where between 50-80% of loans are financing Low income/Very low-income housing</li> <li>Conduit, Single asset single borrower (SASB) and CMLs where between 50-80% of loans are financing LEED, GBI, or other green certified collateral</li> </ul>	<ul style="list-style-type: none"> <li>All conduit, SASB, and Agency CMBS deals that don't fit in other buckets.</li> </ul>	<ul style="list-style-type: none"> <li>Deals with concentrations in the casino sector or other socially sensitive exposures (to be determined on case-by-case basis)</li> </ul>
<b>US ABS</b>	<ul style="list-style-type: none"> <li>Renewable Energy ABS (solar, wind)</li> <li>Dark, Medium, Light Green ABS bonds</li> <li>Dark, Medium Gold ABS Social Bonds</li> <li>Student loan pools: &gt;80% of the loans are refinanced at a lower rate</li> <li>100% electric vehicle auto ABS</li> </ul>	<ul style="list-style-type: none"> <li>All other ABS</li> <li>Very Light Green ABS Bonds</li> <li>Light Gold Social ABS Bonds</li> </ul>	<ul style="list-style-type: none"> <li>Consumer installment loan pools that include &gt;36% APR loans</li> </ul>	<ul style="list-style-type: none"> <li>Tobacco litigation receivables</li> </ul>
<b>US mortgage credit</b>	<p><b>Legacy Residential Mortgage-Backed Security (RMBS)</b></p> <ul style="list-style-type: none"> <li>Alt-A:<sup>13</sup> 60+ day delinquencies &lt;10%, modifications &gt;75%</li> <li>Option Adjustable-Rate Mortgage (ARM): 60+ day delinquencies &lt;10%, modifications &gt;75%</li> <li>Prime: 60+ day delinquencies &lt;10%, modifications &gt;75%</li> <li>Subprime: 60+ day delinquencies &lt;10%, modifications &gt;75%</li> </ul> <p><b>Non-QM:</b> &gt;80% loans CDFI, pools with self employed min. 80%, FICO&lt;660 min. 40%, DTI&gt;43% min. 40%</p>	<p><b>Legacy RMBS:</b></p> <ul style="list-style-type: none"> <li>Alt-A: 60+ day delinquencies &lt;20%, modifications &gt;45%</li> <li>Option ARM: 60+ day delinquencies &lt;20%, modifications &gt;45%</li> <li>Prime: 60+ day delinquencies &lt;20%, modifications &gt;45%</li> <li>Subprime: 60+ day delinquencies &lt;20%, modifications &gt;45%</li> </ul> <p><b>Non-QM:</b> Pools with self employed min. 40%, FICO&lt;660 min. 20%, DTI&gt;43% min. 20%</p>	<ul style="list-style-type: none"> <li>All other bonds</li> </ul>	N/A
<b>Alternatives</b>	<ul style="list-style-type: none"> <li>Carbon allowances – EU ETS, RGGI, CCA</li> <li>Sustainable timber</li> <li>Renewable power infrastructure</li> <li>Buildings in the top 15% EE in regional baseline</li> <li>Renovation projects 30% EE for buildings</li> <li>EPCA, LEED platinum, BREEAM very good</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary carbon offsets</li> </ul>		<ul style="list-style-type: none"> <li>Certain cryptocurrencies</li> <li>Fossil commodities</li> </ul>

Source: BlackRock, as of December 2023. For illustrative purposes only, subject to change.

<sup>12</sup> Source: Freddie Mac Multifamily Green Advantage. Green Up/Green Up Plus: Borrowers who commit to making improvements based on the Green Assessment (Plus) and are able to save 30% in energy or water usage with a minimum of 15% from energy receive better pricing and underwriting of savings. Green Rewards: A product feature that provides lower pricing, additional loan proceeds and a free High Performance Building Report (energy and water audit) to finance smarter, greener property improvements.

<sup>13</sup> Source: Classification of mortgages with a risk profile falling between prime and subprime.

**Summary of the PEXT/NEXT™ profiler (continued):**

	Positive Externalities (PEXT)	Baseline Externalities (BEXT)	Discussion on Externalities (DEXT)	Negative Externalities (NEXT)
	Names held in this bucket are the most preferred holdings.	Acceptable holdings; not preferred as such.	Unclear externalities; review with Global Fixed Income ESG (GFI ESG) and BlackRock Investment Stewardship (BIS) team.	No-go zone!
European securitized	<ul style="list-style-type: none"> <li>• <b>RMBS:</b> Dark, medium and light RMBS green bonds, dark and medium gold RMBS social bonds</li> <li>• <b>ABS:</b> Dark, medium and light ABS green bonds, dark and medium gold ABS social bonds, 100% electric auto ABS, renewable energy ABS (solar, wind etc.)</li> <li>• <b>CMBS:</b> Dark, medium and light CMBS green bonds, dark and medium gold CMBS social bonds, UK social housing CMBS, LEED gold, platinum, or silver buildings or BREEAM very good, excellent or outstanding</li> </ul>	<ul style="list-style-type: none"> <li>• Very Light Green Bonds RMBS/ABS/CMBS Bonds</li> <li>• Light Gold Social Bonds RMBS/ABS/CMBS Bonds</li> <li>• <b>RMBS:</b> Owner-occupied RMBS with high exposure to underserved demographics (such as self-employed, first-time buyers etc.)*, RMBS with above average environmental standards*, prime, buy-to-let or non-conforming RMBS from well established originator-servicers with strong governance, consistent underwriting, fair servicing and no negative externalities or unusual pool concentrations.</li> <li>• <b>ABS:</b> Auto ABS with average or above average exposure to electrics*, credit card ABS with conservative underwriting &amp; fair servicing*, consumer loan ABS with conservative underwriting &amp; fair servicing*</li> </ul>	<ul style="list-style-type: none"> <li>• <b>RMBS:</b> Reverse mortgage, RMBS originated by new originator-servicers with limited track record and/or those with weak underwriting/servicing standards, RMBS with below average environmental standards.</li> <li>• <b>ABS:</b> Auto ABS with materially below average exposure to electrics &amp; above average ICE exposure, credit card ABS with aggressive underwriting &amp; servicing and/or lack of track record, consumer loan ABS with aggressive underwriting &amp; servicing and/or lack of track record</li> <li>• <b>CMBS:</b> Hotel CMBS</li> </ul>	<ul style="list-style-type: none"> <li>• <b>RMBS:</b> Signs of predatory lending.</li> <li>• <b>Consumer ABS:</b> Signs of predatory lending.</li> <li>• <b>CMBS:</b> Gaming/casino CMBS</li> </ul>
Corporates	<ul style="list-style-type: none"> <li>• Dark, medium and light green bonds</li> <li>• Dark and medium gold social bonds</li> <li>• Sustainability bonds</li> <li>• All issuers with &gt;25% revenues from sustainable impact categories (ex. Fossil, ex. SDG "Strongly Misaligned")</li> <li>• Issuers with approved Science Based Target, and making progress toward near-term targets</li> <li>• All issuers aligned with 2 degrees C or below per Transition Pathway Initiative (TPI)</li> <li>• BlackRock impact equity team universe<sup>14</sup></li> <li>• <b>ESG ratings based:</b> DM: Top quintile MSCI ESG scores (ex. Fossil, ex. SDG "Strongly Misaligned"), EM: Band '1' in JP Morgan EM ESG scores</li> </ul>	<ul style="list-style-type: none"> <li>• Very light green bonds</li> <li>• Light gold social bonds</li> <li>• Commitments to setting Science Based Targets (SBTs) or approved SBT but negative progress</li> <li>• Climate High Yield (HY) universe – manually reviewed names</li> <li>• Transition Pathway Initiative, carbon performance on track with "National Pledges"</li> <li>• <b>ESG ratings based:</b> Developed Market (DM): Top Half "ESG" scores ex. fossil, Emerging Market (EM): Second quintile JESG CEMBI ex. fossil</li> </ul>	<ul style="list-style-type: none"> <li>• Catchall bucket</li> <li>• Corporate fossil names not in PEXT/BEXT/NEXT</li> <li>• All state-owned fossil names (not in PEXT)</li> <li>• All names with MSCI LCT asset stranding or &gt;= 1% thermal coal mining revenues</li> <li>• SFDR good governance engagement or failed names</li> <li>• Corporate names on both MSCI and sustainability UNGC watchlist</li> <li>• All Russian corporates (unless already NEXTed)</li> <li>• PEXT veto names</li> </ul>	<ul style="list-style-type: none"> <li>• Coal &gt;5% revenue (unless issuer has set SBTs)</li> <li>• Tobacco</li> <li>• Controversial weapons &amp; civilian firearms</li> <li>• UNGC violators</li> <li>• Oil sands 5%</li> <li>• Red flag controversial</li> <li>• Deforestation screen (using SPOTT, FAIRR, and MSCI)</li> <li>• CCC ESG rated names</li> <li>• Corporates - bottom half fossil w/ reserves</li> <li>• Corporates fossil names with MSCI LCT asset stranding or &gt;= 1% thermal coal mining revenues maturing &gt; 2030</li> <li>• Bottom quintile JESG</li> <li>• Adult entertainment,</li> <li>• Gambling</li> <li>• Unconventional O&amp;G &gt;10%</li> <li>• FI credit res. transition to decarb. energy system "offender"</li> <li>• Bottom quintile China ESG score - MioTech+China ESG bond score</li> </ul>

Source: BlackRock, as of December 2023. For illustrative purposes only, subject to change.

<sup>14</sup> Source: As of April 2022. Based on analysis from BlackRock's Impact Equity team internally.

