

Bringing ESG Considerations to Australian Strategies

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This paper will demonstrate the potential improvements in environmental, social and governance (ESG) characteristics that are reflected in ESG benchmarks versus traditional market-capitalization-weighted benchmarks in a hypothetical group of Australian equities. We explore how various sustainability-focused indices might provide improved ESG characteristics, while maintaining comparable sectoral and country composition to that of traditional equity benchmarks. The alternatives to market-cap-weighted equity indices we considered include: a broad-based domestic ESG index, international carbon control indices, a global ESG real estate index, and a global net zero infrastructure index.

AN OVERVIEW OF SUSTAINABILITY-FOCUSED INDICES

The [S&P/ASX 200 ESG Index](#) draws on the intelligence of the S&P DJI ESG Scores, which robustly measure companies' ESG risk and performance factors to measure the performance of securities from the benchmark index that meet sustainability criteria. It is designed with the goal of maintaining similar industry group weights as its benchmark, with the overall result of improving ESG performance. It excludes companies with activities in key negative ESG areas, such as the extraction and consumption of thermal coal, production of tobacco and controversial weapons, as well as companies with poor alignment with UN Global Compact (UNGC) principles, involvement in relevant ESG controversies, and those identified as ESG laggards.

The [S&P Developed Ex-Australia LargeMidCap Carbon Control Index](#) and the [S&P Emerging LargeMidCap Carbon Control Index](#) focus on carbon intensity reduction and employ the carbon emissions intensity figures published by S&P Global Trucost. The index design aims to minimize average carbon intensity of the underlying benchmark, while offering diversification across a range of companies in the underlying index. The indices also apply exclusions based on companies' involvement in specific business activities including fossil fuel, tobacco, controversial weapons, alcohol, gambling and adult entertainment, as well as companies with poor alignment with UNGC principles, low S&P DJI ESG Scores, and involvement in relevant ESG controversies.

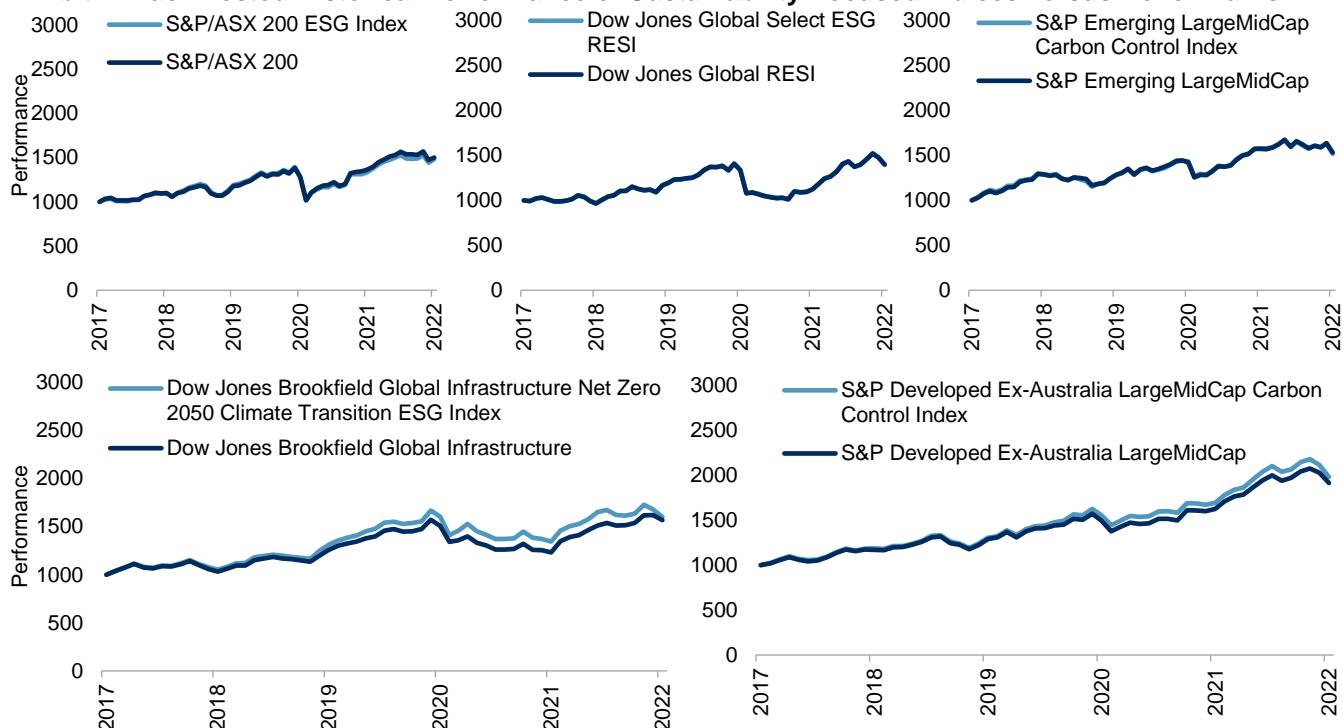
The [Dow Jones Global Select ESG Real Estate Securities Index \(RESI\)](#) uses data from GRESB and is designed to be representative of the investment characteristics of the Dow Jones Global Select Real Estate Securities Index, a conventional real estate benchmark, but with an improved sustainability profile through the use of GRESB scores. As a leader in evaluating ESG characteristics of real estate companies, GRESB uses a framework that is specifically tailored to real estate companies and seeks to embrace industry best practices on the full range of ESG issues that can be material to shareholders. The indices also apply exclusions based on companies' involvement in specific business activities including fossil fuel, tobacco, controversial weapons, alcohol, gambling and adult entertainment, as well as companies with poor alignment with UNGC principles and involvement in relevant ESG controversies.

