

# **SANTA CLARA VALLEY WATER DISTRICT**

## **BOARD INVESTMENT POLICY**

July 1, 2025

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# **SANTA CLARA VALLEY WATER DISTRICT BOARD INVESTMENT POLICY**

July 1, 2025

## **1.0 POLICY**

It is the policy of Santa Clara Valley Water District (Valley Water) that public funds not needed for the immediate necessities of Valley Water should, to the extent reasonably possible, be prudently invested or deposited consistent with applicable law to produce revenue for Valley Water.

The Treasurer-Chief Financial Officer and their designee, the Treasury and Debt Officer, manage Valley Water's investment portfolio under the prudent person standard, which states that:

Investments shall be made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable safety of their capital as well as the probable income to be derived.

## **2.0 SCOPE**

The Investment Policy applies to Valley Water's pooled investment fund, which encompasses all monies under the direct oversight of the Treasurer. Included in the investment pool are the Valley Water General Fund, the Safe, Clean Water Fund, the Watershed Funds, the Water Utility Enterprise Fund, the Equipment Service Fund, the Risk Insurance Fund, and debt proceeds with special consideration given to specific provisions contained in the indentures for each issuance. The employees' retirement, other postemployment benefit, and deferred compensation funds are not included nor are the Guaranteed Investment Contracts or any other debt proceeds that are invested following instructions in the debt documents.

A glossary containing key terms used in this document is included in Exhibit A.

## **3.0 OBJECTIVES (REFERENCE: CA GOVT. CODE 53600.5)**

Valley Water will invest funds under the prudent person standard as described in Section 1, and within the specific parameters of safety, liquidity, and yield, in order of highest to lowest priority:

### **3.1 Safety**

Safety of principal is the foremost objective of the investment program. Investments of Valley Water will be undertaken in a manner that seeks to ensure the preservation of capital. Valley Water seeks to mitigate credit risk by requiring that all investments be in obligations whose senior long-term debt rating is rated by at least two of the three national rating agencies. The required ratings must be at least Aa3 by Moody's Investor Services, AA- by Standard & Poor's rating agency, or AA- by Fitch Ratings Service. This excludes funds placed with the

Local Agency Investment Fund (LAIF), Joint Powers Authority, and Federal Deposit Insurance Corporation (FDIC) or National Credit Union Administration (NCUA) protected investments in banks or credit unions. In addition, Commercial Paper investments will also carry short-term ratings by at least two of the three national rating agencies of P-1 by Moody's Investor Services, A-1 by Standard & Poor's, or F-1 by Fitch. Risk related to adverse changes in interest rates is alleviated by maturity and instrument diversification. Please refer to Exhibit B for a summary of credit rating scales.

### **3.2 Liquidity**

In order to ensure adequate liquidity, the average life of the investment portfolio of Valley Water shall be maintained at approximately two and one-half (2.5) years, but may be adjusted from time-to-time to meet ongoing cash flow needs of the portfolio.

### **3.3 Return on Investment**

Valley Water's investment portfolio shall be designed with the objective of attaining the greatest yield to maturity consistent with the preservation of capital and the maintenance of adequate liquidity.

### **3.4 Socially Responsible Investment**

In addition to the investment objectives of safety, liquidity, and yield, Valley Water encourages investing in corporate securities, banking institutions and state agencies that meet the ESG (Environmental, Social and Governance) factors. Valley Water shall use best efforts to follow the ESG Guiding Principles and utilize the Investment Evaluation Scorecard to evaluate and approve such investments to ensure compliance with the ESG factors (Appendix 1).

3.4.1 The ESG factor shall include considerations for local California based businesses.

### **3.5 California Bank Investments**

To the extent permitted by California Government Code, while meeting Valley Water's investment objectives for safety, liquidity and yield, Valley Water encourages investing in Certificates of Deposit issued by California based banks, up to the Federal Deposit Insurance Corporation limit at the time of such investment which is currently set at \$250,000, and up to 30% of the portfolio, as amended.

3.5.1 Keeping investments to local banks, within the Bay Area, to keep money at home and jobs local; invest only in banks with below \$10 billion in assets; and keep a minimum of 4% of liquid cash in banks with \$10 billion in assets and 1% in banks with \$2 billion in assets for a limit of 5 years (short term) at the discretion of the treasurer; such investments may be in the form of collateralized deposits, FDIC/NCUA insured CDs, CDARS, or any other legally allowable deposits.

## **4.0 DELEGATION OF INVESTMENT AUTHORITY**

California Government Code Section 53607 provides the authority for the legislative body of the local agency to delegate for one-year periods to the Treasurer of the local agency the full responsibility to invest or reinvest local agency funds. Furthermore, Government Code Section 53608 requires the Board to delegate the authority to deposit funds for safekeeping with a federal or state association (as defined by Section 5102 of the Financial Code), a trust company or state or national bank located within this state or with the Federal Reserve Bank of San Francisco or any branch thereof within this state, or with any Federal Reserve bank or with any state or national bank located in any city designated as a reserve city by the Board of Governors of the Federal Reserve System.

### **4.1 Board of Directors**

The Board of Directors delegates authority to the Treasurer-Chief Financial Officer who in turn has delegated such duties to the Treasury and Debt Officers (or any acting or interim of such position), to invest, or deposit for safekeeping, as far as possible, all money belonging to, or in the custody of, Valley Water pursuant to the Title 5, Division 2, Part 1, Chapter 4, Article 1 Investment of Surplus (53600 – 53610) and Article 2 Deposit of Funds (53630-53686) of the California Government Code (“Government Code”) and as directed by the policies of the Board.

### **4.2 Treasurer**

The Treasurer – Chief Financial Officer delegates the execution of daily investment transactions to the Treasury and Debt Officer. Under the direction of the Chief Financial Officer (CFO), the Treasury and Debt Officer will invest funds pursuant to the quarterly investment strategy approved by the Investment Committee and within the parameters established by the Investment Policy.

### **4.3 Treasury and Debt Officer**

The CFO delegates the execution of daily investment transactions to the designated support staff when the Treasury and Debt Officer is absent.

### **4.4 Investment Committee**

The Investment Committee meets once quarterly to review cash management performance and the Investment Policy and to map out the investment strategy for the coming quarter. The Investment Committee is comprised of the Treasurer/CFO, District Counsel or their designee, the Financial Services Unit Manager, the Treasury/Debt Officer, and treasury support staff, if any.

## **5.0 ETHICS AND CONFLICTS OF INTEREST**

The Treasurer and any other Valley Water staff member or contract employee having influence over the investment decision process will refrain from personal business activity that could conflict with proper execution of the investment program or which could impair the ability to make impartial investment decisions. Further, the Treasurer and any other Valley Water staff member or contract employee will refrain from making, participating in making, or in any way using their official position to influence a Valley Water investment decision in which they know or have reason to know they have a disqualifying conflict of interest as described in the Political Reform Act and the Fair Political Practices Commission Guidelines implementing the Act.

## **6.0 AUTHORIZED FINANCIAL INTERMEDIARIES**

The Treasury and Debt Officer will maintain a list of broker/dealers authorized to provide investment services. These may include primary dealers or regional dealers. All broker/dealers who desire to become qualified broker/dealers for investment transactions must participate in the Broker/Dealer selection process managed by the Treasury and Debt Officer that takes place at least once every three years. The participating broker/dealers must provide all the documentation, and complete all other requirements specified in the Broker/Dealers selection criteria.

Selection of broker/dealers authorized to engage in transactions with Valley Water shall be at the sole discretion of Valley Water. Minimum assets of the company will be \$5 million. The Treasury and Debt Officer and CFO will conduct an annual review of the financial condition of qualified broker/dealers.

## **7.0 AUTHORIZED INVESTMENTS, MATURITIES, ISSUER AND PORTFOLIO LIMITS**

Valley Water shall comply with Code<sup>1</sup>, as amended from time to time, and invest in the authorized securities described in this section. Where this section specifies a percentage limitation for a particular category of investment, that percentage is applicable only at the date of purchase. Where this section does not specify a limitation on the remaining maturity, no investment shall be made in any security that at the time of the investment has a term remaining to maturity in excess of five (5) years. The five-year limitation may be waived provided that the legislative body has granted express authority to make that investment either specifically or as a part of an investment program approved by the legislative body no less than three (3) months prior to the investment.

For the most recent allowable investments per State Government Code guidelines as published by CDIAC (California Debt and Investment Advisory Commission), see Appendix 2.