**Summary of the PEXT/NEXT™ profiler (continued):**

	Positive Externalities (PEXT)	Baseline Externalities (BEXT)	Discussion on Externalities (DEXT)	Negative Externalities (NEXT)
	<b>Names held in this bucket are the most preferred holdings.</b>	<b>Acceptable holdings; not preferred as such.</b>	<b>Unclear externalities; review with Global Fixed Income ESG (GFI ESG) and BlackRock Investment Stewardship (BIS) team.</b>	<b>No-go zone!</b>
<b>Private equity and loans</b>	<ul style="list-style-type: none"> <li>• 80% minimum of company/project revenues aligned with European Union (EU) Sustainability Taxonomy</li> <li>Thematic to include:                             <ul style="list-style-type: none"> <li>• Electrification of transport, vehicle charging infrastructure</li> <li>• Battery manufacturing</li> <li>• Green hydrogen</li> <li>• Vertical farming</li> <li>• Meat alternatives</li> <li>• Localization of food supply chains</li> <li>• Modular construction</li> <li>• Biodiversity eligible projects</li> <li>• Undercapitalized minority-led businesses or projects that serve minorities</li> <li>• Food security products or services supporting development of basic food (choices international)</li> <li>• Education targeting underserved populations</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Grid build</li> <li>• Public transport design</li> <li>• Water technology</li> <li>• Digital agriculture</li> <li>• Sustainable building material</li> <li>• Heating, Ventilation and Air Conditioning (HVAC) efficiency</li> <li>• Circular products and packaging</li> <li>• Healthcare support ex beauty, controversial Research &amp; Development (R&amp;D)</li> <li>• Development of affordable multi family housing</li> <li>• Access to finance for undercapitalized borrowers</li> </ul>	<ul style="list-style-type: none"> <li>• Biofuels</li> <li>• Fusion</li> <li>• Mobility services</li> <li>• Internet connectivity</li> <li>• Sustainable airline/shipping</li> <li>• Luxury homes</li> </ul>	<ul style="list-style-type: none"> <li>• Tobacco</li> <li>• Alcohol</li> <li>• Weapons</li> <li>• Fossil</li> <li>• Predatory lending</li> <li>• Cruise ships</li> <li>• Gambling</li> <li>• Adult entertainment</li> <li>• For profit prison</li> </ul>

Source: BlackRock, as of December 2023. For illustrative purposes only, subject to change.

Further information on the BlackRock Sovereign Sustainability Index (BSSI), JPMorgan JESG EMD Indices Methodology and our green bond shading methodology is provided in the Appendix.

Part of the beauty of the PEXT/NEXT™ profiler is that it is a realistic tagging system which can be applied practically by BlackRock portfolio managers in the investment process. The externality profiler is not designed to be overly restrictive in either how it is adopted or the underlying methodology itself. The adoption of ‘BEXT’ for neutral holdings, and ‘DEXT’ which is designed to encourage debate and engagement, allow for flexibility and limit prescriptiveness. By its very nature, an externality or ESG impact should in fact be measured with a degree of magnitude, and not simply given a binary assignment. Relatedly, it is in ‘DEXT’ where direct engagement with companies occurs by way of integrating and advancing material sustainability insights to help enhance long-term risk-adjusted returns.

Clearly, while the PEXT/NEXT™ profiler is very deliberately designed to help provide a common language to measure the sustainability of issuers or holdings across different sectors, an underlying sector-specific approach is necessary to achieve this.

The criteria for inclusion in one of the buckets depends on the fixed income universe sector the issuer/security falls under. For example, a municipal issuer is classified using different datapoints than a corporate issuer, by virtue of both data coverage from ESG data providers but also different considerations for the sectors. It is also worth noting that the system is dynamic enough to distinguish between a particular issuance and the parent’s regular operations from an ESG perspective, i.e. different PEXT/NEXT™ tagging for each. This can occur, for example, when a coal power generating company issues a green bond. In such cases, the green bond itself will be tagged as PEXT while the issuer could be tagged as NEXT. Here, the tagging at the security level supersedes the tagging at the issuer level.

A comprehensive overview of these considerations for each Fixed Income sub-asset class is provided in the Appendix, including as it relates to the United Nation’s Sustainable Development Goals (UN SDGs) and how these are mapped to PEXT criteria.

**A realistic tool which can be applied practically by our portfolio managers.**

# 04. Putting it into practice

The methodology behind our PEXT/NEXT™ profiler can be best showcased with examples where we demonstrate the broad applicability of the system across different Fixed Income sectors. We use examples of PEXT and DEXT names to showcase how we aim for sustainability through positive change, rather than focusing purely on screened names that flag as NEXT.

## The following showcase the select case studies we have chosen to walk through:

A US Mortgage Loan Provider was chosen to show an example of an issuer of securitized impact mortgages

A Dutch Financial Services Provider was chosen to show an example of a corporate green bond issuer

A US Automaker was chosen to show an example of a “DEXT” issuer, which we engaged with on sustainability topics

A US Construction Company was chosen to show an example of a “DEXT” issuer, which we engaged with on sustainability topics

## PEXT

# US mortgage loan provider

## Impact MBS

A government-sponsored enterprise that was established to stimulate the housing market by making more mortgages available to lower income borrowers.

The company can create custom Impact MBS pools, supportive of their Duty to Serve goals which include the following specific mortgage borrowers:

**A** Low-Income Families Home Purchase Goal (LIP)

**B** Very Low-Income Families Home Purchase Goal (VLIP)

**C** Low-Income Areas Home Purchase Goal (Area Goal #1)

**D** Low-Income and High-Minority Areas Home Purchase Goal (Area Goal #2)

Custom pools may help **BlackRock provide credit to a targeted group of borrowers**, for whom the positive benefits of home ownership may likely have significant social impact. This tends to benefit lower-income mortgage borrowers the most, particularly those earning 80% or less of the Area Median Income (AMI)<sup>15</sup>, and also those in areas at risk of natural disasters or with high a population of minorities.

The clear and discernible positive social impact of the impact MBS pools make these bonds prime candidates for PEXT.

<sup>15</sup> Source: <https://www.hud.loans/hud-loans-blog/what-is-area-median-income-ami/>

Case studies are for illustrative purposes only; they are not meant as a guarantee of any future results or experience, and should not be interpreted as advice or a recommendation. This US Mortgage Loan Provider was selected as it is an example of a impact bond issuer of mortgage pools. Any opinions represent an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. Reference to the names of the companies mentioned is for illustrative purposes only and should not be construed as investment advice or an investment recommendation of the companies. There is no guarantee that any forecasts made will come to pass.

**PEXT**

# Dutch financial services provider

## Green Bond

A Dutch multinational banking and financial services corporation. The company takes proactive action to combat climate change through sustainable finance.

The company issued a 6-year green bond as part of their strategy to support strong growth of their Sustainable Finance portfolio, and to meet the green funding needs. They have over €4 billion in green bonds outstanding in the market and have been issuing in the green bond market since 2015.<sup>16</sup>

The company intends to allocate the net proceeds of the green bonds issued under its green bond framework to an Eligible Green Loan Portfolio of new and existing loans including renewable energy projects and green buildings. Other categories are clean transportation, pollution prevention and control, and sustainable water management.

The use of proceeds will be applied towards green projects – for this reason we define the bond as ‘dark’ green in our green bond taxonomy<sup>17</sup> and it is also therefore tagged as PEXT.

### Eligible categories

### Eligible criteria

<b>Renewable energy</b>	Renewable energy projects; as well as the connection of renewable energy production units to the electricity grid and the transportation through the network.
<b>Green buildings</b>	The financing of buildings which meet certain sustainability standards.
<b>Clean transportation</b>	The financing of electric, hybrid, public, rail, non-motorized, multi-modal transportation and the infrastructure for clean transportation.
<b>Pollution prevention and control</b>	Reduction of air emissions, greenhouse gas control, soil remediation, waste recycling and energy/emission-efficient waste to energy.
<b>Sustainable water management</b>	The financing of sustainable infrastructure for clean and/or drinking water, wastewater treatment.

<sup>16</sup> As of September 2021.

<sup>17</sup> Further details about our green bond taxonomy can be found in the Appendix (IV).

Case studies are for illustrative purposes only; they are not meant as a guarantee of any future results or experience, and should not be interpreted as advice or a recommendation. This Dutch Financial Services Provider was selected as it is an example of a corporate green bond issuer. Any opinions represent an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. Reference to the names of the companies mentioned is for illustrative purposes only and should not be construed as investment advice or an investment recommendation of the companies. There is no guarantee that any forecasts made will come to pass.

**DEXT** > **PEXT**

# US Automaker

## Corporate

A US multinational automaker. This is an MSCI B-rated, Sustainalytics Medium risk-rated issuer with product safety/recalls still higher than peers despite improved quality management<sup>18</sup>. They also lag peers in fleet fuel efficiency. The name was initially tagged as DEXT and identified for engagement.

### Topics of engagement:

- **Their commitment to net zero emissions by 2050.** The discussion revolved around how the company plans to ‘zero out’ vehicle emissions as the biggest shift (Scope 3)<sup>19</sup> even before tackling operational emissions (Scope 1 & 2). The focus was on electric vehicles, including a partnership with a German automaker.
- **The company’s disclosures,** include TCFD, SASB and GRI templates<sup>20</sup> in their sustainability report. We looked to understand their efforts in reflecting the most recent changes in their strategy.
- **The debt instruments under consideration** help to approach the market and associated strategy (green or sustainable bonds as an example).

Having committed to setting Science Based Targets<sup>21</sup>, the name was granted PEXT status. This is an example which showcases how engagement can encourage more sustainable outcomes, while demonstrating the fluidity of the PEXT/NEXT™ profiler overall.



<sup>18</sup> As of September 2021.

<sup>19</sup> Over the past decade, many automotive companies have lowered their Scope 1 & 2 emissions (direct and indirect emissions from own plants and external suppliers), but Scope 3 is where the real challenge was for the industry: Emissions that are generated in the production of vehicles. This includes emissions resulting from the use of vehicles which were produced by the company (~75% of Scope 3).