Finally, the [Dow Jones Brookfield Global Infrastructure Net Zero 2050 Climate Transition ESG Index](#) relies on innovative environmental datasets published by S&P Global Trucost to select and weight companies from the listed infrastructure universe to be collectively compatible with a 1.5°C global warming climate scenario at the index level. The index design also aims to be in line with the EU Climate Transition Benchmark requirements and the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures (TCFD), including but not limited to a 30% carbon intensity reduction relative to the underlying benchmark, a baseline 7% average year-over-year self-decarbonization, activity exclusions and a reduction in index exposure to physical climate risks.

PERFORMANCE OF SUSTAINABILITY-FOCUSED INDICES

We analyzed the risk/return profiles of five sustainability equity indices compared with their traditional benchmarks, without sustainability considerations. As illustrated in Exhibits 1 and 2, based on back-tested data, all five sustainability-focused indices closely tracked their respective benchmarks over the period studied, with annual tracking error ranging from 1.0% to 2.6%.

Exhibit 1: Back-Tested Historical Performance of Sustainability-Focused Indices versus Benchmarks



Source: S&P Dow Jones Indices LLC. Data from Feb. 28, 2017, to Feb. 28, 2022. The S&P/ASX 200 ESG Index was launched July 6, 2020. The Emerging LargeMidCap Carbon Control Index and Developed Ex-Australia LargeMidCap Carbon Control Index were launched Aug. 30, 2021. The Dow Jones Global Select ESG RESI was launched April 26, 2021. The Dow Jones Brookfield Global Infrastructure Net Zero 2050 Climate Transition ESG Index was launched Nov. 29, 2021. All data prior to index launch date is back-tested hypothetical data. Index performance based on gross total return in AUD. Past performance is no guarantee of future results. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

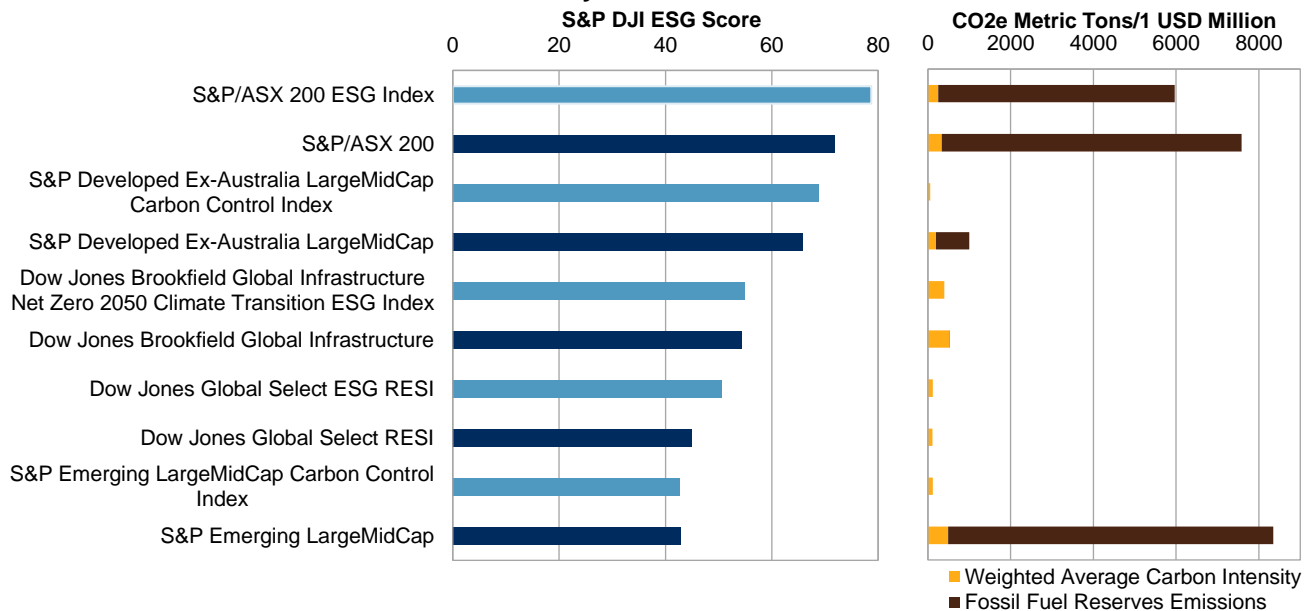
Exhibit 2: Back-Tested Historical Risk/Return Profile of Sustainability-Focused Indices versus Benchmarks