### **7.1 U.S. Government**

United States Treasury Bills, Notes, and Bonds or those obligations for which the faith and credit of the United States are pledged for the payment of principal and interest.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	5 years	5 years
Portfolio Limit	None Specified	None Specified
Issuer Limit	None Specified	None Specified
Minimum Credit Rating	See Section 3.1—Safety	None Specified

### **7.2 U.S. Agencies**

Obligations issued by the following federal-related institutions and government-sponsored entities where the implied and moral support of the

<sup>1</sup> Refer to California Debt and Investment Advisory Commission, for details regarding state law changes <https://www.treasurer.ca.gov/cdiac/publications.asp>

U.S. Government is pledged for the payment of principal and interest. They may be either bullet (non-callable) or callable issues:

Federal National Mortgage Association  
Federal Farm Credit Banks  
Federal Home Loan Bank  
Federal Agricultural Mortgage Corporation of America  
Federal Home Loan Mortgage Corporation  
Tennessee Valley Authority

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	5 years	5 years
Portfolio Limit	None Specified	None Specified
Issuer Limit	None Specified	None Specified
Minimum Credit Rating	See Section 3.1—Safety	None Specified

### **7.3 Bankers Acceptances**

Bills of exchange or time drafts drawn on and accepted by a commercial bank, otherwise known as Bankers Acceptances, which are eligible for purchase by the Federal Reserve System.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	180 days	180 days
Portfolio Limit	40%	40%
Issuer Limit	4.8%	30%
Minimum Credit Rating	See Section 3.1—Safety	None Specified

### **7.4 Commercial Paper**

Commercial Paper (CP) issued by corporations that are organized and operating within the United States and having total assets in excess of US \$500 million. Purchases of eligible Commercial Paper may not exceed 10 percent of the issuer's outstanding Commercial Paper program.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	90 days	270 days
Portfolio Limit	15%	40%*
Issuer Limit	Up to 1.8% of portfolio and 10% of the issuer's CP outstanding	May not exceed 10% of the issuer's CP and MTN outstanding.
Minimum Credit Rating (at least 2 ratings)	A-1 (short-term)/AA- (long-term, if available) or equivalent	A-1 (short-term)/A (long-term, if available) or equivalent

*\*Portfolio limit increased to 40% from prior limit of 25% per Chapter 235, Statutes of 2020 (SB 998) amended Government Code Section 53601(h) to allow local agencies, other than counties or a city and county, that have one hundred million dollars (\$100,000,000) or more of investment assets under management to invest no more than 40% of their*

*moneys in eligible commercial paper. On January 1, 2026, the maximum percentage of the portfolio reverts to 25%.*

### **7.5 Negotiable Certificates of Deposit**

Negotiable Certificates of Deposit issued by a nationally or state-chartered bank, a savings association or a federal association (as defined by Section 5102 of the Financial Code), a state or federal credit union, or by a state-licensed branch of a foreign bank.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	5 years	5 years
Portfolio Limit	30%	30%
Issuer Limit	3.6%	None Specified
Minimum Credit Rating (at least 2 ratings), or FDIC/NCUA insured	AA- (long-term) or equivalent	None Specified

### **7.6 Time/Non-Negotiable Certificates of Deposit**

Per Section 53601.8 of the Government Code, a local agency that has the authority under law to invest funds, at its discretion, may invest a portion of its surplus funds in deposits at a commercial bank, savings bank, savings and loan association, or credit union that uses a private sector entity that assists in the placement of deposits under certain conditions, including FDIC and NCUA insurance.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	5 years	5 years
Portfolio Limit	5%	None
Issuer Limit	Current FDIC/NCUA Insurance Limit (\$250,000) and FDIC/NCUA membership	Current FDIC/NCUA Insurance Limit (\$250,000) and FDIC/NCUA membership
Minimum Credit Rating	'Satisfactory' Community Reinvestment Act (CRA)	None Specified

### **7.7 Repurchase Agreements**

Repurchase Agreements as defined by the purchase of securities (approved under Sections 1 and 2 of this document) by Valley Water pursuant to an agreement whereby the seller will repurchase the securities on a specified date at a specified price. Valley Water requires delivery of the purchased securities to Valley Water's custody bank via book-entry prior to payment for such securities. All Repurchase Agreements will operate under the industry-standard Public Securities Association Master Repurchase Agreement which must be executed

prior to the transaction. Valley Water requires that purchased securities exceed the cash value of the transaction by a minimum of 2 percent to protect against adverse price movements. All collateral relating to outstanding repurchase agreements will be priced daily to ensure the maintenance of 102 percent collateralization. Collateral is limited to those securities listed in Section 7.1 and 7.2.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	30 days	1 year
Portfolio Limit	None Specified	None Specified
Issuer Limit	None Specified	None Specified
Minimum Credit Rating	See Section 3.1—Safety	None Specified

## **7.8 Medium-Term Notes**

Corporate Medium-Term Notes issued by corporations organized and operating in the United States or by depository institutions licensed by the United States and operating within the United States.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	5 years	5 years
Portfolio Limit	15%	30%
Issuer Limit	1.8%	May not exceed 10% of the issuer's outstanding CP and MTN.
Minimum Credit Rating (at least 2 ratings)	AA- (long-term) or equivalent	A or equivalent

## **7.9 Municipal Obligations**

Municipal obligations issued by a municipality within the State of California, including obligations payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency. This may include Bonds, notes, warrants, or other evidence of indebtedness of a local agency within this state, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency, or by a department, board, agency, or authority of the local agency.

Registered treasury notes or bonds of the State of California or any of the other 49 states, including bonds payable solely out of the revenues from a revenue producing property owned, controlled or operated by the state or by a department, board, agency or authority of the state.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	5 years	5 years
Portfolio Limit	15%	None Specified
Issuer Limit	1.8%	None Specified

Minimum Credit Rating (at least 2 ratings)	AA- or equivalent	None Specified
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#### **7.10 Local Agency Investment Fund (LAIF)**

Valley Water may place funds with LAIF up to the maximum allowable amount as stipulated by LAIF and amended from time to time. LAIF is managed by the State of California Treasurer's Office with the objective of realizing the maximum return consistent with safe and prudent treasury management. Currently LAIF will accept no more than \$75 million of an agency's unrestricted funds while placing no constraints on funds relating to unspent bond proceeds.

#### **7.11 Mutual Funds**

Mutual funds invested in U.S. Government securities which strive to maintain a price of \$1.00 per share (Government money market funds) with a minimum of \$500 million in total portfolio value and a rating by at least two rating agencies of Aaa by Moody's and AAA by Standard & Poor's or Fitch. Investment in such funds shall not exceed 10% of Valley Water's total portfolio book value.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	Not Applicable	Not Applicable
Portfolio Limit	10%	20%
Issuer Limit	10%	10%
Minimum Credit Rating (at least 2 ratings)	Aaa/AAA	Aaa/AAA

#### **7.12 Supranational Obligations**

United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), or Inter-American Development Bank (IADB), with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision shall be rated "AA" or better by two or more national credit rating agencies and shall not exceed 15 percent of Valley Water's total portfolio book value.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	5 Years	5 Years
Portfolio Limit	15%	30%
Issuer Limit	1.8%	--
Minimum Credit Rating (at least 2 ratings)	Aa/AA	Aa/AA

#### **7.13 Joint Powers Authority Pool**

Shares of beneficial interest issued by a joint powers authority organized pursuant to Section 6509.7 that invests in the securities and obligations

authorized in subdivisions (a) to (r), inclusive (e.g. California Asset Management Program or CAMP, or CalTrust). Each share shall represent an equal proportional interest in the underlying pool of securities owned by the joint powers authority, and must retain an investment advisor who is registered (or exempt from registration) with the United States Securities and Exchange Commission (SEC), has assets under management in excess of \$500 million, and has at least five years' experience investment in instruments authorized by Section 53601, subdivisions (a) to (q), inclusive.

	<b>Valley Water Policy</b>	<b>Government Code</b>
Maturity Limit	N/A	N/A
Portfolio Limit	15%	None
Issuer Limit	15%	None
Minimum Credit Rating (at least 2 ratings)	N/A	N/A

## **7.14 Prohibited Investments**

### *7.14.1 Prohibited Investments*

Prohibited investments include securities not listed in this section 7, as well as inverse floaters, range notes, interest only strips derived from a pool of mortgages and any security that could result in zero interest accrual if held to maturity, as specified in Section 53601.6 of the California Government Code, with the following exception:

Beginning January 1, 2021, until January 1, 2026, investments are authorized in securities issued by, or backed by, the United States government that could result in zero- or negative-interest accrual if held to maturity, in the event of, and for the duration of, a period of negative market interest rates.

### *7.14.2 Climate Divestment Investment Restriction*

No investments will be made in the top 200 fossil fuel companies that control most of the world's oil, coal and natural gas supplies. See Exhibit C for the list of the 200 companies as defined by the organization, "350.org."

### *7.14.3 Prohibited Banks*

No investments will be made in any banks who do not have an Environmental, Social, and Governance (ESG) ranking at or better than the "Average/Medium" category, by at least one of the professional ESG research companies such as Sustainalytics, or other equivalent rankings published by other ESG research firms. Small and local banks/credit unions located within the nine Bay Area counties with total assets at or below \$10 billion are exempt from this provision.

## **7.15 Investment Sales Prior to Maturity**

While the overall investment management philosophy of the portfolio is based on a passive approach focusing on matching investment maturities with anticipated liabilities in the future, sales of outstanding investment positions prior to maturity are permitted so long as a yield enhancement on the total transaction is achieved. Specifically, the reinvestment proceeds from the sale of an investment position must earn an income flow whose present value is greater than the present value of the sold position considering any capital losses and foregone interest income. In addition, investment positions may be sold if funds are needed for unanticipated expenditures, or if a corporate and bank obligation is downgraded (see section 7.16 below).