<sup>20</sup> Source: TCFD: Task Force on Climate-related Financial Disclosures, SASB: Sustainability Accounting Standards Board, GRI: Global Reporting Initiative.

<sup>21</sup> Source: <https://sciencebasedtargets.org/>

Case studies are for illustrative purposes only; they are not meant as a guarantee of any future results or experience, and should not be interpreted as advice or a recommendation. This US Automaker was selected as it is an example of a “Discussion on Externalities”, DEXT, company that we had engaged with. Any opinions represent an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. Reference to the names of the companies mentioned is for illustrative purposes only and should not be construed as investment advice or an investment recommendation of the companies. There is no guarantee that any forecasts made will come to pass.

**DEXT**

# US Construction Company

## Credit

A US construction company. This is an MSCI B-rated (downgrade from BB in June 2020), Sustainalytics Medium risk-rated issuer.<sup>22</sup>

The main area of concern was around the health and safety practices after a staff fatality, allegedly due to a lack of fall protection on site which may indicate gaps in safety management. We were also concerned around the board's composition which threatened to compromise its ability to exercise management oversight. The name was tagged as DEXT and identified for engagement.

### Topics of engagement:

- **The Board – anticipated retirements would lead to a renewal of the board.** Initially the board is expected to shrink; in 2022-2023 the company expects to add a board member, and to create an ESG committee that reports to the board.
- **New policies on human rights and child labour.** A chief diversity and inclusion officer was hired.
- **Some limitations on executive compensation** introduced as safeguards for investors.
- **Lack of disclosures** drove lower MSCI and Sustainalytics ESG ratings, but the company is working to remedy this and in the process of producing disclosures along SASB/TCFD.

The company claims it is equipping its residential properties with energy-efficient and water-saving fixtures. However, we believe it still lags peers in obtaining third-party certification for its properties (only 1.9% of its properties are green-certified). In our view, management's explanation that "bigger homes use more energy hence the properties do not meet the thresholds for certifications" is not satisfactory.

On a pure material ESG risks dimension, the company's trajectory seems stable to improving, with a focus on better board quality, new policies and enhanced disclosures. However, the environmental sustainability of this business model is questionable in our opinion.

The company develops and sells luxury residential homes, most often located in far suburbs, driving high energy consumption (large square footage, no energy efficiency certifications), high emissions due to transport costs (private vehicles would be necessary given suburban locations with no public transit access) and competition with wild areas, driving deforestation (plus potentially high exposure to fire risks and other such hazards).

The homes are also marketed as "luxury", and are therefore not addressing the lack of affordable housing. From a sustainability perspective, in this sector, we would prefer multi-family developers that target affordable products in dense and urban areas accessible via public transit. The name retained its DEXT tagging, with scope for further engagement.

<sup>21</sup> As of September 2021.

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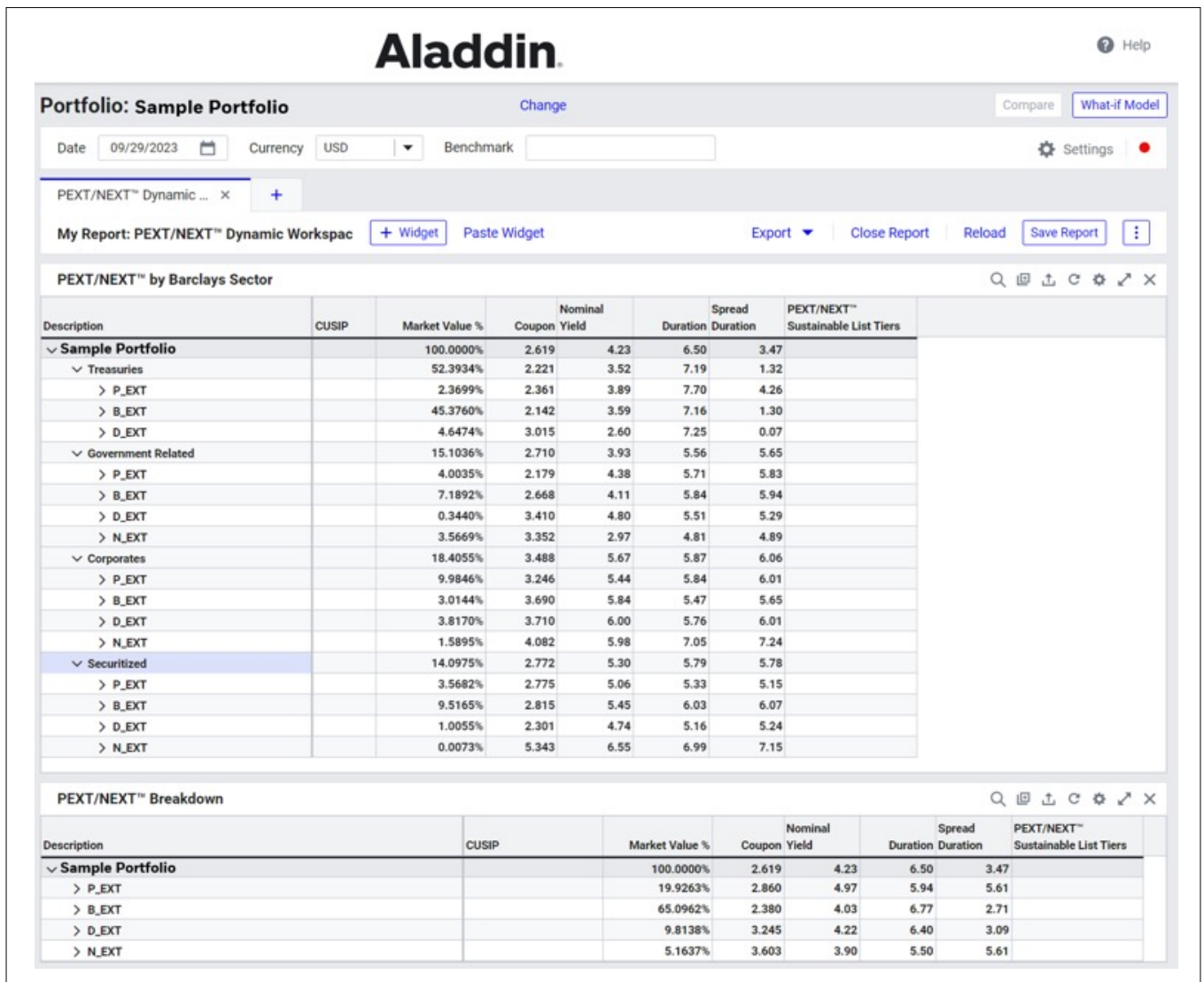
Case studies are for illustrative purposes only; they are not meant as a guarantee of any future results or experience, and should not be interpreted as advice or a recommendation. This US Construction Company was selected as it is an example of a company that falls within "Discussion on Externalities", DEXT, that we engaged with. Any opinions represent an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. Reference to the names of the companies mentioned is for illustrative purposes only and should not be construed as investment advice or an investment recommendation of the companies. There is no guarantee that any forecasts made will come to pass.

# 05. PEXT/NEXT™ profiler in portfolio management tools

Access to externality insights and the PEXT/NEXT™ profiler is seamlessly integrated into portfolio management processes. Hundreds of thousands of classifications are stored in our Aladdin® platform, our proprietary trading and portfolio system. Portfolio managers have the ability to slice, dice, and construct portfolios based on PEXT/NEXT™ profiler tags via various tools within the Aladdin® technology platform, researchers are able to view the externality attributes for individual companies that lead to a company’s PEXT/NEXT™ profiler classification, strategists use a combination of tools to assess and report on portfolios’ exposures to the system profiles.

**Figure 1. PEXT/NEXT™ profiles as a portfolio snapshot**

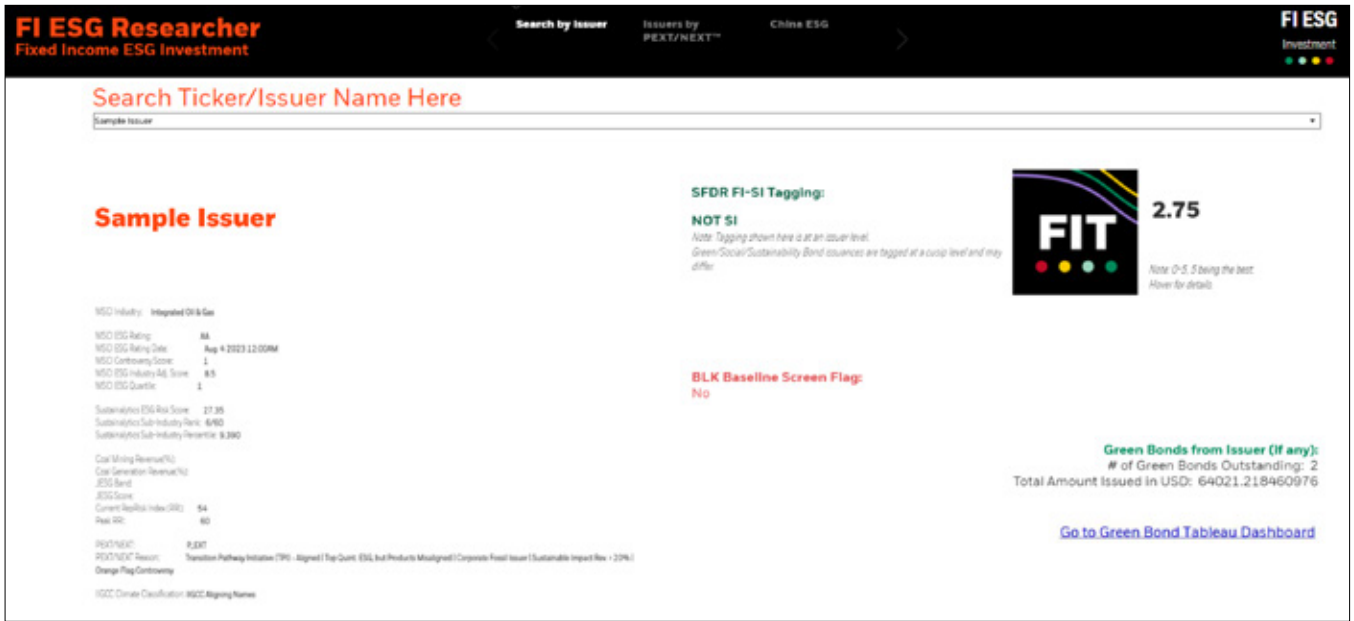
The below showcases two portfolio breakdowns featuring PEXT/NEXT™ profiles, allowing to quickly assess exposure to the various externality profiles as determined by the PEXT/NEXT™ profiler alongside fixed income risk and analytics measures, and click through to the individual holdings comprising each portion.