INDEX	ANNUAL RETURN (%)	ANNUAL VOLATILITY (%)	RISK-ADJUSTED RETURN	EXCESS RETURN (%)	ANNUAL TRACKING ERROR (%)
S&P/ASX 200	8.48	14.5	0.58	-	-
S&P/ASX 200 ESG Index	8.18	14.3	0.57	-0.30	1.75
S&P Developed Ex-Australia LargeMidCap	13.88	10.9	1.27	-	-
S&P Developed Ex-Australia LargeMidCap Carbon Control Index	14.66	10.9	1.35	0.79	1.12
S&P Emerging LargeMidCap	8.90	10.9	0.82	-	-
S&P Emerging LargeMidCap Carbon Control Index	8.72	10.8	0.81	-0.18	1.27
Dow Jones Brookfield Global Infrastructure	9.40	11.7	0.81	-	-
Dow Jones Brookfield Global Infrastructure Net Zero 2050 Climate Transition ESG Index	9.86	12.6	0.79	0.45	2.58
Dow Jones Global RESI	6.93	14.1	0.49	-	-
Dow Jones Global Select ESG RESI Index	6.91	13.9	0.50	-0.02	0.79

Source: S&P Dow Jones Indices LLC. Data from Feb. 28, 2017, to Feb. 28, 2022. The S&P/ASX 200 ESG Index was launched July 6, 2020. The Emerging LargeMidCap Carbon Control Index and Developed Ex-Australia LargeMidCap Carbon Control Index were launched Aug. 30, 2021. The Dow Jones Global Select ESG RESI was launched April 26, 2021. The Dow Jones Brookfield Global Infrastructure Net Zero 2050 Climate Transition ESG Index was launched Nov. 29, 2021. All data prior to index launch date is back-tested hypothetical data. Index performance based on gross total return in AUD. Past performance is no guarantee of future results. Table is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