Before an investment position can be sold, an analysis must be made showing the benefit of the sale to Valley Water and the impact the sale will have on the investment portfolio. The sales must be reviewed by Valley Water's Investment Committee. A sale will only be initiated after receiving guidance from the committee members and authorization by the Treasurer.

#### **7.16 Downgrade Provisions**

Pursuant to Valley Water's investment policy, the minimum credit criteria for the purchase of municipal, corporate and bank obligations is a rating by two of the three major rating agencies of Aa3 by Moody's Investor Services, AA- by Standard & Poor's Credit Rating Agency and Fitch at the time the investment is purchased. If an outstanding investment is downgraded such that it is below the minimum credit criteria after purchase date, a credit analysis will be performed within two business days and a recommendation made to the Investment Committee on whether the investment will be held or sold. Such a review will give consideration to the time to maturity remaining on the life of the security, specific discussions with Fitch, Standard & Poor's and/or Moody's Investor Services, and credit analysis by staff.

#### **7.17 Dropped Rating**

Pursuant to Valley Water's investment policy, the minimum credit criteria for the purchase of municipal, corporate and bank obligations is a rating by two of the three major rating agencies of Aa3 by Moody's Investor Services and AA- by Standard & Poor's Credit Rating Agency, and Fitch at the time the investment is purchased. If the rating on an outstanding investment is no longer reported by the rating agency for any reason, and the other rating(s) remain the same as at the time of purchase, the investment will remain in the portfolio. If the other rating(s) are downgraded, section 7.15 downgrade provisions will be followed. An analysis of the dropped rating will be initiated to determine the cause of dropped rating, and the findings will be reported to the investment committee within two business days.

### **8.0 COLLATERAL**

As required by Government Code Section 53652, all deposits must be secured at all times with eligible securities pursuant to Government Code Sections 53656 and 53657. Valley Water further restricts collateralization as follows:

#### **8.1 Repurchase Agreements**

All transactions will be collateralized only by Government and Agency securities defined in Sections 7.1 and 7.2 of the Investment Policy at a level equal to, or

greater than, 102 percent of the principal cash value of the investment principal. All transactions will be executed on a delivery versus payment basis and will be safekept by Valley Water's Custodial Agent. All collateral on outstanding repurchase agreements will be priced daily.

## **8.2 Time Certificates of Deposits**

Pursuant to Government Code Section 53653, a Treasurer may, at their discretion, waive security requirements for such portion of deposits that are insured pursuant to federal law, investments in Time CDs may not exceed the current FDIC protected amount. As such, the Treasurer waives the security required by Government Code Section 53652 as long as the depository maintains FDIC insurance for public deposits.

## **8.3 Placement Service Certificates of Deposit**

Effective January 1, 2020, no more than 50% of Valley Water's money may be invested in deposits, including certificates of deposit, through a placement service as authorized under 53601.8 (excludes negotiable certificates of deposit authorized under Section 53601(i)). On January 1, 2031, the maximum percentage of the portfolio reverts to 30%. An example of the placement service is the Certificate of Deposit Account Registry Service (CDARS) program.

## **8.4 Uninvested Balances**

From time to time, Valley Water may leave funds uninvested in its checking account in order to meet anticipated disbursements. Valley Water requires that the depository holding such funds be fully collateralized pursuant to Government Code Section 53652. Eligible securities held as collateral shall have a market value in excess of the total amount of all deposits of a depository as follows:

- Government securities at least 10 percent in excess
- Mortgage backed securities at least 50 percent in excess
- Letters of credit at least 5 percent in excess

# **9.0 SAFEKEEPING AND CUSTODY**

All security transactions entered into by Valley Water will be executed on a delivery versus payment basis and evidenced by safekeeping receipts from Valley Water's custodial agent. The only exception will be investments with the LAIF, non-negotiable Time CDs, and money market accounts.

# **10.0 DIVERSIFICATION**

In an effort to reduce portfolio risk and volatility while maintaining market average rates, Valley Water will diversify its investments with respect to instrument type, issuer, and maturity.

## **10.1 Instrument Type**

To diversify Valley Water's portfolio by type, it should contain a variety of authorized investment instruments. California Government Code

Sections 53601 et seq. and 53635 et seq. limit the maximum amount of some of the authorized investment instruments as a percentage of the total investment portfolio. Valley Water has added additional percentage restrictions on some of the instruments as outlined in section 7 above.

## **10.2 Maximum Maturities**

California Government Code Sections 53601 et seq. and 53635 et seq. state that except as specifically limited in the code sections, no investment shall be made in a security that at the time of investment has more than five (5) years to maturity, unless the Board has given express authority to do so no less than three months prior to the purchase of such security. Valley Water has further limited the maximum maturities on some investment securities as outlined in Section 7 above. LAIF and authorized mutual funds have no specific maturity date and are, therefore, exempt from the five-year limit.

Effective January 2023, Chapter 427, Statutes of 2022 (SB 1489), the *Local Government Omnibus Act*, amended Government Code sections related to the investment of surplus funds by county treasurers. This bill amended Government Code Section 53601 to clarify that a public agency investment's term or remaining maturity is to be measured from the settlement date to final maturity. In addition, this code section was amended to prohibit the purchase of a security with a forward settlement date exceeding 45 days from the time of investment.

## **10.3 Maximum Issuer Limits**

There is no maximum issuer limit for U.S. Treasury obligations, permitted Federal Agency obligations, LAIF, and collateralized Repurchase Agreements outlined in Section 7 above. For all other investment instruments, certain maximum issuer limits are applicable as outlined in section 7 above. Furthermore, as stipulated in Section 7.6 above, no more than the amount insured by the FDIC, which is currently \$250,000 per account, may be invested in Time/Non-Negotiable Certificates of Deposit.

# **11.0 INTERNAL CONTROLS/REVIEW OF INVESTMENT PORTFOLIO**

A system of internal controls will be maintained to ensure compliance with Section 7.0 Authorized Investments, Maturities, Issuer and Portfolio Limits and other federal and state regulations in addition to ensuring prudent cash management and proper segregation of duties.

## **11.1 Investment Committee**

Quarterly review of cash management activity and compliance to the Investment Policy is performed by the Investment Committee through a review of investment status reports supplied to the Investment Committee by the Treasury and Debt Officer.

## **11.2 Treasurer Review**

The CFO or their designate shall perform daily, weekly and monthly reviews of investment transactions executed by the Treasury and Debt Officer to ensure

compliance to all applicable regulations, policies, procedures, and guidelines. In the CFO's absence, the Treasury and Debt Officer will perform the review.

### **11.3 Annual Audit**

Valley Water's portfolio is included in the annual review of Valley Water's financial management program by an independent outside audit firm.

### **11.4 Investment Policy Compliance Checklist**

On a monthly basis, accounting staff reviews the investment portfolio to verify its compliance with the Government Code and the Investment Policy. A report is prepared stating that the portfolio is in compliance, or which items are out of compliance.

## **12.0 PERFORMANCE REPORTING**

The investment portfolio will be designed to obtain a market average rate of return during budgetary and economic cycles, taking into careful consideration Valley Water's risk tolerance and liquidity requirements.

### **12.1 The Benchmark**

Valley Water will strive to maintain a yield within 15 basis points (0.15%) of the 2-year floating average of the twenty-four month Treasury-note rate.

## **13.0 REPORTING**

The Treasurer will ensure that investment reporting is performed in order to provide a monitoring system designed to demonstrate compliance to all applicable laws, policies, procedures, and guidelines.

### **13.1 Weekly Reports**

The Treasury and Debt Officer will provide daily reports of Valley Water's cash position and detailed reports of the investment transactions in the portfolio on a weekly basis to the CFO. This report shall include a list of all purchases, sells, exchanges and maturities for the week being reported.

### **13.2 Monthly Reports**

The Treasury and Debt Officer will provide detailed reports of the investment transactions in the portfolio on a monthly basis to the Board of Directors as required by California Government Code Section 53607. This report shall include a list of all purchases, sells, exchanges and maturities for the month being reported.

### **13.3 Quarterly Reports**

The Treasurer will provide detailed investment reports of the portfolio on a quarterly basis to the Board of Directors pursuant to California Government Code Section 53646. This report shall include type of investment, issuer, date of

maturity, par, dollar amount, and market value including source of the valuation. In addition, this report shall also include a statement denoting the ability to meet the agency's expenditure requirements for the next six (6) months. The quarterly report will also include information on all debt funds held by the trustee, in guaranteed investment contracts (GIC), or with any other agent of Valley Water. This report will be presented to the Investment Committee members in a quarterly meeting.

Effective January 2023, a provision of Chapter 427, Statutes of 2022 (SB 1489) amended Government Code Section 53464(b)(1) to increase the timeline that the treasurer or chief fiscal officer has for presenting a quarterly report to the chief executive officer, the internal auditor, and the legislative body of the local agency by 15 days, from 30- to 45 days following the end of the quarter.