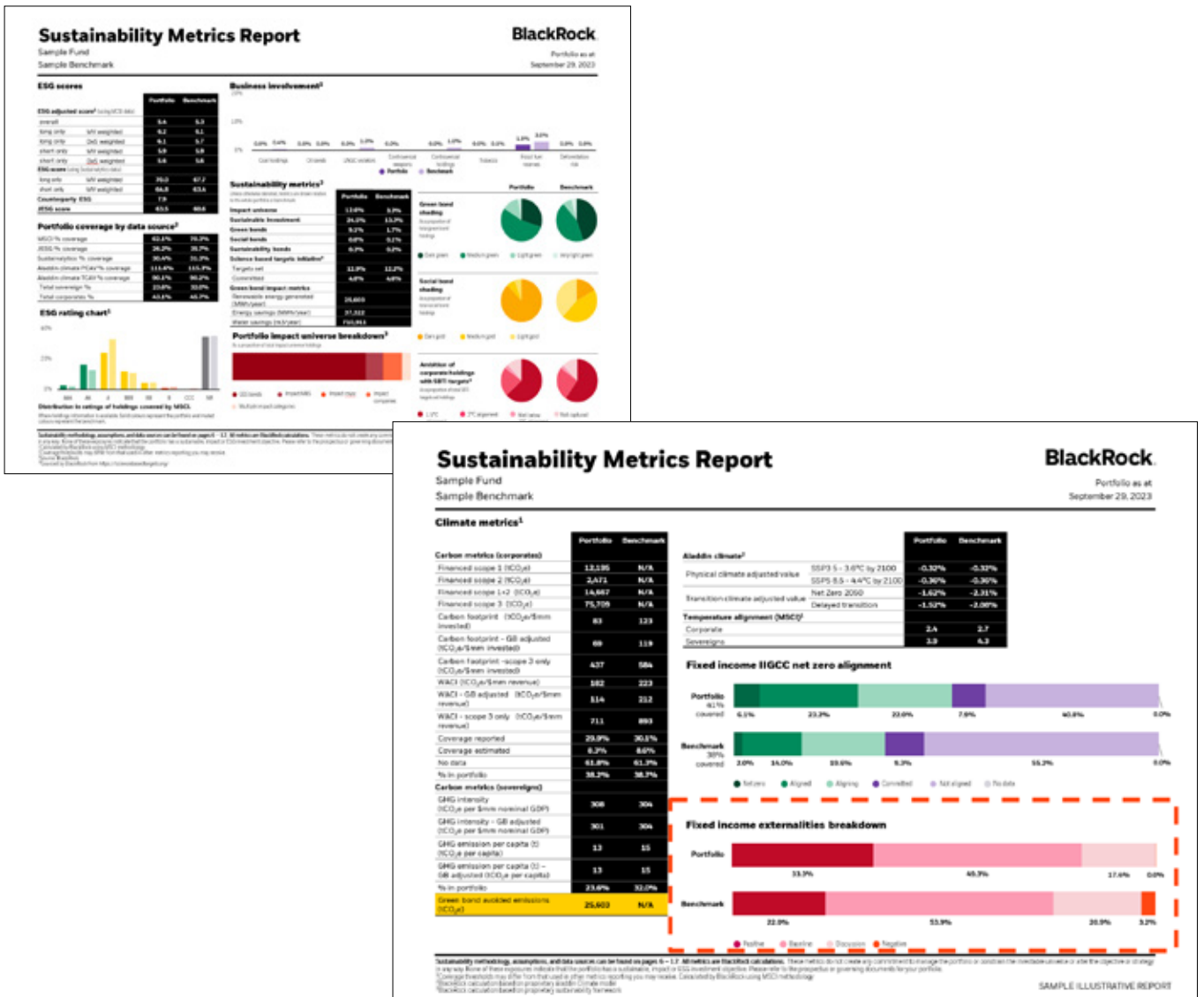


**Figure 2. PEXT/NEXT™ profiles at the company level, via FI ESG built tableau dashboard.**

The below features a company and its PEXT/NEXT™ profiler classification, as well as various additional sustainability metrics tied to the company, many of which are incorporated in deriving the company’s PEXT/NEXT™ profiler tag.



**Figure 3. PEXT/NEXT™ profiler featured in standard Fixed Income Sustainability reporting.**



# Concluding remarks

We present a profiling system which we believe offers a transparent and quantifiable means of measuring and discerning sustainability across the Fixed Income universe. Our PEXT/NEXT™ profiler looks at the externalities of – or the impact of – holdings by bringing together rigorous bottoms-up sector analysis into a broad but concise infrastructure.

**We believe our approach offers the following benefits:**

## **A broad and full acknowledgement that fixed income cannot be treated in the same way as other asset classes such as equity.**

The fixed income universe is extensive and includes a variety of sub-asset classes. Traditional measures of assigning ESG scores or classic business revenue approaches ultimately fall short with large swathes of the universe.

## **Our approach to ESG integration is to assess how the pricing in risks and rewards of ESG factors has an impact on portfolios.**

This naturally complements our existing bottom-up research efforts across our different sector specialist teams. For example, our sector specialist credit research teams hold monthly sector ‘deep dives’ looking specifically at the idiosyncratic ESG factors that are relevant to their sectors.

## **The ESG analysis from across different sector specialist teams is centralised through one consistent system.**

This is very deliberately designed to help provide a common language to measure the sustainability of issuers or holdings across different sectors.

## **We have embedded ESG data and analytics in the Aladdin platform’s suite of portfolio and risk management tools.**

Datasets sourced from external vendors (principally MSCI and Sustainalytics), including headline ESG scores, carbon data, product involvement metrics or controversies have been incorporated into Aladdin technology tools to support the investment process at each step, from research, to portfolio construction and modelling, to reporting.

## **Sustainability data is evolving – including new areas of focus ranging from temperature alignment to biodiversity and impact.**

The PEXT/NEXT™ profiler is not static – we continue to update it to include cutting-edge ESG metrics and approaches that provide investors with a better understanding of our investments’ externalities. Regulatory requirements will also shape the PEXT/NEXT™ profiler, particularly as markets consolidate sustainability outcome thresholds.



# Full methodology<sup>22</sup>

## Sector-specific considerations:

### Government and government-related

#### Sovereign bonds

We use the BlackRock Sovereign Sustainability Index (BSSI)<sup>23</sup> Rankings to identify holdings for the PEXT/NEXT™ profiler as well as JP Morgan JESG scores for EM Sovereigns. BSSI rankings are generated internally by the FI ESG team on a quarterly basis and published (please see appendix for more details on on BSSI and JESG score).

#### PEXT

- BSSI Score  $\geq 8.0$ .
- Dark, Medium and Light Green Sovereign Bonds<sup>24</sup>
- Dark and Medium Gold Social Sovereign Bonds<sup>25</sup>
- Sustainability bonds
- Net zero/governance-leading EM sovereigns

See Appendix for Details

#### BEXT

- Very Light Green Sovereign Bonds
- Light Gold Social Sovereign Bonds
- Top two quintile BSSI Scores
- EM specific sovereigns:
  - Top three quintile JESG scores
  - JESG score improvement over one year (>1 quintile improvement)
  - If the issuer improved from band 5 to band 4 over the past 12 months

#### NEXT

- BSSI Score  $\leq 2.0$ .
- JESG bottom quintile.

All sovereign bonds are included in the analysis through BSSI but sub-sovereign and agency debt are not included using BSSI and included elsewhere (see below).

### Supranational and government agency bonds

Some Supranational and agency issuers – particularly multi-lateral development banks – finance development initiatives and infrastructure related to clean energy, education, health, women empowerment, among others. These explicit investments to either promote sustainable investments and/or reduce poverty and improve quality

of life in developing member countries make them eligible for PEXT designation. These mandates were identified with the help of FI Credit Research Team supranational and government related analysts. Almost all have signed declarations to align themselves to the United Nations Sustainable Development Goals (UN SDGs) as well as the Paris Agreement. As a result, we are including debt issued by supranational/agency issuers that have these characteristics/commitments as PEXT. See full list in appendix.

#### PEXT

- Supranationals/Agencies with mandates that are UN SDG-aligned

#### BEXT

- Supranationals/Agencies without specific UN SDG-aligned or committed mandates, that do not fund any fossil development.

#### DEXT

- Supranational/Agencies that fund fossil development

### Other Sovereign and Sovereign Related

UK Social housing: UK Housing associations issue bonds to fund housing programs for low-income housing and can be considering to have social benefit.

#### PEXT

- UK housing association debt from the following issuers:

#### Municipal bonds

We use the impact municipal sectors – sectors that have an associated sustainable impact to the community – as the primary data source to identify obligors or CUSIPs to tag. These sectors are identified jointly by the FI ESG Investment Team and Municipal Bond Group as having a positive impact to society and are aligned to the UN SDGs. These sectors are reviewed periodically. Municipal corporates will inherit tagging based on the corporate tagging methodology.