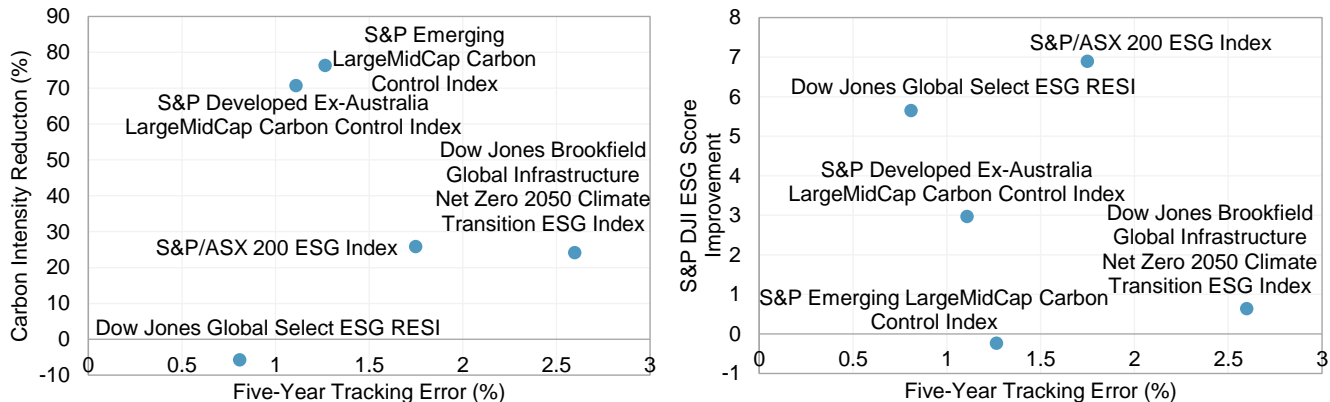
As seen in Exhibit 3, most sustainability-focused indices showed an S&P DJI ESG Score improvement relative to their underlying indices, with the S&P ASX 200 ESG Index and Dow Jones Global Select ESG RESI leading for highest ESG score improvement. Likewise, most sustainable index variants reflected lower carbon intensity and a significant fossil fuel reserve emissions reduction relative to the benchmark. Particularly, the S&P Carbon Control Indices demonstrated the highest carbon intensity reductions, with the lowest level of tracking error (see Exhibit 4). The S&P ASX 200 ESG Index reflected a 21% reduction in fossil fuel reserve emissions relative to its underlying index, mainly due to the thermal coal exclusion and, to a smaller extent, the removal of companies with low S&P DJI ESG Scores. See Appendix 1 for the sector allocations of the analyzed indices.

Exhibit 3: ESG Characteristics of Sustainability-Focused Indices versus Benchmarks



Source: S&P Dow Jones Indices LLC. Data as of Feb. 28, 2022. Charts are provided for illustrative purposes. For more information on index carbon metrics, please see [here](#).

Exhibit 4: ESG Characteristics versus Back-Tested Five-Year Tracking Error of Sustainability-Focused Indices



Source: S&P Dow Jones Indices LLC. Data as of Feb. 28, 2022. The S&P/ASX 200 ESG Index was launched July 6, 2020. The Emerging LargeMidCap Carbon Control Index and Developed Ex-Australia LargeMidCap Carbon Control Index were launched Aug. 30, 2021. The Dow Jones Global Select ESG RESI was launched April 26, 2021. The Dow Jones Brookfield Global Infrastructure Net Zero 2050 Climate Transition ESG Index was launched Nov. 29, 2021. All data prior to index launch date is back-tested hypothetical data. Index performance based on total return in USD. Past performance is no guarantee of future results. Charts are provided for illustrative purposes and reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

THE POTENTIAL ESG BENEFITS OF SUSTAINABILITY-FOCUSED INDICES WITHIN AN HYPOTHETICAL INDEX OF INDICES

To demonstrate the potential improvement in ESG characteristics that can be achieved via ESG benchmarks versus traditional market-cap-weighted benchmarks in a typical Australian equity strategy, we constructed two hypothetical indices of indices based on the latest asset mix of the overall superannuation industry, sourced from the Australian Prudential Regulation Authority (APRA).

Exhibit 5: Superannuation Industry Asset Allocation	
ASSET CLASS	PROPORTION OF INVESTMENTS (%)
Cash	9
Fixed Income	18
Australian Fixed Income	10
International Fixed Income	8
Equity	56
Australian-Listed Equity	23
International-Listed Equity	29
Unlisted Equity	5
Property	8
Listed Property	3
Unlisted Property	5
Infrastructure	6
Listed Infrastructure	1
Australian-Unlisted Infrastructure	3
International-Unlisted Infrastructure	2
Commodities	0
Other	2
Total Investments	100

Source: APRA. Available at: <https://www.apra.gov.au/quarterly-superannuation-statistics>. Accessed on March 1, 2022. Table is provided for illustrative purposes.