#### **13.4 Annual Report**

The Investment Policy will be presented to the Board at a public meeting on an annual basis.

### **14.0 STATEMENT OF DERIVATIVES INVESTMENT GUIDELINE**

Valley Water will not invest funds in derivative products based on the following definition of a derivative:

A derivative is a security or a financial arrangement whose value is linked to, or derived from, some underlying index or benchmark. Such examples are floating rate notes whose interest payments may fluctuate in an inverse or a linear relationship to the established benchmark and interest rate swaps. Furthermore, Valley Water will not place funds in securities whose coupons rise or fall based on whether the issuer exercises the call option. This does not include repurchase agreements which are specifically authorized under Section 7.7 of the Investment Policy.

### **15.0 OTHER PROCEDURES**

Valley Water treasury group has compiled an Investment Manual, approved by the Valley Water Investment Committee, which consolidates pertinent procedures related to the cash management function in a single reference manual. Included in this manual is a step-by-step description of the investment process and how investments are identified, chosen, executed, and recorded. Section 2 of this manual gives detailed instructions on completing the daily cash analysis; Section 3 explains preparation procedures for planning to invest; Section 4 details the types of authorized investments; Section 5 explains the process by which the chosen investment transaction is executed and includes delivery and safekeeping instructions; Section 6 lists the accounting procedures for investments; and Section 7 details internal control procedures. Also included in the appendix is a summary of government legislation pertaining to government investing, the Valley Water Investment Policy, and a glossary of key terms.

## **APPENDIX 1** **ENVIRONMENTAL, SOCIAL, GOVERNANCE FACTORS**

### **GUIDING PRINCIPLES**

When evaluating potential investments in corporate and financial institution securities, the Investment Committee shall follow the guiding principles:

#### **Negative Screens**

No investments shall be made in companies significantly involved in the production or sale of fossil fuels, tobacco, and other products that are environmentally harmful. Furthermore, to the extent possible while maintaining adequate safety, liquidity and yield of the portfolio, no investments shall be made in companies with a demonstrated record of the following:

- poor practices with respect to environmental regulation, greenhouse gas emissions, toxins, hazardous waste or environment justice
- human rights abuse, violations of international law, and/or materially or otherwise supporting repressive regimes
- endangering rural people's access to the land, water and other resources on which their livelihoods depend
- violating labor laws, abusing or otherwise mistreating workers and/or preventing or impeding unionization
- discrimination based on sexual orientation, gender, race, ethnicity, age or disability
- practices which have significant negative effects on affected communities, particularly those with minority or low-income residents
- restriction of access to affordable medicine in the developing world

#### **Positive Screens**

To the extent possible while maintaining adequate safety, liquidity and yield of the portfolio, investments shall be made in companies involved in the production of renewable energy and organic food, local food and sustainable agriculture and generally, invest in companies and investments that demonstrate commitment to:

- environmental sustainability, including reducing greenhouse gas emissions and sustainable forestry
- community development and/or investment, particularly in communities with minority or low-income residents
- diversity in hiring, executives and boards with respect to sexual orientation, gender, race, ethnicity
- living wages for all employees and collective bargaining
- transparency and accountability in corporate governance

## ENVIRONMENTAL, SOCIAL, GOVERNANCE (ESG) FACTORS

<b>ENVIRONMENTAL</b>	
<b>Category</b>	<b>Considerations</b>
Climate Change & Pollution	<p>Does the company have a stated commitment to emissions reduction?</p> <p>What is the firm doing to combat climate change?</p> <p>Does the firm participate in carbon crediting/offset programs?</p> <p>Has the company been cited for excessive pollution?</p> <p>Does the company have an emissions reduction program?</p>
Energy Efficiency & Waste Management	<p>Has the firm employed energy efficient design or retrofits in its buildings?</p> <p>Does the firm participate in E-Waste recycling programs?</p> <p>Do the operations require heavy use of chemicals?</p>
Water Use & Management	<p>Where does the company get its water?</p> <p>Have they installed smart filling stations and efficient fixtures?</p> <p>Does the company operate in water-stressed areas?</p>
Land Use & Management	<p>Are company facilities designed to minimize damage to the surrounding habitat?</p> <p>Does the company actively participate in greening or reforestation efforts?</p> <p>Does the company encourage alternative methods of transportation to and from work; if so, does building design facilitate these methods?</p>
<b>SOCIAL</b>	
<b>Category</b>	<b>Considerations</b>
Stakeholder Relations	<p>Are customers treated as key stakeholders in the company?</p> <p>Do minority shareholders have an outlet to voice opinions regarding company operations?</p> <p>Are fair labor standards enforced?</p> <p>Do workers have representation in order to bring concerns to management?</p>
Value Chain Management	<p>Does the firm's supply chain reflect adequate working conditions and respect for human rights?</p> <p>Does the company hold suppliers to stated ethical and moral standards?</p> <p>Does the company have any outstanding litigation over its products; are the products generally safe?</p> <p>Are suppliers practicing sustainable production methods?</p>
Community Impact	<p>Is the firm engaged with local non-profits to combat social issues in the community?</p> <p>Does the company donate a share of profits to advocate for impact issues?</p> <p>Does the company make an effort to hire and promote employees from the surrounding community?</p>
Local/California Business?	In what city is the firm located? Is the business located in the San Jose-San Francisco Metropolitan Statistical Area? Is the business located in California?

CORPORATE GOVERNANCE	
Category	Considerations
Diversity	<p>Are the workplace and board comprised of people from diverse backgrounds and ethnicities?</p> <p>Does the board have a roughly equal number of men and women?</p>
Compensation	<p>What is the ratio of executive pay to worker pay?</p> <p>Is executive compensation based on identifiable metrics?</p> <p>Are employees receiving equal pay for equal work?</p>
Accountability & Audit Quality	<p>Does the company employ a large number of special purpose vehicles and other off-balance sheet entities?</p> <p>Does the audit clearly stake risks to which the firm is exposed?</p>
Cyber/Information Security	<p>Does the company have a stated cyber/information security policy?</p> <p>Has the company been hacked in the last 3 years?</p> <p>What corrections/improvements have been made to prevent future hacks?</p>
Transparency	<p>Are internal discussions about the company kept hidden, or does the company routinely publish information for public consumption?</p> <p>Are the firm's financials easily understood?</p> <p>Is the firm readily accessible and do they respond to requests for comment?</p>

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**APPENDIX 2**  
**ALLOWABLE INVESTMENT INSTRUMENTS PER STATE**  
**GOVERNMENT CODE<sup>A</sup> (AS OF JANUARY 1, 2025) APPLICABLE TO**  
**ALL LOCAL AGENCIES<sup>B</sup>**

Investment Type	Maximum Maturity <sup>c</sup>	Maximum Specified % of Portfolio <sup>D</sup>	Minimum Quality Requirements	Gov't Code Sections
Local Agency Bonds	5 years	None	None	53601(a)
U.S. Treasury Obligations	5 years	None	None	53601(b)
State Obligations— CA and Others	5 years	None	None	53601(c) 53601(d)
CA Local Agency Obligations	5 years	None	None	53601(e)
U.S. Agency Obligations	5 years	None	None	53601(f)
Bankers' Acceptances	180 days	40% <sup>E</sup>	None	53601(g)
Commercial Paper—Non-Pooled Funds <sup>F</sup> (under \$100,000,000 of investments)	270 days or less	25% of the agency's money <sup>G</sup>	Highest letter and number rating by an NRSRO <sup>H</sup>	53601(h)(2)(c)
Commercial Paper—Non-Pooled Funds <sup>I</sup> (min. \$100,000,000 of investments)	270 days or less	40% of the agency's money <sup>G</sup>	Highest letter and number rating by an NRSRO <sup>H</sup>	53601(h)(2)(c)
Commercial Paper— Pooled Funds <sup>J</sup>	270 days or less	40% of the agency's money <sup>G</sup>	Highest letter and number rating by an NRSRO <sup>H</sup>	53635(a)(1)
Negotiable Certificates of Deposit	5 years	30% <sup>K</sup>	None	53601(i)
Non-negotiable Certificates of Deposit	5 years	None	None	53630 et seq.
Placement Service Deposits	5 years	50% <sup>L</sup>	None	53601.8 and 53635.8
Placement Service Certificates of Deposit	5 years	50% <sup>L</sup>	None	53601.8 and 53635.8
Repurchase Agreements	1 year	None	None	53601(j)
Reverse Repurchase Agreements and Securities Lending Agreements	92 days <sup>M</sup>	20% of the base value of the portfolio	None <sup>N</sup>	53601(j)
Medium-Term Notes <sup>O</sup>	5 years or less	30%	"A" rating category or its equivalent or better	53601(k)
Mutual Funds And Money Market Mutual Funds	N/A	20% <sup>P</sup>	Multiple <sup>Q, R</sup>	53601(l) and 53601.6(b)
Collateralized Bank Deposits <sup>S</sup>	5 years	None	None	53630 et seq. and 53601(n)
Mortgage Pass-Through and Asset-Backed Securities <sup>T</sup>	5 years or less <sup>T</sup>	20%	"AA" rating category or its equivalent or better <sup>T</sup>	53601(o)
County Pooled Investment Funds	N/A	None	None	27133
Joint Powers Authority Pool	N/A	None	Multiple <sup>U</sup>	53601(p)
Local Agency Investment Fund (LAIF)	N/A	None	None	16429.1
Voluntary Investment Program Fund <sup>V</sup>	N/A	None	None	16340
Supranational Obligations <sup>W</sup>	5 years or less	30%	"AA" rating category or its equivalent or better	53601(q)
Public Bank Obligations	5 years	None	None	53601(r), 53635(c) and 57603