#### PEXT

- PEXT Muni sectors. See Appendix for full list.
- Dark, Medium and Light Green Bonds
- Dark and Medium Gold Social Bonds
- Sustainability Bonds

<sup>22</sup> BlackRock proprietary methodology and subject to change.

<sup>23</sup> For more information on BlackRock Sovereign Sustainability Index, see Appendix (VI).

<sup>24</sup> For more information on BlackRock's green bond taxonomy, see Appendix (IV).

<sup>25</sup> For more information on BlackRock's social bond taxonomy, see Appendix (V).

**BEXT**

- Very Light Green Bonds
- Light Gold Social Bonds

**DEXT**

- DEXT Muni sectors. See Appendix for full list.
- Remaining Muni bonds not in PEXT, BEXT, or NEXT

**NEXT**

- NEXT Muni sectors. See Appendix for full list.
- Production/revenue threshold for fossil fuel related sectors
- Public Power Municipals with > 30% Coal generation production

See appendix for full list of Muni sectors.

## Securitized

### Agency mortgages

FI ESG team and the Agency MBS team have identified a subset of the US mortgage universe that qualifies as being social loans that provide tangible impact to the community and/or environment. Programs and details identified below.

**PEXT**

- Impact mortgage programs (see table below)
- MBS issued through Ginnie Mae’s Single-Family Program
- Pools with 100% loans secured by Energy Star Certified Homes
- Pools with 100% loans from FICO < 700 borrowers
- Pools with 100% loans from first time homebuyers, capped at \$150k loan size

**BEXT**

- All other agency mortgages

**Eligible Impact Programs**

Rural Housing
Manufactured Housing
State HFA’s
FHFA designated Persistent Poverty Counties
HomeReady and HomePossible
Modified or Reperforming Pools
Borrower Focused customized Impact MBS Pools

### US CMBS

FI ESG team and the CMBS team have identified a subset of the CMBS universe that qualifies as being impact investments per the social and green loan programs that provide tangible impact to the community. The CMBS team and FI ESG teams will review programs and underlying pools at new issue to determine the relevant universe.

**PEXT**

- Dark, Medium and Light CMBS Green Bonds
- Freddie Mac CMBS pools where >80% of loans are financing Green-Up/Green-Up Plus programs
- Fannie Mae CMBS pools where >80% of loans are financing Green Rewards programs
- Fannie/Freddie/Conduit/SASB pools where >80% of loans are financing Low Income/Very Low-Income Housing
- Conduit, SASB and CML where >80% of loans are financing LEED, GBI, or other green certified collateral

**BEXT**

- Very Light CMBS Green Bonds
- Light Gold CMBS Social Bonds
- Freddie Mac CMBS pools where between 50-80% of loans are financing Green-Up/Green-Up Plus programs
- Fannie Mae CMBS pools where between 50-80% of loans are financing Green Rewards programs
- Fannie/Freddie/Conduit/SASB pools where between 50-80% of loans are financing Low Income/Very Low-Income Housing
- Conduit, SASB and CMLs where between 50-80% of loans are financing LEED, GBI, or other green certified collateral

**DEXT**

- All Conduit, SASB, and Agency CMBS deals that don’t fit in other buckets

**NEXT**

- Deals with concentrations in the casino sector or other socially sensitive exposures (to be determined on case by case basis)

### US ABS

FI ESG team and the ABS team have identified certain programs with a focus on positive environmental impact as well as receivables with positive societal impact relative to peers.

Consumer loan ABS pools that include >36% APR loans are categorized as D\_EXT due to the additional regulatory scrutiny that is typically applied to this cohort of consumer loans. 36% APR has historical significance as it has been a foundation for interest rate cap regulations focused on enhancing consumer protections particularly related to small loans. In the early 1900s, the Uniform Small Loan Law recommended an interest rate cap that ranged from 3-3.5% per month (or 36-42% per year). In the early 2000s, the Military Lending Act (MLA) was passed, establishing certain consumer credit terms including an APR limit of 36% for credit extended to service members and dependents. Several states currently have limits of 36% or less on small, instalment loans made by nonbank lenders. We apply additional layers of diligence to pools containing >36% APR loans given the potential for additional risks.

## PEXT

- Student loan pools where >80% of the loans are refinanced at a lower rate
- Renewable Energy ABS (solar, wind, etc.)
- Dark, Medium, Light Green Bonds
- Dark, Medium Gold Social bonds
- 100% electric vehicle auto ABS

## BEXT

- All other ABS
- Very Light Green ABS bonds
- Light Gold Social ABS bonds

## DEXT

- Consumer installment loan pools that include >36% APR loans
- Property Assessed Clean Energy (PACE) ABS

## NEXT

- Tobacco litigation receivables

## Mortgage credit

Social impact considerations include the extent to which originators/lenders provide credit to under-served sectors such as self-employed and lower income borrowers. In the mortgage credit space, this is captured by two main investments:

- **Legacy RMBS** – using delinquencies (which reflect a pool's likelihood of continuing to reperform successfully) and modifications (change in rate, principal of both of the mortgage) to capture low income holders who are still likely to be able to pay their mortgage with modifications.
- **Non Qualifying Mortgages** – either through Community Development Financial Institutions or mortgages for self-employed small business owners offer access to credit to under-served populations

## PEXT

### Legacy RMBS:

- Alt-A: 60+ day delinquencies < 10%, modifications > 75%
- Option ARM: 60+ day delinquencies < 10%, modifications > 75%
- Prime: 60+ day delinquencies < 10%, modifications > 75%
- Subprime: 60+ day delinquencies < 10%, modifications > 75%

### Non-QM:

- >80% loans from Community Development Financial Institutions (CDFI)
- Pools with Self employed min. 80%, FICO<660 min. 40%, DTI>43% min. 40%

## BEXT

### Legacy RMBS:

- Alt-A: 60+ day delinquencies < 20%, modifications >45%

- Option ARM: 60+ day delinquencies < 20%, modifications >45%
- Prime: 60+ day delinquencies < 20%, modifications >45%
- Subprime: 60+ day delinquencies < 20%, modifications >45%

### Non-QM:

- Pools with Self employed min. 40%, FICO<660 min. 20%, DTI>43% min. 20%

## DEXT

### Legacy RMBS:

- All sectors – any bond not PEXT or BEXT European securitized

## European Securitized

The European Securitized team uses an ESG Scorecard to recommend PEXT-NEXT rating (a PEXT recommendation is checked by the ESG Investment Team). The score will range from +1 to -1:

- PEXT:  $0.5 < x \leq 1$
- BEXT:  $0 < x \leq 0.5$
- DEXT:  $-0.5 < x \leq 0$
- NEXT:  $-1 < x \leq -0.5$  OR breach of the BLK Baseline Screens OR exposure to gambling (>5% revenues or >5% assets) OR evidence of predatory lending

Below gives some examples of the types of investments that may fall in each category (excluding GSS bonds where the tagging is consistent across building blocks), but not exclusive nor conclusive as it will depend on the overall ESG Scorecard Rating. Data availability in Europe is less standardised than in the US, for instance FICO scores are available for all consumer transactions in the US but there is no common equivalent in Europe. Consequently, ESG assessment in Europe is more bespoke while the more standardised data available in the US allows a more systematic approach.

Under-served demographics, which are those not typically catered for by high street banks, require more complex manual underwriting and may be associated with a higher risk of foreclosure and/or higher loss severities. These include self-employed borrowers (for owner occupied properties only), first time buyers, and people buying a property through a government or public authority incentive scheme to promote home-ownership (such as right to buy, help to buy or shared ownership schemes in the UK and similar programmes in other jurisdictions).

## Residential Mortgage Backed Securities (RMBS)

## PEXT

- Dark, Medium and Light RMBS Green Bonds
- Dark and Medium Gold RMBS Social Bonds

### BEXT

- Very Light Green Bonds RMBS Bonds
- Light Gold Social Bonds RMBS Bonds
- Owner-occupied RMBS with high exposure to under-served demographics (such as self-employed, first-time buyers etc.).
- RMBS with above average environmental standards.
- Prime, Buy-To-Let or Non-Conforming RMBS from well established originator-servicers with strong governance, consistent underwriting, fair servicing and no negative externalities or unusual pool concentrations.

### DEXT

- Reverse Mortgage
- RMBS originated by new originator-servicers with limited track record and/or those with weak underwriting/servicing standards.
- RMBS with materially below average environmental standards.

### NEXT

- Signs of predatory lending

### ABS

#### PEXT

- Dark, Medium and Light ABS Green Bonds
- Dark and Medium Gold ABS Social Bonds
- 100% electric auto ABS
- Renewable energy ABS (solar, wind etc.)

#### BEXT

- Very Light Green Bonds ABS Bonds
- Light Gold Social Bonds ABS Bonds
- Auto ABS with average or above average exposure to electrics.
- Credit card ABS with conservative underwriting & fair servicing.
- Consumer loan ABS with conservative underwriting & fair servicing.

#### DEXT

- Auto ABS with materially below average exposure to electrics & materially above average ICE exposure.
- Credit card ABS with aggressive underwriting & servicing and/or lack of track record.
- Consumer loan ABS with aggressive underwriting & servicing and/or lack of track record.

#### NEXT

- Signs of predatory lending.

### Commercial Mortgage Backed Securities (CMBS)

#### PEXT

- Dark, Medium and Light CMBS Green Bonds
- Dark and Medium Gold CMBS Social Bonds
- UK social housing CMBS
- LEED Gold, Platinum, Silver buildings or BREEAM Very Good, Excellent or Outstanding (excluding property types automatically in D-EXT or N-EXT).