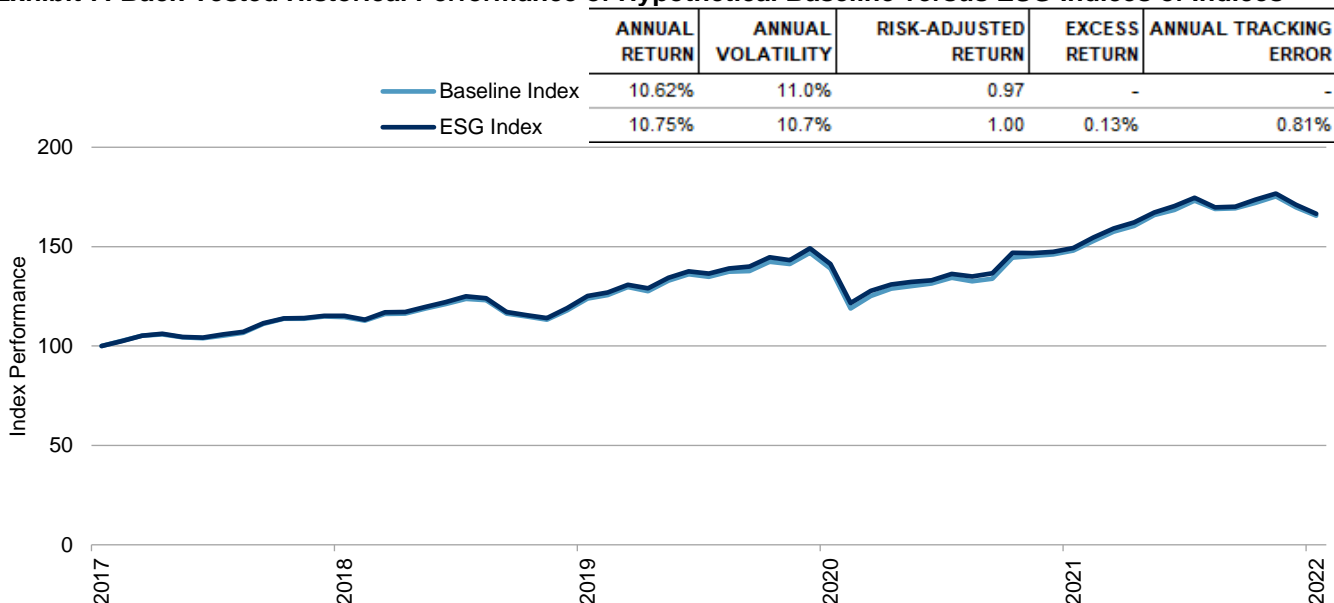
To construct the hypothetical baseline index of indices, we use traditional indices to represent the various investment types that are listed equity. The weight assigned to each index corresponds to its weight in Exhibit 5, rescaled to sum 100% among listed equity. For simplicity, the index of indices is rebalanced on a monthly basis. The hypothetical ESG index of indices is constructed in a similar way by swapping traditional indices with their ESG counterparts. Exhibit 6 presents the allocation of the two hypothetical indices of indices, and Exhibits 7 and 8 present the results of this analysis.

Exhibit 6: Listed Equity Portion of Asset Allocation in Hypothetical Baseline and ESG Indices of Indices

HYPOTHETICAL BASELINE INDEX	HYPOTHETICAL ESG INDEX	WEIGHT (%)
AUSTRALIAN-LISTED EQUITY		23
S&P/ASX 200	S&P/ASX 200 ESG Index	23
INTERNATIONAL-LISTED EQUITY		29
S&P Developed Ex-Australia LargeMidCap	S&P Developed Ex-Australia LargeMidCap Carbon Control Index	20
S&P Emerging LargeMidCap	S&P Emerging LargeMidCap Carbon Control Index	9
LISTED PROPERTY		3
Dow Jones Global Select RESI	Dow Jones Global Select ESG RESI	3
LISTED INFRASTRUCTURE		1
Dow Jones Brookfield Global Infrastructure	Dow Jones Brookfield Global Infrastructure Net Zero 2050 Climate Transition ESG Index	1
TOTAL LISTED EQUITY		56