## Table Notes for Figure 1

<p><sup>A</sup> Sources: Sections 16340, 16429.1, 27133, 53601, 53601.6, 53601.8, 53630 et seq., 53635, 53635.8, and 57603.</p>	<p><sup>M</sup> Reverse repurchase agreements or securities lending agreements may exceed the 92-day term if the agreement includes a written codicil guaranteeing a minimum earning or spread for the entire period between the sale of a security using a reverse repurchase agreement or securities lending agreement and the final maturity dates of the same security.</p>
<p><sup>B</sup> Municipal Utilities Districts have the authority under the Public Utilities Code Section 12871 to invest in certain securities not addressed here.</p>	<p><sup>N</sup> Reverse repurchase agreements must be made with primary dealers of the Federal Reserve Bank of New York or with a nationally or state chartered bank that has a significant relationship with the local agency. The local agency must have held the securities used for the agreements for at least 30 days.</p>
<p><sup>C</sup> Section 53601 provides that the maximum term of any investment authorized under this section, unless otherwise stated, is five years from the settlement date. However, the legislative body may grant express authority to make investments either specifically or as a part of an investment program approved by the legislative body that exceeds this five year remaining maturity limit. Such approval must be issued no less than three months prior to the purchase of any security exceeding the five-year maturity limit.</p>	<p><sup>O</sup> "Medium-term notes" are defined in Section 53601 as "all corporate and depository institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States."</p>
<p><sup>D</sup> Percentages apply to all portfolio investments regardless of source of funds. For instance, cash from a reverse repurchase agreement would be subject to the restrictions.</p>	<p><sup>P</sup> No more than 10% invested in any one mutual fund. This limitation does not apply to money market mutual funds.</p>
<p><sup>E</sup> No more than 30% of the agency's money may be in bankers' acceptances of any one commercial bank.</p>	<p><sup>Q</sup> A mutual fund must receive the highest ranking by not less than two nationally recognized rating agencies or the fund must retain an investment advisor who is registered with the SEC (or exempt from registration), has assets under management in excess of \$500 million, and has at least five years' experience investing in instruments authorized by Sections 53601 and 53635.</p>
<p><sup>F</sup> Applies to local agencies, other than counties or a city and county, with less than \$100 million of investment assets under management. Includes agencies defined as a city, a district, or other local agency that do not pool money in deposits or investment with other local agencies, other than local agencies that have the same governing body.</p>	<p><sup>R</sup> A money market mutual fund must receive the highest ranking by not less than two nationally recognized statistical rating organizations or retain an investment advisor registered with the SEC or exempt from registration and who has not less than five years' experience investing in money market instruments with assets under management in excess of \$500 million.</p>
<p><sup>G</sup> Local agencies, other than counties or a city and county, may purchase no more than 10% of the outstanding commercial paper and medium-term notes of any single issuer.</p>	<p><sup>S</sup> Investments in notes, bonds, or other obligations under Section 53601(n) require that collateral be placed into the custody of a trust company or the trust department of a bank that is not affiliated with the issuer of the secured obligation, among other specific collateral requirements.</p>
<p><sup>H</sup> Issuing corporation must be organized and operating within the U.S., have assets in excess of \$500 million, and debt other than commercial paper must be in a rating category of "A" or its equivalent or higher by a nationally recognized statistical rating organization, or the issuing corporation must be organized within the U.S. as a special purpose corporation, trust, or LLC, have program wide credit enhancements, and have commercial paper that is rated "A-1" or higher, or the equivalent, by a nationally recognized statistical rating organization.</p>	<p><sup>T</sup> Security types authorized under Section 53601(o) that are issued or guaranteed by an issuer identified in subdivisions (b) or (f), are not subject to the limitations placed on privately issued securities authorized in Section 53601(o)(2)(A)(B).</p>
<p><sup>I</sup> Applies to counties or a city and county, and the City of Los Angeles that have \$100 million or more of investment assets under management.</p>	<p><sup>U</sup> A joint powers authority pool must retain an investment advisor who is registered with the SEC (or exempt from registration), has assets under management in excess of \$500 million, and has at least five years' experience investing in instruments authorized by Section 53601, subdivisions (a) to (o).</p>
<p><sup>J</sup> Includes agencies defined as a county, a city and county, or other local agency that pools money in deposits or investments with other local agencies, including local agencies that have the same governing body. Local agencies that pool exclusively with other local agencies that have the same governing body must adhere to the limits set forth in Section 53601(h)(2)(C).</p>	<p><sup>V</sup> Local entities can deposit between \$200 million and \$10 billion into the Voluntary Investment Program Fund, upon approval by their governing bodies. Deposits in the fund will be invested in the Pooled Money Investment Account.</p>
<p><sup>K</sup> No more than 30% of the agency's money may be in negotiable certificates of deposit that are authorized under Section 53601(i).</p>	<p><sup>W</sup> Only those obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), and Inter-American Development Bank (IADB), with a maximum remaining maturity of five years or less.</p>
<p><sup>L</sup> Effective January 1, 2020, no more than 50% of the agency's money may be invested in deposits, including certificates of deposit, through a placement service as authorized under 53601.8 (excludes negotiable certificates of deposit authorized under Section 53601(i)). On January 1, 2026, the maximum percentage of the portfolio reverts back to 30%. Investments made pursuant to 53635.8 remain subject to a maximum of 30% of the portfolio.</p>	

## **EXHIBIT A** **GLOSSARY OF KEY TERMS**

Listed below are commonly used financial terms. For a more comprehensive Glossary, please review the Municipal Securities Rulemaking Board (MSRB) Glossary of Municipal Securities Terms ([https://www.msrb.org/sites/default/files/2022-08/MSRB-Glossary-of-Municipal-Securities-Terms-Third\\_Edition-August-2013.pdf](https://www.msrb.org/sites/default/files/2022-08/MSRB-Glossary-of-Municipal-Securities-Terms-Third_Edition-August-2013.pdf))

**AGENCIES:** Federal agency securities and/or Government-sponsored enterprises.

**ANNUAL COMPREHENSIVE FINANCIAL REPORT (ACFR):** The official annual report of the Valley Water. It includes five combined statements for each individual fund and account group prepared in conformity with GAAP. It also includes supporting schedules necessary to demonstrate compliance with finance-related legal and contractual provisions, extensive introductory material, and a detailed Statistical Section.

**ASKED:** The price at which securities are offered.

**BANKERS' ACCEPTANCE (BA):** A draft or bill or exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill, as well as the issuer.

**BASIS POINTS:** Refers to the yield on bonds. Each percentage point of yield in bonds equals 100 basis points (1/100% or 0.01%). If a bond yield changes from 7.25% to 7.39%, that is a rate of 14 basis points.

**BONDS:** A debt obligation of a firm or public entity. A bond represents the agreement to repay the debt in principal and, typically, in interest on the principal.

**BOND PROCEEDS:** The money paid to the issuer by the purchaser or underwriter of a new issue of municipal securities. These moneys are used to finance the project or purpose for which the securities were issued and to pay certain costs of issuance as may be provided in the bond contract.

**BOOK VALUE:** The value at which a security is carried on the financial records of its owner. This value may be the original cost of acquisition of the security or original cost adjusted by amortization of a premium or accretion of a discount. The book value may differ from the security's current market value.

**BENCHMARK:** A comparative base for measuring the performance or risk tolerance of the investment portfolio. A benchmark should represent a close correlation to the level of risk and the average duration of the portfolio's investments.

**BID:** The price offered by a buyer of securities. (When you are selling securities, you ask for a bid.) See Offer.

**BROKER:** A broker brings buyers and sellers together for a commission.

**BULLET:** A bullet bond is a non-callable bond in which the principal is repaid as a lump sum when the bond matures.

**CALL OPTION:** The terms of the bond contract giving the issuer the right to redeem or call an outstanding issue of bonds prior to its stated date of maturity.

**CALLABLE:** An investment security that contains an option allowing the issuer to retire the security prior to its final maturity date.

**CDARS (CERTIFICATE OF DEPOSIT ACCOUNT REGISTRY SYSTEM):** A private CD placement service that allows local agencies to purchase more than \$250,000 in CDs from a single financial institution (must be a participating institution of CDARS) while still maintaining FDIC insurance coverage. CDARS is currently the only entity providing this service. CDARS facilitates the trading of deposits between the California institution and other participating institutions in amounts that are less than \$250,000 each, so that FDIC coverage is maintained.