### BEXT

- Very Light Green Bonds CMBS Bonds
- Light Gold Social Bonds CMBS Bonds

### DEXT

- Hotel CMBS

### NEXT

- Gaming/Casino CMBS

### CLOs

Our approach to CLOs performs ESG assessments at the manager level, and at the underlying holdings level.

**Note that this is still in development:**

#### Manager ESG Assessments

**Assess CLO Managers (at the corporate level) on their sustainability profile and practices, taking into consideration how the parent company integrates ESG factors into their decision-making processes and investment strategies.**

**Overall ESG Ratings:** Review the ESG performance of the parent company of the CLO Manager

- 1 Specific financing related ESG KPIs:** Evaluate their lending practices, financing environmental impact, and other key performance indicators relevant to their business activities,

**KPIs on lending practices and policies:** Examine the manager's commitment to responsible lending, including criteria for borrower selection, credit risk assessments, and engagement with borrowers on ESG matters.

**Financing environmental impact KPIs:** Assess the manager's financing activities and their potential implications on climate change, deforestation, and biodiversity, among other environmental factors.

- 2 PRI-signatory status:** Determine if the CLO manager is a signatory to the Principles for Responsible Investment (PRI), which signals a commitment to incorporating ESG factors into investment decisions. ESG ratings based:

#### Underlying holdings assessment

- 1 Manager disclosure on underlying sectoral involvement** -requires CLO managers to provide information about the ESG performance of the companies in their portfolios – only certain fields available.

1.1 Metals Mining Median Exp

1.2 Oil Gas Median Exp

1.3 Beverage Tobacco Median Exp

## 2 Map underlying holdings to MSCI ESG Ratings:

Leverage MSCI ESG Ratings to further assess the sustainability characteristics of underlying companies, particularly around controversial involvement

2.1 **Only ~30% coverage:** MSCI ESG Ratings may have limited coverage on this Very Light Green Bonds.

3 **Map data to RepRisk dataset:** Utilize RepRisk's dataset to monitor and assess the ESG controversies and reputational risks associated with underlying companies in the CLO portfolio.

## Corporates

We will be using a mixture of MSCI ESG Ratings, positive/negative involvement/revenues, climate commitments and aliases as well as JPM ESG Index Scores for the EM universe to classify the global corporates universe. All issuers that have committed to set targets. Data is from Science Based Targets Initiative (SBTi).

### PEXT

- Dark, Medium and Light Green Bonds
- Dark and Medium Gold Social Bonds
- Sustainability Bonds
- **All issuers with >25% revenues from sustainable impact categories**
  - Field from MSCI (SI\_SUST\_IMPACT\_MAX\_REV), impact themes including nutrition, sanitation, major diseases treatment, SME finance, education or affordable real estate, alternative energy, energy efficiency, green building, pollution prevention and sustainable water BEXT
  - Names that are “Strongly Misaligned” to the UN SDGs per MSCI are excluded
- **All issuers with science based targets set, and making progress towards near-term targets**
  - Data is from Science Based Targets Initiative (SBTi)
  - Progress is determined using MSCI Carbon data, and SBTi's yearly progress report. Companies that meet ALL of the below criteria would not be making progress towards their near-term targets:
    - More than 25% near-term target timeframe has elapsed.
    - Overall emissions have increased since setting target (across all scopes).
- **BlackRock Impact Equity Team Universe**
  - List of issuers identified by the BlackRock Impact Equity Team as having tangible impact per their proprietary Impact methodology
- **Fixed Income Credit Research “Transition to a Decarbonized Energy System” – “Best” names**

– The Fixed Income Credit Research Team has identified utility and oil companies leading the transition to a fully decarbonized energy system. All issuers aligned per Transition Pathway Initiative DEXT

\* The team identifies ‘Best’ companies in US and European IG coverage universe for this theme.

– These names do not override NEXT screens

### • All issuers aligned per Transition Pathway Initiative

– Long-term Carbon Alignment in:

‘Below 2 Degrees’, ‘Paris Pledges’, ‘2 Degrees (High Efficiency)’, ‘2 Degrees (Shift-Improve)’, ‘2 Degrees’

### • ESG Ratings Based

– DM: Top quintile of ESG scores ex. Fossil

\* Internally calculated using MSCI ACWI and MSCI sectors to determine quintile cutoffs

\* Fossil fuel names are excluded

\* Names that are “Strongly Misaligned” to the UN SDGs per MSCI are excluded

– EM: Band ‘1’ in JPM EM ESG Indices

\* This is the highest ‘band’/top quintile in the EM ESG universe

### BEXT

#### • Very Light Green Bonds

#### • Light Gold Social Bonds

#### • ESG Ratings Based:

– DM: Top half of ESG scores ex. Fossil

\* Fossil fuel names are excluded

– EM: Band ‘2’ in JPM EM ESG Indices

\* This is the second-highest ‘band’/2nd quintile in the EM ESG universe

\* Fossil fuel names are excluded

– HY: Climate HY reviewed issuers

\* These issuers have been reviewed by FI ESG Investments team alongside HY Credit Research analysts for environmental/climate considerations and deemed eligible for a separate Paris to Pathway HY Strategy,

#### • All issuers with commitments to setting science based targets, or approved science based targets, but negative progress

#### • Transition Pathway Initiative carbon performance in: ‘National Pledges’

### DEXT

#### • Corporate Fossil Names not in PEXT/BEXT/NEXT

#### • All State-owned Fossil names not in PEXT/BEXT/NEXT

#### • MSCI Low Carbon Transition (LCT) Asset Stranding, or >=1% Thermal Coal Mining



- **SFDR Good Governance Engagement Names**
- **SFDR Good Governance Failures**
- **Corporate names on either MSCI and Sustainalytics UNGC Watchlist**
- **All Russian corporate names have been classified as DEXT, unless otherwise already NEXT.**
  - This was approved by a FI ESG committee vote given the extraordinary circumstances following Russia’s invasion of Ukraine.

## **NEXT**

### **BlackRock EMEA Baseline Screens Criteria**

- **Coal and Oil Sands**
  - Issuers deriving more than 5% of their revenue from thermal coal extraction and/or thermal coal-based power generation
    - \* Unless the issuer has set science based targets with the Science Based Targets Initiative (SBTi)
    - \* Green bonds that are considered to comply with the International Capital Markets Association’s Green Bond Principles, are also exempt.
  - Issuers deriving more than 5% of their revenue from the production and generation of tar sands (also known as oil sands)
- **Tobacco**
  - Issuers which produce tobacco products.
  - Issuers which derive more than 5% of their revenue from the production
- **Controversial Weapons**
  - Issuers which are engaged in, or are otherwise exposed to, the production of controversial weapons (including, but not limited to, cluster munitions, biological chemical, landmines, depleted uranium, blinding laser, non-detectable fragments and/or incendiary weapons).
- **Nuclear Weapons**
  - Issuers deriving any revenue from direct involvement in the production of nuclear weapons or nuclear weapon components or delivery platforms, or the provision of auxiliary services related to nuclear weapons.
- **Civilian Firearms**
  - Issuers which produce firearms and/or small arms ammunition intended for retail to civilians.
  - Issuers which derive more than 5% of their revenue from the distribution (wholesale or retail) of firearms and/or small arms ammunition intended for civilian use.
- **UNGC Violators**
  - UN Global Compact Violators are companies that violate global norms as defined by the UN Global Compact Principles as reported by MSCI

### **Other NEXT Screens**

- **Deforestation**
  - Set of companies that are in the bottom half of Palm Oil Producers per SPOTT
  - Set of companies that are at High Risk of Deforestation from Cattle production AND High Risk of Deforestation from Cattle production due to poor Engagement, Monitoring, and Traceability per FAIRR
  - Per MSCI, Beef/Soy/Palm Oil/Timber producers with physical assets in deforestation fronts, no deforestation policy, and embroiled in unresolved deforestation controversies
- **Red Flag Controversial**
  - Holdings with notable controversy related to a company’s operations
    - \* Red’ Flag for controversy per MSCI or a score of ‘0’ per MSCI
- **CCC ESG Rated Names**
  - Holdings rated ‘CCC’ by MSCI
- **Bottom half corporate fossil issuers**
  - **Bottom 50% corporate fossil issuers with reserves**
    - \* Field from MSCI, rated against peers in MSCI ACWI Index
- **LCT Asset Stranding or >= 1% Thermal Coal Mining Revenues maturing > 2030**
  - We place companies with MSCI LCT Category = Asset Stranding or >=1% Thermal coal Mining Revenues into DEXT. However any debt from these companies that mature past 2030 are NEXT.
- **Adult Entertainment, Gambling**
  - Issuers deriving >USD 500million OR >5% of revenue from adult entertainment and/or gambling
- **Unconventional Oil & Gas Revenue**
  - Issuers deriving > 10% revenue from unconventional oil & gas, including Arctic Oil Drilling
- **Fixed Income Credit Research “Transition to a Decarbonized Energy System” Theme Offenders**
  - Utility and oil companies identified as offenders by the Fixed Income Credit Research Team in the ‘Transition Towards a Decarbonized Energy System’ themeBottom quintile JESG
  - **EM: Band ‘5’ in JPM EM ESG Indices**
    - \* This is the lowest ‘band’ in the EM ESG universe. These are issuers in the parent JPM indices but not in the JESG indices
- **Bottom quintile China Credit ESG Score**
  - Proprietary methodology using a blend of ChinaBond ESG + MioTech controversy scores

## Alternatives

### PEXT

- **Carbon Allowances – EU ETS, RGGI, CCA**
- **Sustainable Timber**
- **Renewable Power Infrastructure**
- **Energy Efficiency: Below thresholds are consistent with green bond standards (CBI).**
  - Buildings in the top 15% Energy Efficiency in regional baseline
  - Renovation projects 30% Energy Efficiency for buildings
- **EPC Rating A, LEED platinum**
- **BREEAM Excellent, Outstanding, and Very Good**