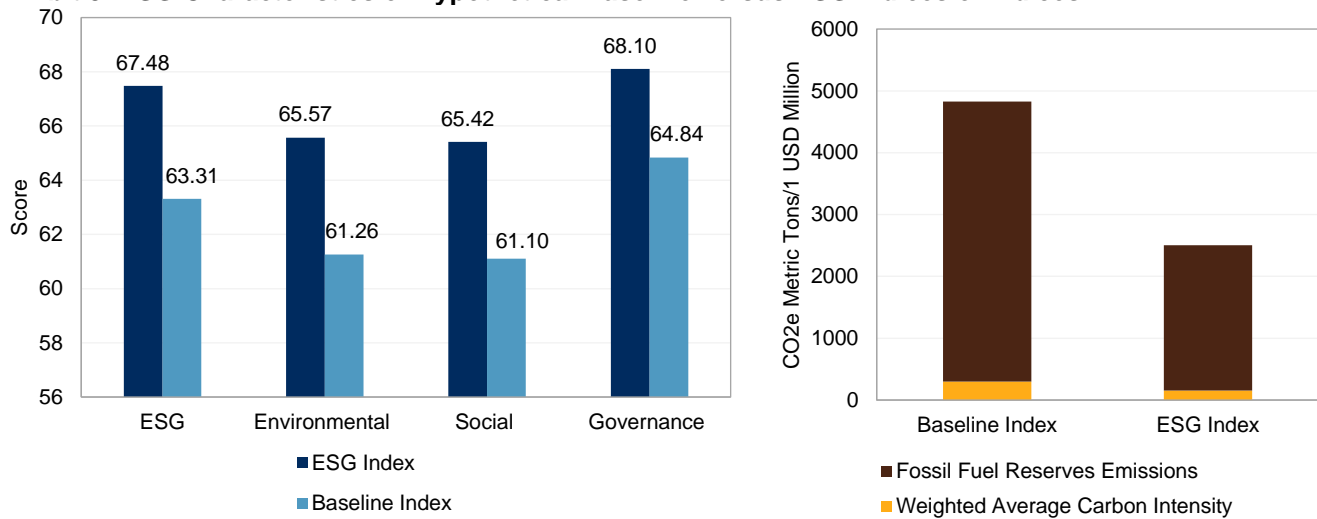
All information above is hypothetical.
 Source: S&P Dow Jones Indices LLC. Table is provided for illustrative purposes.

Exhibit 7: Back-Tested Historical Performance of Hypothetical Baseline versus ESG Indices of Indices



All indices of indices are hypothetical.
 Source: S&P Dow Jones Indices LLC. Data from Feb. 28, 2017, to Feb. 28, 2022. The S&P/ASX 200 ESG Index was launched July 6, 2020. The Emerging LargeMidCap Carbon Control Index and Developed Ex-Australia LargeMidCap Carbon Control Index were launched Aug. 30, 2021. The Dow Jones Global Select ESG RESI was launched April 26, 2021. The Dow Jones Brookfield Global Infrastructure Net Zero 2050 Climate Transition ESG Index was launched Nov. 29, 2021. All data prior to index launch date is back-tested hypothetical data. Index performance based on gross total return in AUD. Past performance is no guarantee of future results. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 8: ESG Characteristics of Hypothetical Baseline versus ESG Indices of Indices



All indices of indices are hypothetical.

Source: S&P Dow Jones Indices LLC. Data as of Feb. 28, 2022. Charts are provided for illustrative purposes. For more information on index carbon metrics, please see [here](#).

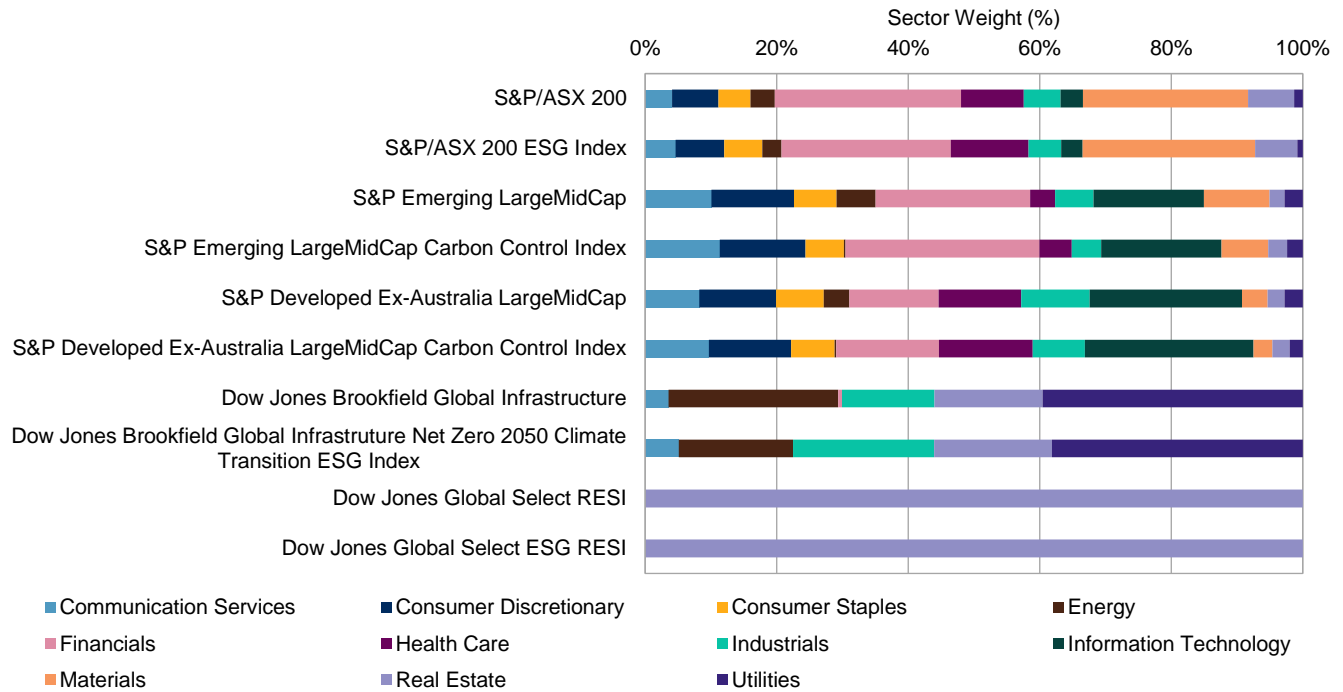
Looking at an ESG-based index of indices versus a typical equity index of indices reflects potential tangible ESG benefits, with a low annualized tracking error level of 0.81% (see Exhibit 7) to the baseline index of indices. The hypothetical ESG index of indices showed an improvement of 4.17% for the S&P DJI ESG Score relative to the hypothetical baseline index of indices, as well as enhanced dimensional environmental, social and governance scores. Furthermore, the ESG index of indices demonstrated carbon intensity and fossil fuel reserve reductions close to 50%, helping align with lower carbon targets. The hypothetical ESG index of indices exhibited an underweight to the Energy and Materials sectors, while overweighting Health Care and Communication Services (see Appendix 2).