**CERTIFICATE OF DEPOSIT (CD):** A short-term, secured deposit in a financial institution that usually returns principal and interest to the lender at the end of the loan period. Certificates of Deposit (CDs) differ in terms of collateralization and marketability. Those appropriate to public agency investing include:

*Negotiable Certificates of Deposit-* Generally, short-term debt instrument that usually pays interest and is issued by a bank, savings or federal association, state or federal credit union, or state-licensed branch of a foreign bank. The majority of negotiable CDs mature within six months while the average maturity is two weeks. Negotiable CDs are traded in a secondary market and are payable upon order to the bearer or initial depositor (investor). Negotiable CDs are insured by FDIC up to \$250,000, but they are not collateralized beyond that amount.

*Non-Negotiable/Time Certificates of Deposit-* CDs that carry a penalty if redeemed prior to maturity. A secondary market does exist for non-negotiable CDs, but redemption includes a transaction cost that reduces returns to the investor. Non-negotiable CDs issued by banks and savings and loans are insured by the Federal Deposit Insurance Corporation up to the amount of \$250,000, including principal and interest. Amounts deposited above this amount may be secured with other forms of collateral through an agreement between the investor and the issuer. Collateral may include other securities including Treasuries or agency securities such as those issued by the Federal National Mortgage Association.

**COLLATERAL:** Securities, evidence of deposit or other property, which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

**COMMERCIAL PAPER:** An unsecured short-term promissory note issued by corporations or municipalities, with maturities ranging from 1 to 270 days.

**CORPORATE NOTES AND BONDS:** Debt instruments, typically unsecured, issued by corporations, with original maturities in most cases greater than one year and less than ten years.

**COUPON:** (a) The annual rate of interest that a bond's issuer promises to pay the bondholder on the bond's face value. (b) A certificate attached to a bond evidencing interest due on a payment date.

**DEALER:** A dealer, as opposed to a broker, acts as a principal in all transactions, buying and selling for his own account.

**DEBENTURE:** A bond secured only by the general credit of the issuer.

**DELIVERY VERSUS PAYMENT:** There are two methods of delivery of securities: delivery versus payment and delivery versus receipt. Delivery versus payment is delivery of securities with an exchange of money for the securities. Delivery versus receipt is delivery of securities with an exchange of a signed receipt for the securities.

**DERIVATIVES:** (1) Financial instruments whose return profile is linked to, or derived from, the movement of one or more underlying index or security, and may include a leveraging factor; or (2) financial contracts based upon notional amounts whose value is derived from an underlying index or security (interest rates, foreign exchange rates, equities or commodities).

**DISCOUNT:** The difference between the cost price of a security and its maturity when quoted at lower than face value. A security selling below original offering price shortly after its sale also is considered to be at a discount.

**DISCOUNT SECURITIES:** Non-interest bearing money market instruments that are issued at a discount and redeemed at maturity for full face value, e.g., U.S. Treasury Bills.

**DIVERSIFICATION:** Dividing investment funds among a variety of securities offering independent returns.

**DURATION:** A measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices.

**FEDERAL CREDIT AGENCIES:** Agencies of the Federal government set up to supply credit to various classes of institutions and individuals, e.g., S&L's, small business firms, students, farmers, farm cooperatives, and exporters.

**FEDERAL DEPOSIT INSURANCE CORPORATION (FDIC):** A federal agency that insures bank deposits, currently up to \$250,000 per deposit.

**FEDERAL FUNDS RATE:** The rate of interest at which Fed funds are traded. This rate is currently pegged by the Federal Reserve through open-market operations.

**FEDERAL HOME LOAN BANKS (FHLB):** Government sponsored wholesale banks (currently 12 regional banks), which lend funds and provide correspondent banking services to member commercial banks, thrift institutions, credit unions and insurance companies. The mission of the FHLBs is to liquefy the housing related assets of its members who must purchase stock in their district Bank.

**FEDERAL NATIONAL MORTGAGE ASSOCIATION (FNMA):** FNMA, like GNMA was chartered under the Federal National Mortgage Association Act in 1938. FNMA is a federal corporation working under the auspices of the Department of Housing and Urban Development (HUD). It is the largest single provider of residential mortgage funds in the United States. Fannie Mae, as the corporation is called, is a private stockholder-owned corporation. The corporation's purchases include a variety of adjustable mortgages and second loans, in addition to fixed-rate mortgages. FNMA's securities are also highly liquid and are widely accepted.

**FNMA** assumes and guarantees that all security holders will receive timely payment of principal and interest.

**FEDERAL OPEN MARKET COMMITTEE (FOMC):** Consists of seven members of the Federal Reserve Board and five of the twelve Federal Reserve Bank Presidents. The President of the New York Federal Reserve Bank is a permanent member, while the other Presidents serve on a rotating basis. The Committee periodically meets to set Federal Reserve guidelines regarding purchases and sales of Government Securities in the open market as a means of influencing the volume of bank credit and money.

**LIQUIDITY:** A liquid asset is one that can be converted easily and rapidly into cash without a substantial loss of value. In the money market, a security is said to be liquid if the spread between bid and asked prices is narrow and reasonable size can be done at those quotes.

**MARKET VALUE:** The price at which a security is trading and could presumably be purchased or sold.

**MASTER REPURCHASE AGREEMENT:** A written contract covering all future transactions between the parties to repurchase—reverse repurchase agreements that establishes each party's rights in the transactions. A master agreement will often specify, among other things, the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller borrower.

**MATURITY:** The date upon which the principal or stated value of an investment becomes due and payable.

**MEDIUM TERM NOTES:** Corporate and depository institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States.

**MONEY MARKET:** The market in which short-term debt instruments (bills, commercial paper, bankers' acceptances, etc.) are issued and traded.

**OFFER:** The price asked by a seller of securities. (When you are buying securities, you ask for an offer.) See Asked and Bid.

**PORTFOLIO:** Collection of securities held by an investor.

**NATIONAL CREDIT UNION ADMINISTRATION (NCIA):** An independent federal agency that insures credit union deposits, currently up to \$250,000 per deposit.

**PRIMARY DEALER:** A group of government securities dealers who submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight. Primary dealers include Securities and Exchange Commission (SEC)-registered securities broker-dealers, banks, and a few unregulated firms.

**PRUDENT PERSON RULE:** An investment standard. In some states the law requires that a fiduciary, such as a trustee, may invest money only in a list of securities selected by the custody state—the so-called legal list. In other states the trustee may invest in a security if it is one which would be bought by a prudent person of discretion and intelligence who is seeking a reasonable income and preservation of capital.

**RATE OF RETURN:** The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity on a bond the current income return.

**REPURCHASE AGREEMENT (RP OR REPO):** A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date. The security "buyer" in effect lends the "seller" money for the period of the agreement, and the terms of the agreement are structured to compensate him for this. Dealers use RP extensively to finance their positions. Exception: When the Fed is said to be doing RP, it is lending money that is, increasing bank reserves.

**REVERSE REPURCHASE AGREEMENT (REVERSE REPO):** A reverse-repurchase agreement (reverse repo) involves an investor borrowing cash from a financial institution in exchange for securities. The investor agrees to repurchase the securities at a specified date for the same cash value plus an agreed upon interest rate. Although the transaction is similar to a repo, the purpose of entering into a reverse repo is quite different. While a repo is a straightforward investment of public funds, the reverse repo is a borrowing.

**SAFEKEEPING:** A service to customers rendered by banks for a fee whereby securities and valuables of all types and descriptions are held in the bank's vaults for protection.

**SECONDARY MARKET:** A market made for the purchase and sale of outstanding issues following the initial distribution.

**SECURITIES & EXCHANGE COMMISSION:** Agency created by Congress to protect investors in securities transactions by administering securities legislation.

**SEC RULE 15C3-1:** See Uniform Net Capital Rule.

**STRUCTURED NOTES:** Notes issued by Government Sponsored Enterprises (FHLB, FNMA, FHLMC, etc.) and Corporations, which have imbedded options (e.g., call features, step-up coupons, floating rate coupons, derivative-based returns) into their debt structure. Their market performance is impacted by the fluctuation of interest rates, the volatility of the imbedded options and shifts in the shape of the yield curve.

**SUPRANATIONALS:** A supranational organization is formed by a group of countries through an international treaty with specific objectives such as promoting economic development. Supranational organizations also issue debt in the United States. The most commonly recognized supranational debt is the International Bank for Reconstruction and Development (IBRD or World Bank), International Finance Corporation (IFC) and Inter-American Development Bank (IADB).

**TREASURY BILLS:** A non-interest bearing discount security issued by the U.S. Treasury to finance the national debt. Most bills are issued to mature in three months, six months, or one year.

**TREASURY BONDS:** Long-term coupon-bearing U.S. Treasury securities issued as direct obligations of the U.S. Government and having initial maturities of more than 10 years.