### BEXT

- **Voluntary Carbon Offsets**

### NEXT

- **Certain cryptocurrencies**
- **Fossil commodities**

## Private Equity and Loans

Private companies that do not have ESG data from data providers are assessed via a case-by-case deep dive with the FI ESG Investment team. Example themes and their associated externality classification tags can be found below:

### PEXT

- **80% company/projected revenue aligned with EU Sustainability Taxonomy. Thematics include:**
  - Electrification of Transport, Vehicle charging infrastructure
  - Battery Manufacturing
  - Green Hydrogen
  - Vertical Farming
  - Meat alternatives
  - Localization of food supply chains
  - Modular construction
  - BIO fund eligible projects
  - Undercapitalized minority-led businesses or projects that serve minorities
  - Food security projects or services supporting development of basic food (Choices international)
  - Dedication targeting underserved populations

### BEXT

- Grid Build
- Public transport design
- Water technology
- Digital Agriculture
- HVAC Efficiency
- Circular products and packaging
- Healthcare support ex. Beauty, controversial R&D
- Development of affordable multi family housing
- Access to finance for undercapitalized borrowers

### DEXT

- Biofuels
- Fusion
- Luxury homes
- Mobility Services
- Internet connectivity
- Sustainable airline/shipping
- Other: ESG evaluation template needed

### NEXT

- Tobacco
- Alcohol
- Weapons
- Fossil
- Predatory Lending
- Cruise Ships
- Gambling
- Adult entertainment
- For profit prisons

# Appendix

## (I) Net Zero/Governance-leading EM Sovereigns

<b>Advancing UN SDG 13:</b>	At least 2.0 degrees Celsius alignment or less (MSCI Sovereign Potential Warming)
<b>OR</b>	
<b>Advancing S/G UN SDGs</b>	(A) Top quintile G score within EMD universe (BSSI); AND (B) Stable or upward trend in ALL social/governance UN SDGs #1,2,3,4,5,6,8,16 according to UN SDG Index. (At least one needs to be significantly improving: rate 50% above required growth rate).
<b>AND</b>	
<b>Strict DNSH</b>	<ul style="list-style-type: none"> <li>• Scores above 2.5 “Extreme Risk” across all 4 Verisk Social Violations pillars (Human rights, Labour rights, Corruption, Gender)</li> <li>• Scores above 25th percentile globally ranked across in all World Bank Governance factors (Voice and Accountability, Absence of Violence/Terrorism, Government Effectiveness, Regulator Quality, Rule of Law, Control of Corruption)</li> <li>• Coal no more than 25% of energy mix, and coal share of energy mix not increasing by more than 50% over 10 years</li> <li>• Not Bottom quintile JESG and BSSI and signatory of Paris Agreement</li> </ul>
<b>Qualitative overlay</b>	Other countries can be considered for exclusion from the SI list for extraordinary reasons following due process (agreement between investment team and BSI) TBC

## (II) Municipal bonds

Tagged muni sectors

PEXT	BEXT	DEXT	NEXT
EDUCATION - CHARTER SCHOOLS	EDUCATION - INSTITUTION	OTHER - HOTELS	CORP - PRE-PAID GAS
EDUCATION - STUDENT LOAN	EDUCATION - OTHER EDUCATION	OTHER - OTHER	OTHER - TRIBAL GAMING
EDUCATION - UNIVERSITY PUBLIC	EDUCATION - PRIVATE SCHOOLS	TAX-BACKED - DEVELOPMENT DISTRICTS	TOBACCO - TOBACCO - LOCAL
HEALTHCARE - CCRC	EDUCATION - STUDENT HOUSING	TRANSPORTATION - AIRPORT	TOBACCO - TOBACCO STATE
HEALTHCARE - HOSPITAL	EDUCATION - UNIVERSITY PRIVATE	TRANSPORTATION - OTHER TRANSPORTATION	CORRECTIONAL FACILITIES
HEALTHCARE - OTHER HEALTHCARE	ESCROWED - ESCROWED TO MATURITY	TRANSPORTATION - PARKING	LOTTERY/GAMING/ALCOHOL REVENUE BONDS
HEALTHCARE - SKILLED NURSING FACILITY	ESCROWED - PREREFUNDED	TRANSPORTATION - RAIL MASS TRANSIT	
HOUSING - MULTI-FAMILY HOUSING	TAX-BACKED - AUTHORITY	TRANSPORTATION - SEAPORT	
HOUSING - SINGLE FAMILY MORTGAGE	TAX-BACKED - CITIES - COUNTIES	TRANSPORTATION - TOLL FACILITIES	
OTHER - RESOURCE RECOVERY	TAX-BACKED - STATE OR US TERRITORY	UTILITY - COGENERATION	
TAX-BACKED - SCHOOL DISTRICTS		UTILITY - GAS	
TRANSPORTATION - RAIL MASS TRANSIT		STATE/LOCAL BONDS for STADIUMS/HOTELS	
UTILITY - SANITATION			
UTILITY - WATER & SEWER			

### (III) UN SDG Mapping

Asset class	Instruments/sectors	Relevant S UN SDGs	
<b>Govt. &amp; govt. related</b>	Dark, Medium and Light Green Sovereign Bonds	Multiple	
	Dark and Medium Gold Social Sovereign Bonds	Multiple	
	Sustainability Bonds	Multiple	
	Supra/Agency/Local Green, Social/ Sustainability Bonds	Multiple	
	UN SDG-committed Supranationals	SDG Aligned Financing from multilateral development banks – not all banks qualify	
	BSSI Score >= 8.0	Multiple	
	UK Social Housing	11: Sustainable Cities and Communities	
	Net Zero/Governance-leading EM Sovereigns	Multiple	
<b>Municipal Bonds</b>	UN SDG-committed European Agencies	Multiple	
	Dark, Medium and Light Green Bonds	Multiple	
	Dark and Medium Gold Social Bonds	Multiple	
	Sustainability Bonds	Multiple	
	Tax Backed School Districts: Charter Schools, Public University, Student Loans	4: Quality Education	
	Healthcare: Hospital, Nursing Facility, Retirement Community, Other Healthcare	3: Good Health and Well-being	
	Housing: Multi-Family, Single-Family	11: Sustainable Cities and Communities	
	Transportation: Mass Transit	11: Sustainable Cities and Communities	
	Utility: Sanitation, Water & Sewer Public Power (Low Carbon Issuers)	11: Sustainable Cities and Communities	
	Other: Resource Recovery	11: Sustainable Cities and Communities	
	<b>US Agency Mortgages</b>	Rural Housing,	10: Reduced Inequality, 11: Sustainable Cities and Communities
		Manufactured Housing	10: Reduced Inequality, 11: Sustainable Cities and Communities
		State HFA's	10: Reduced Inequality, 11: Sustainable Cities and Communities
FHFA designated Persistent Poverty Counties		10: Reduced Inequality, 11: Sustainable Cities and Communities	
HomeReady & HomePossible (Down Payment Assistance)		10: Reduced Inequality, 11: Sustainable Cities and Communities	
Modified or Reperforming Pools (Loss mitigation / Foreclosure prevention)		10: Reduced Inequality, 11: Sustainable Cities and Communities	
Borrower Focused customized Impact MBS Pools (FHFA designated)		10: Reduced Inequality, 11: Sustainable Cities and Communities	
MBS issued through Ginnie Mae's Single-Family Program		10: Reduced Inequality, 11: Sustainable Cities and Communities	
Pools with 100% loans secured by Energy Star Certified Homes		10: Reduced Inequality, 11: Sustainable Cities and Communities	
Pools with 100% loans from FICO < 700 borrowers		10: Reduced Inequality, 11: Sustainable Cities and Communities	
Pools with 100% loans from first time homebuyers, capped at \$150k loan size		10: Reduced Inequality, 11: Sustainable Cities and Communities	
<b>US CMBS</b>	CMBS Green Bonds	Multiple	
	Freddie Mac CMBS pools where >80% of loans are financing Green-Up/Green-Up Plus programs	13: Climate Action	
	Fannie Mae CMBS pools where >80% of loans are financing Green Rewards programs	13: Climate Action	
	Fannie/Freddie/Conduit/ SASB pools where >80% of loans are financing Low Income/Very Low-Income Housing	10: Reduced Inequality	
	Conduit, SASB and CML where >80% of loans are financing LEED, GBI, or other green certified collateral	13: Climate Action	