CONCLUSION

Market participants are increasingly integrating sustainability considerations into their investment decision-making. For Australia, that’s no exception. We highlighted how various S&P ESG Indices versus a traditional market-cap-weighted index of indices could potentially offer substantial ESG benefits, including S&P DJI ESG Score improvement and lower carbon intensity—with low levels of tracking error to the benchmark index. Importantly, each series of S&P ESG Indices has different ESG design features that could appeal to different investment and ESG needs. When combined with a holistic strategy, these indices may represent efficient tools to help align investments with principles and move toward more sustainable business activities.

APPENDIX 1

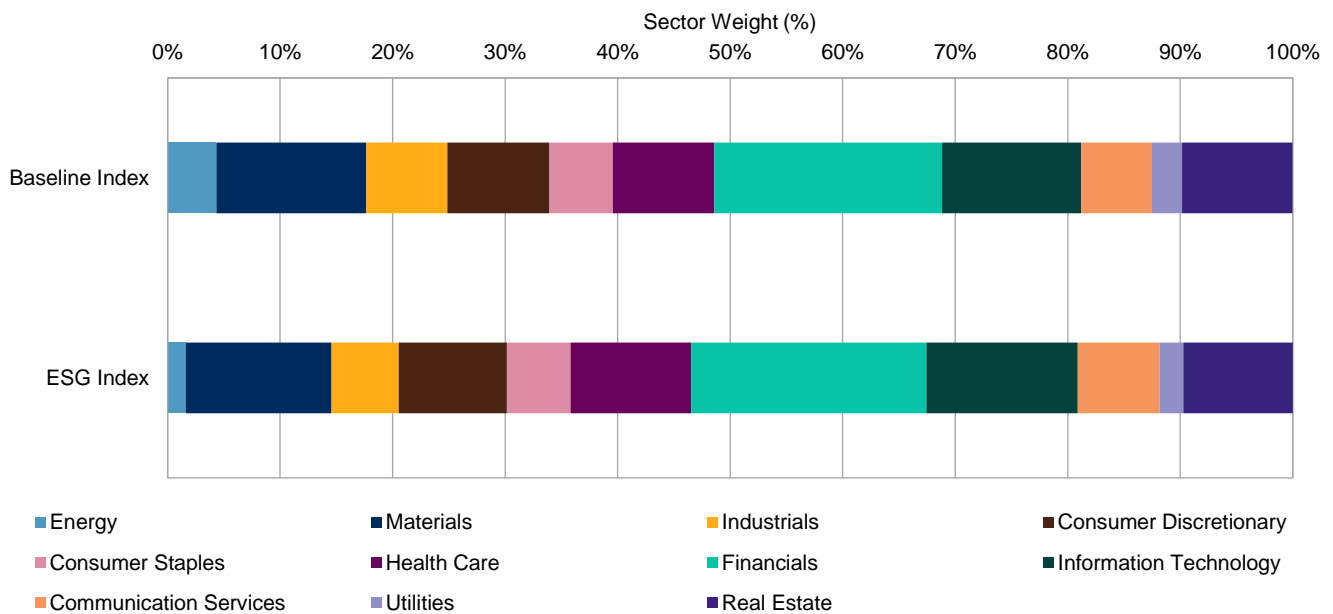
Exhibit 9: Sector Weights of Sustainability-Focused Indices versus Their Benchmarks