**TREASURY NOTES:** Medium-term coupon-bearing U.S. Treasury securities issued as direct obligations of the U.S. Government and having initial maturities from two to 10 years.

**UNIFORM NET CAPITAL RULE:** Securities and Exchange Commission requirement that member firms as well as nonmember broker-dealers in securities maintain a maximum ratio of

Indebtedness to Liquid Capital of 15 to 1; also called net capital rule and net capital ratio. Indebtedness is defined as all money owed to a firm, including margin loans and commitments to purchase securities, one reason new public issues are spread among members of underwriting syndicates. Liquid Capital is defined as cash and assets easily converted into cash.

**YIELD:** The rate of annual income return on an investment, expressed as a percentage. (a) INCOME YIELD is obtained by dividing the current dollar income by the current market price for the security. (b) NET YIELD or YIELD TO MATURITY is the current income yield minus any premium above par or plus any discount from par in purchase price, with the adjustment spread over the period from the date of purchase to the date of maturity of the bond.

## EXHIBIT B

### CREDIT RATING SUMMARY

#### SHORT-TERM CREDIT RATING DEFINITIONS

Moody's Rating	Moody's Definition	S&P Rating	S&P Definition	Fitch Rating	Fitch Ratings Definition
P-1	P-1 Issuers (or supporting institutions) rated Prime-1 have a superior ability to repay short-term debt obligations.	SP-1	Strong capacity to pay principal and interest. An issue determined to possess a very strong capacity to pay debt service is given a plus (+) designation.	F1	Highest credit quality. Indicates the strongest capacity for timely payment of financial commitments.
	MIG-1—This designation denotes superior credit quality. Excellent protection is afforded by established cash flows, highly reliable liquidity support, or demonstrated broad-based access to the market for refinancing.		A-1		
	VMIG-1—This designation denotes superior credit quality. Excellent protection is afforded by the superior short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.				
P-2	P-2 Issuers (or supporting institutions) rated Prime-2 have a strong ability to repay short-term debt obligations.	SP-2	Satisfactory capacity to pay principal and interest, with some vulnerability to adverse financial and economic changes over the term of the notes.	F2	Good credit quality. A satisfactory capacity for timely payment of financial commitments, but the margin of safety is not as great as in the case of the higher ratings.
	MIG-2—This designation denotes strong credit quality. Margins of protection are ample, although not as large as in the preceding group.		A-2		
	VMIG-2—This designation denotes strong credit quality. Good protection is afforded by the strong short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.				

Moody's Rating	Moody's Definition	S&P Rating	S&P Definition	Fitch Rating	Fitch Ratings Definition
P-3	P-3 Issuers (or supporting institutions) rated Prime-3 have an acceptable ability to repay short-term obligations.	SP-3	Speculative capacity to pay principal and interest.	F3	Fair credit quality. The capacity for timely payment of financial commitments is adequate; however, near-term adverse changes could result in a reduction to noninvestment grade.
MIG-3	MIG-3—This designation denotes acceptable credit quality. Liquidity and cash-flow protection may be narrow, and market access for refinancing is likely to be less well-established.		A-3		
VMIG-3	VMIG-3—This designation denotes acceptable credit quality. Adequate protection is afforded by the satisfactory short-term credit strength of the liquidity provider and structural and legal protections that ensure the timely payment of purchase price upon demand.				
NP	Issuers (or supporting institutions) rated Not Prime do not fall within any of the Prime rating categories.	B	Only speculative capacity for timely payment.	B	Speculative. Minimal capacity for timely payment of financial commitments, plus vulnerability to near term adverse changes in financial and economic conditions.
	MIG-SG S This designation denotes speculative-grade credit quality. Debt instruments in this category may lack sufficient margins of protection.  VMIG-SG This designation denotes speculative-grade credit quality. Demand features rated in this category may be supported by a liquidity provider that does not have an investment grade short-term rating or may lack the structural and/or legal protections necessary to ensure the timely payment of purchase price upon demand.				

<b>Moody's Rating</b>	<b>Moody's Definition</b>	<b>S&amp;P Rating</b>	<b>S&amp;P Definition</b>	<b>Fitch Rating</b>	<b>Fitch Ratings Definition</b>
		<b>C</b>	Doubtful capacity for payment.	<b>C</b>	High default risk. Default is a real possibility. Capacity for meeting financial commitments is solely reliant upon a sustained, favorable business and economic environment.
		<b>D</b>	Default.	<b>D</b>	Default. Denotes actual or imminent payment default.

## LONG-TERM CREDIT RATINGS

Moody's Rating	Moody's Definition	S&P Rating	S&P Definition	Fitch Rating	Fitch Ratings Definition
<b>Aaa1</b> <b>Aaa2</b> <b>Aaa3</b>	Obligations rated Aaa are judged to be of the highest quality, subject to the lowest level of credit risk.	<b>AAA+</b> <b>AAA</b> <b>AAA-</b>	An obligation rated 'AAA' has the highest rating assigned by Standard & Poor's. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.	<b>AAA+</b> <b>AAA</b> <b>AAA-</b>	<b>Highest credit quality.</b> 'AAA' ratings denote the lowest expectation of credit risk. They are assigned only in cases of exceptionally strong capacity for payment of financial commitments. This capacity is highly unlikely to be adversely affected by foreseeable events.
<b>Aa1</b> <b>Aa2</b> <b>Aa3</b>	Obligations rated Aa are judged to be of high quality and are subject to very low credit risk.	<b>AA+</b> <b>AA</b> <b>AA-</b>	An obligation rated 'AA' differs from the highest-rated obligations only to a small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.	<b>AA+</b> <b>AA</b> <b>AA-</b>	<b>Very high credit quality.</b> 'AA' ratings denote expectations of very low credit risk. They indicate very strong capacity for payment of financial commitments. This capacity is not significantly vulnerable to foreseeable events.
<b>A1</b> <b>A2</b> <b>A3</b>	Obligations rated A are judged to be upper-medium grade and are subject to low credit risk.	<b>A+</b> <b>A</b> <b>A-</b>	An obligation rated 'A' is somewhat more susceptible to the adverse effects of changes in circumstances and economic conditions than obligations in higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.	<b>A+</b> <b>A</b> <b>A-</b>	<b>High credit quality.</b> 'A' ratings denote expectations of low credit risk. The capacity for payment of financial commitments is considered strong. This capacity may, nevertheless, be more vulnerable to adverse business or economic conditions than is the case for higher ratings.
<b>Baa1</b> <b>Baa2</b> <b>Baa3</b>	Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.	<b>BBB+</b> <b>BBB</b> <b>BBB-</b>	An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.	<b>BBB+</b> <b>BBB</b> <b>BBB-</b>	<b>Good credit quality.</b> 'BBB' ratings indicate that expectations of credit risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.

Moody's Rating	Moody's Definition	S&P Rating	S&P Definition	Fitch Rating	Fitch Ratings Definition
Ba1 Ba2 Ba3	Obligations rated Ba are judged to be speculative and are subject to substantial credit risk.	BB+ BB BB-	An obligation rated 'BB' is less vulnerable to nonpayment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions, which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.	BB+ BB BB-	<b>Speculative.</b> 'BB' ratings indicate an elevated vulnerability to credit risk, particularly in the event of adverse changes in business or economic conditions over time; however, business or financial alternatives may be available to allow financial commitments to be met.
B1 B2 B3	Obligations rated B are considered speculative and are subject to high credit risk.	B+ B B-	An obligation rated 'B' is more vulnerable to nonpayment than obligations rated 'BB,' but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.	B+ B B-	<b>Highly speculative.</b> 'B' ratings indicate that material credit risk is present.
Caa1 Caa2 Caa3	Obligations rated Caa are judged to be speculative of poor standing and are subject to very high credit risk.	CCC+ CCC CCC-	An obligation rated 'CCC' is currently vulnerable to nonpayment, and is dependent upon favorable business, financial, and economic conditions for the obligor to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.	CCC+ CCC CCC-	<b>Substantial credit risk.</b> 'CCC' ratings indicate that substantial credit risk is present.
Ca1 Ca2 Ca3	Obligations rated Ca are highly speculative and are likely in, or very near, default, with some prospect of recovery of principal and interest.	CC+ CC CC-	An obligation rated 'CC' is currently highly vulnerable to nonpayment.	CC+ CC CC-	<b>Very high levels of credit risk.</b> 'CC' ratings indicate very high levels of credit risk