### (III) UN SDG Mapping (continued)

Asset class	Instruments/sectors	Relevant S UN SDGs
US ABS	Renewable Energy ABS (solar, wind)	13: Climate Action; 11: Sustainable Cities and Communities
	Dark, Medium, Light Green ABS bonds	Multiple
	Dark, Medium Gold ABS Social Bonds	Multiple
	Student loan pools: >80% of the loans are refinanced at a lower rate	4: Quality Education
	100% electric vehicle auto ABS	13: Climate Action; 11: Sustainable Cities and Communities
US Mortgage Credit	Legacy RMBS:	10: Reduced Inequality, 11: Sustainable Cities and Communities
	Alt-A: 60+ day delinquencies < 10%, modifications > 75%	10: Reduced Inequality, 11: Sustainable Cities and Communities
	Option ARM: 60+ day delinquencies < 10%, modifications > 75%	10: Reduced Inequality, 11: Sustainable Cities and Communities
	Prime: 60+ day delinquencies < 10%, modifications > 75%	10: Reduced Inequality, 11: Sustainable Cities and Communities
	Subprime: 60+ day delinquencies < 10%, modifications > 75%	10: Reduced Inequality, 11: Sustainable Cities and Communities
	Non-QM: >80% loans CDFI, Pools with Self employed min. 80%, FICO<660 min. 40%, DTI>43% min. 40%	10: Reduced Inequality, 11: Sustainable Cities and Communities
European Securitized	Dark, Medium and Light RMBS, ABS, CMBS Green Bonds	Multiple
	Dark and Medium Gold RMBS, ABS, CMBS Social Bonds	Multiple
	100% electric auto ABS	13: Climate Action; 11: Sustainable Cities and Communities
	Renewable energy ABS (solar, wind etc.)	13: Climate Action; 11: Sustainable Cities and Communities
	UK social housing CMBS	11: Sustainable Cities and Communities
	LEED Gold, Platinum, or Silver buildings or BREEAM Very Good, Excellent or Outstanding	13: Climate Action; 11: Sustainable Cities and Communities
Corporates	Dark, Medium and Light Green Bonds	Multiple
	Dark and Medium Gold Social Bonds	Multiple
	Sustainability bonds	Multiple
	All issuers with >25% revenues from sustainable impact categories (ex. UN SDG “Strongly Misaligned”)	Multiple
	Issuers with Science Based Targets Set, and making progress toward near-term targets	13: Climate Action
	All issuers aligned per Transition Pathway Initiative (TPI)	13: Climate Action
	BlackRock Impact Equity Team Universe	Multiple UN SDGs (Subset: Impact Equity Team Investment Issuers Only)
	FI Credit Research Transition to Decarb. Energy System “Best”	13: Climate Action
	DM: Top Quintile ESG scores (ex. Fossil, ex. UN SDG “Strongly Misaligned”)	Multiple
	EM: Band ‘1’ in JP Morgan EM ESG Scores	Multiple
Alternatives	Carbon Allowances – EU ETS, RGGI, CCA	13: Climate Action, 15: Life on Land
	Sustainable Timber	13: Climate Action, 15: Life on Land
	Renewable Power Infrastructure	13: Climate Action, 7: Affordable and Clean Energy
	Buildings in the top 15% EE in regional baseline	13: Climate Action; 11: Sustainable Cities and Communities
	Renovation projects 30% EE for buildings	13: Climate Action; 11: Sustainable Cities and Communities
	EPCA, LEED Platinum, Breen Very Good	13: Climate Action; 11: Sustainable Cities and Communities

### (III) UN SDG Mapping (continued)

Asset class	Instruments/sectors	Relevant S UN SDGs
Alternatives	Carbon Allowances – EU ETS, RGGI, CCA	13: Climate Action, 15: Life on Land
	Sustainable Timber	13: Climate Action, 15: Life on Land
	Renewable Power Infrastructure	13: Climate Action, 7: Affordable and Clean Energy
	Buildings in the top 15% EE in regional baseline	13: Climate Action; 11: Sustainable Cities and Communities
	Renovation projects 30% EE for buildings	13: Climate Action; 11: Sustainable Cities and Communities
	EPCA, LEED Platinum, Breen Very Good	13: Climate Action; 11: Sustainable Cities and Communities
	80% company/project rev. aligned with EU Sustainability Taxonomy	13: Climate Action; 11: Sustainable Cities and Communities
	Electrification of transport, Vehicle charging infrastructure	13: Climate Action, 9: Industry, Innovation, and Infrastructure
	Battery manufacturing	13: Climate Action, 9: Industry, Innovation, and Infrastructure
	Green Hydrogen	12: Responsible Consumption and Production 13: Climate Action, 15: Life on Land
Private equity and loans	Vertical farming	12: Responsible Consumption and Production 13: Climate Action, 15: Life on Land
	Meat Alternatives	12: Responsible Consumption and Production 13: Climate Action, 15: Life on Land
	Localization of food supply chains	12: Responsible Consumption and Production 13: Climate Action, 15: Life on Land
	Modular construction	10: Reduced Inequality
	Bio fund eligible projects	2: Zero Hunger
	Undercapitalized minority-led businesses or projects that serve minorities	10: Reduced Inequality
	Food security products or services supporting development of basic food (Choices international)	4: Quality Education; 10: Reduced Inequality
	Education targeting underserved populations	4: Quality Education

### (IV) Green bond taxonomy:

Scoring:

- 1) BlackRock scoring methodology assigns tiering to bonds based on the “greenness” or “impact” of the proceeds use.
- 2) Score tiering is: Dark green, medium green, light green, very light green and “off scale”. Strong impact reporting by an issuer will help in this. Green bond score lives in Aladdin research.

Very light green	Light green	Medium green	Dark green
Fund projects that yield only marginal improvements over baseline energy consumption, CO2 emissions, etc. but are not yet aligned with long-term decarbonization.	Fund projects that yield improvements over baseline energy consumption, CO2 emissions, etc. but are not yet aligned with long-term decarbonization.	Fund projects that yield improvements over baseline energy consumption, CO2 emissions, etc. and show some signs of alignment with long-term decarbonization.	Fund projects that BlackRock determines to most likely put the world on a long-term path towards a zero carbon economy.

Source: BlackRock, October, 2023. Investment process is shown for illustrative purposes only and subject to change.

## (V) Social bond taxonomy:

Scoring:

- 1) BlackRock scoring methodology assigns tiering to social bonds based on the issuer intended “positive outcomes” or “impact” of the proceeds use in the real world, definition of target population and suitability of use of proceeds in global/local contexts
- 2) Score tiering is: Dark gold, Medium gold, and Light gold
  - i. A proper definition of target population\* is crucial – the more specific and quantitative it can be, the darker the gold shade; as is specification of an investment opportunity with transparent social credentials in global/local social contexts
  - ii. Impact reporting as defined by ICMA Harmonized Framework for Social Bond Impact Reporting\*\* (based on the most recent available data, as of June 2020) by an issuer will also result in a darker shade

Light gold	Medium gold	Dark gold
Fund projects that aims to address/mitigate a specific social issue but need furth granularity and detail to reflect positive social outcomes, including better definition of target populations, contextualization to local and/or global social environments.	Fund projects that aims to address/mitigate a specific social issue and clearly contribute to positive social outcomes, with defined target populations and appropriate social environment contextualization.	Fund projects that aims to address/mitigate a specific social issue and can quantifiably result in positive social outcomes, with well defined target populations and specific to context of local and/or global social environments.

Source: BlackRock, October, 2023. Investment process is shown for illustrative purposes only and subject to change.

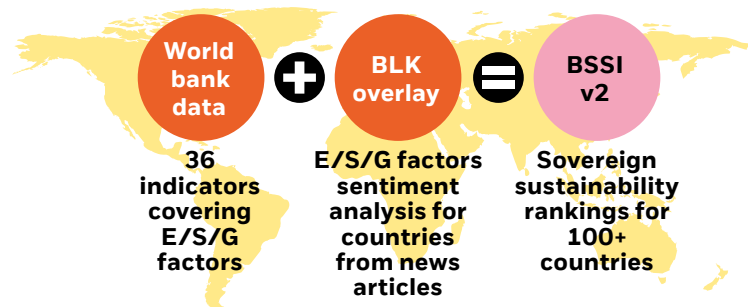
\*The definition of target population can vary depending on local contexts and that, in some cases, such target population(s) may also be served by addressing the general public.

\*\*<https://www.icmagroup.org/assets/documents/Sustainable-finance/2023-updates/Social-Bond-Principles-SBP-June-2023-220623.pdf>, as of June 2023. Based on latest available information as of October 2023.

## (VI) BlackRock Sovereign Sustainability Index (BSSI):

BSSI aims to add an ESG lens to sovereign analysis toolkit

- Ranks 100+ sovereign debt issuers based on performance on key sustainability metrics from the World Bank’s ESG data portal for each ESG pilla
- Internal research tool for sovereign ESG research



**We take into account three main questions that can influence a country’s long-term standing from an ESG perspective:**

- 1) How is the issuer treating the environment and how exposed is it to climate risk?
- 2) How is the issuer investing in its citizens?
- 3) How effectively is the issuer governing its people?

Source: BlackRock, October 2023. For illustrative purposes only, subject to change.

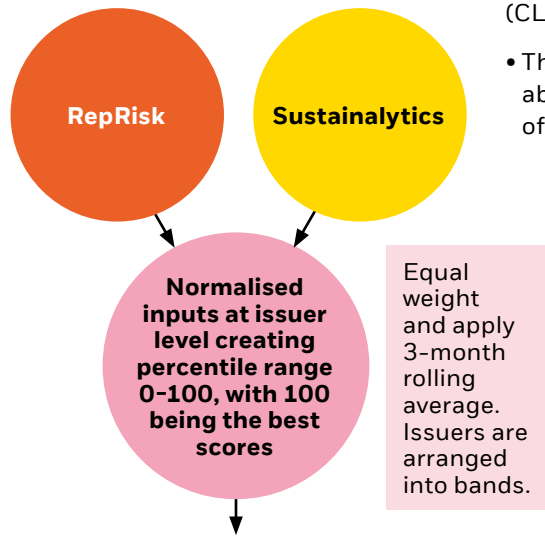
## (VII) JP Morgan JESG EMD Indices Methodology:

### 1) Ethical green screen

Zero tolerance of issuers with any involvement in:

- Thermal coal
- Tobacco
- Weapons
- Violating the UN Global Compact principles

### 2) Establish JESG scores



### 3) Inclusion of green bonds

Allocating higher weight to bonds categorised as 'green' by the CBI (CLIMATE Bond Initiative)

- These bonds ranked one band above that of their EMD issuer of reference

Band	JESG score	Proportion of original baseline index market value retained in JESG indices
1	Greater than 80	100%
2	Between 60 and 80	80%
3	Between 40 and 60	60%
4	Between 20 and 40	40%
5	Less than 20	Excluded

Sources: BlackRock, J.P. Morgan. Data as of 31 October 2023. For illustrative purposes only.



## Risk warnings

**Capital at risk.** The value of investments and the income from them can fall as well as rise and are not guaranteed. Investors may not get back the amount originally invested.

Past performance is not a reliable indicator of current or future results and should not be the sole factor of consideration when selecting a product or strategy.

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