Source: S&P Dow Jones Indices LLC. Data as of Feb. 28, 2022. Chart is provided for illustrative purposes.

APPENDIX 2

Exhibit 10: Sector Weights of Hypothetical Baseline versus ESG Indices of Indices



All indices of indices are hypothetical.

Source: S&P Dow Jones Indices LLC. Data as of Feb. 28, 2022. Chart is provided for illustrative purposes.

PERFORMANCE DISCLOSURE/BACK-TESTED DATA

The S&P/ASX 200 ESG Index was launched July 6, 2020. The Emerging LargeMidCap Carbon Control Index and Developed Ex-Australia LargeMidCap Carbon Control Index were launched August 30, 2021. The Dow Jones Global Select ESG RESI was launched April 26, 2021. The Dow Jones Brookfield Global Infrastructure Net Zero 2050 Climate Transition ESG Index was launched November 29, 2021. All information presented prior to an index's Launch Date is hypothetical (back-tested), not actual performance. The back-test calculations are based on the same methodology that was in effect on the index Launch Date. However, when creating back-tested history for periods of market anomalies or other periods that do not reflect the general current market environment, index methodology rules may be relaxed to capture a large enough universe of securities to simulate the target market the index is designed to measure or strategy the index is designed to capture. For example, market capitalization and liquidity thresholds may be reduced. Complete index methodology details are available at <http://www.spglobal.com/spdji>. Past performance of the Index is not an indication of future results. Back-tested performance reflects application of an index methodology and selection of index constituents with the benefit of hindsight and knowledge of factors that may have positively affected its performance, cannot account for all financial risk that may affect results and may be considered to reflect survivor/look ahead bias. Actual returns may differ significantly from, and be lower than, back-tested returns. Past performance is not an indication or guarantee of future results. Please refer to the methodology for the Index for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations. Back-tested performance is for use with institutions only; not for use with retail investors.

S&P Dow Jones Indices defines various dates to assist our clients in providing transparency. The First Value Date is the first day for which there is a calculated value (either live or back-tested) for a given index. The Base Date is the date at which the index is set to a fixed value for calculation purposes. The Launch Date designates the date when the values of an index are first considered live: index values provided for any date or time period prior to the index's Launch Date are considered back-tested. S&P Dow Jones Indices defines the Launch Date as the date by which the values of an index are known to have been released to the public, for example via the company's public website or its data feed to external parties. For Dow Jones-branded indices introduced prior to May 31, 2013, the Launch Date (which prior to May 31, 2013, was termed "Date of introduction") is set at a date upon which no further changes were permitted to be made to the index methodology, but that may have been prior to the Index's public release date.

Typically, when S&P DJI creates back-tested index data, S&P DJI uses actual historical constituent-level data (e.g., historical price, market capitalization, and corporate action data) in its calculations. As ESG investing is still in early stages of development, certain datapoints used to calculate S&P DJI's ESG indices may not be available for the entire desired period of back-tested history. The same data availability issue could be true for other indices as well. In cases when actual data is not available for all relevant historical periods, S&P DJI may employ a process of using "Backward Data Assumption" (or pulling back) of ESG data for the calculation of back-tested historical performance. "Backward Data Assumption" is a process that applies the earliest actual live data point available for an index constituent company to all prior historical instances in the index performance. For example, Backward Data Assumption inherently assumes that companies currently not involved in a specific business activity (also known as "product involvement") were never involved historically and similarly also assumes that companies currently involved in a specific business activity were involved historically too. The Backward Data Assumption allows the hypothetical back-test to be extended over more historical years than would be feasible using only actual data. For more information on "Backward Data Assumption" please refer to the [FAQ](#). The methodology and factsheets of any index that employs backward assumption in the back-tested history will explicitly state so. The methodology will include an Appendix with a table setting forth the specific data points and relevant time period for which backward projected data was used.

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