Moody's Rating	Moody's Definition	S&P Rating	S&P Definition	Fitch Rating	Fitch Ratings Definition
C1 C2 C3	Obligations rated C are the lowest rated and are typically in default, with little prospect for recovery of principal or interest.	C+ C C-	A 'C' rating is assigned to obligations that are currently highly vulnerable to nonpayment, obligations that have payment arrearages allowed by the terms of the documents, or obligations of an issuer that is the subject of a bankruptcy petition or similar action which have not experienced a payment default. Among others, the 'C' rating may be assigned to subordinated debt, preferred stock or other obligations on which cash payments have been suspended in accordance with the instrument's terms or when preferred stock is the subject of a distressed exchange offer, whereby some or all of the issue is either repurchased for an amount of cash or replaced by other instruments having a total value that is less than par.	C+ C C-	<b>Exceptionally high levels of credit risk.</b> 'C' indicates exceptionally high levels of credit risk.
		D+ D D-	An obligation rated 'D' is in payment default. The 'D' rating category is used when payments on an obligation are not made on the date due even if the applicable grace period has not expired, unless Standard & Poor's believes that such payments will be made during such grace period. The 'D' rating also will be used upon the filing of a bankruptcy petition or the taking of similar action if payments on an obligation are jeopardized. An obligation's rating is lowered to 'D' upon completion of a distressed exchange offer, whereby some or all of the issue is either repurchased for an amount of cash or replaced by other instruments having a total value that is less than par.	D	<b>Default.</b> Indicates a default. Default generally is defined as one of the following: <ul style="list-style-type: none"> <li>Failure to make payment of principal and/or interest under the contractual terms of the rated obligation;</li> <li>The distressed exchange of an obligation, where creditors were offered securities with diminished structural or economic terms compared with the existing obligation to avoid a probable payment default.</li> </ul>

**EXHIBIT C**  
**Top 200 Listed Companies by Estimated Carbon Reserves**

<https://gofossilfree.org/top-200/>

Rank	Coal Companies	Coal Gt CO <sub>2</sub>	Rank	Oil and Gas Companies	Oil Gt CO <sub>2</sub>	Gas Gt CO <sub>2</sub>	Total O&G Gt CO <sub>2</sub>
<b>1</b>	Coal India	43.104	<b>1</b>	Gazprom	7.046	36.844	44.069
<b>2</b>	Adani Enterprises	27.809	<b>2</b>	Rosneft	11.536	5.939	16.776
<b>3</b>	China Shenhua Energy	23.143	<b>3</b>	PetroChina	3.363	4.309	8.066
<b>4</b>	Inner Mongolia Yitai Coal	11.756	<b>4</b>	ExxonMobil	3.956	3.079	7.960
<b>5</b>	China Coal Energy	9.492	<b>5</b>	Lukoil	4.309	2.364	7.115
<b>6</b>	Mechel	9.483	<b>6</b>	BP	5.285	1.280	6.388
<b>7</b>	Exxaro Resources	9.433	<b>7</b>	Royal Dutch Shell	2.112	2.209	4.995
<b>8</b>	Public Power	9.339	<b>8</b>	Petrobras	2.473	1.567	4.349
<b>9</b>	Glencore	8.692	<b>9</b>	Chevron	3.516	0.508	4.045
<b>10</b>	Peabody Energy	8.059	<b>10</b>	Novatek	0.550	3.377	3.927
<b>11</b>	BHP Billiton	7.834	<b>11</b>	Total	2.077	1.755	3.833
<b>12</b>	Evraz	6.102	<b>12</b>	Tatneft	2.491	0.060	2.551
<b>13</b>	Mitsubishi	5.635	<b>13</b>	ENI	1.507	0.997	2.504
<b>14</b>	BUMI Resources	5.566	<b>14</b>	ConocoPhillips	1.522	0.937	2.459
<b>15</b>	Bukit Asam (Persero)	5.320	<b>15</b>	ONGC	1.547	0.823	2.371
<b>16</b>	Yanzhou Coal Mining	5.093	<b>16</b>	Statoil	1.039	0.797	1.836
<b>17</b>	Shanxi Xishan Coal and Electricity	4.570	<b>17</b>	CNOOC	1.066	0.413	1.478
<b>18</b>	Rio Tinto	4.351	<b>18</b>	Sinopec	0.950	0.413	1.362
<b>19</b>	Anglo American	4.259	<b>19</b>	Canadian Natural Resources	0.828	0.297	1.124
<b>20</b>	Kuzbasskaya Toplivnaya	4.186	<b>20</b>	Bashneft	1.007	0.000	1.007
<b>21</b>	Open Joint-Stock Raspadskaya	3.933	<b>21</b>	Repsol	0.315	0.719	1.034
<b>22</b>	DaTong Coal Industry	3.808	<b>22</b>	Inpex	0.514	0.358	0.871

Rank	Coal Companies	Coal Gt CO <sub>2</sub>	Rank	Oil and Gas Companies	Oil Gt CO <sub>2</sub>	Gas Gt CO <sub>2</sub>	Total O&G Gt CO <sub>2</sub>
<b>23</b>	Alliance Resource Partners	3.748	<b>23</b>	Occidental	0.658	0.184	0.842
<b>24</b>	Arch Coal	3.731	<b>24</b>	EOG Resources	0.579	0.209	0.788
<b>25</b>	Jindal Steel & Power	3.596	<b>25</b>	Suncor Energy	0.773	0.002	0.775
<b>26</b>	China Cinda Asset Management	3.409	<b>26</b>	Anadarko Petroleum	0.400	0.328	0.728
<b>27</b>	Alpha Natural Resources	3.385	<b>27</b>	Ecopetrol	0.525	0.190	0.714
<b>28</b>	Vale	3.310	<b>28</b>	Antero Resources	0.178	0.520	0.698
<b>29</b>	Severstal	3.218	<b>29</b>	BHP Billiton	0.278	0.392	0.670
<b>30</b>	Westmoreland Coal	2.632	<b>30</b>	Marathon Oil	0.525	0.134	0.660
<b>31</b>	Teck Resources	2.575	<b>31</b>	Devon Energy	0.331	0.317	0.648
<b>32</b>	Jastrzębska Spółka Węglowa	2.513	<b>32</b>	Imperial Oil	0.616	0.022	0.638
<b>33</b>	Lu'an Environmental Energy	2.439	<b>33</b>	BASF	0.205	0.384	0.589
<b>34</b>	Tata Steel	2.435	<b>34</b>	Apache	0.394	0.187	0.581
<b>35</b>	Adaro Energy	2.207	<b>35</b>	EQT	0.041	0.497	0.538
<b>36</b>	AGL Energy	2.144	<b>36</b>	Range Resources	0.180	0.342	0.522
<b>37</b>	CONSOL Energy Inc.	1.919	<b>37</b>	Chesapeake Energy	0.181	0.329	0.510
<b>38</b>	Cloud Peak Energy	1.886	<b>38</b>	Noble Energy	0.189	0.302	0.492
<b>39</b>	South32	1.845	<b>39</b>	Continental Resources	0.297	0.172	0.468
<b>40</b>	Sasol	1.823	<b>40</b>	Cabot Oil & Gas	0.023	0.428	0.451
<b>41</b>	Yancoal Australia	1.811	<b>41</b>	YPF	0.271	0.167	0.438
<b>42</b>	Beijing Haohua Energy Resource	1.775	<b>42</b>	Hess	0.333	0.085	0.417
<b>43</b>	Whitehaven Coal	1.740	<b>43</b>	OMV	0.256	0.129	0.385
<b>44</b>	CCX Carvão da Colômbia	1.736	<b>44</b>	Cenovus Energy	0.348	0.037	0.385
<b>45</b>	New Hope	1.705	<b>45</b>	Encana	0.142	0.222	0.364
<b>46</b>	ITOCHU	1.562	<b>46</b>	Woodside Petroleum	0.046	0.318	0.363
<b>47</b>	NACCO Industries	1.527	<b>47</b>	Southwestern Energy	0.015	0.322	0.337
<b>48</b>	Resource Generation	1.389	<b>48</b>	KazMunaiGas EP	0.306	0.026	0.333
<b>49</b>	Huolinhe Coal	1.387	<b>49</b>	Whiting Petroleum	0.289	0.036	0.326

Rank	Coal Companies	Coal Gt CO <sub>2</sub>	Rank	Oil and Gas Companies	Oil Gt CO <sub>2</sub>	Gas Gt CO <sub>2</sub>	Total O&G Gt CO <sub>2</sub>
<b>50</b>	PGE	1.386	<b>50</b>	Husky Energy	0.197	0.114	0.311
<b>51</b>	Neyveli Lignite	1.296	<b>51</b>	CONSOL Energy	0.027	0.276	0.302
<b>52</b>	Shanghai Datun Energy Resources	1.293	<b>52</b>	PTT	0.076	0.196	0.272
<b>53</b>	Tongchuan Mining	1.273	<b>53</b>	Murphy Oil	0.173	0.092	0.265
<b>54</b>	Coal of Africa	1.245	<b>54</b>	SK Innovation	0.263	0.000	0.263
<b>55</b>	Aspire Mining	1.238	<b>55</b>	Linn Energy	0.117	0.143	0.260
<b>56</b>	Indika Inti Corpindo	1.182	<b>56</b>	California Resources	0.211	0.039	0.250
<b>57</b>	Datang International Power Generation	1.147	<b>57</b>	Sasol	0.166	0.081	0.247
<b>58</b>	PT. Golden Energy Mines	1.100	<b>58</b>	Pioneer Natural Resources	0.168	0.074	0.242
<b>59</b>	Mitsui	1.016	<b>59</b>	Concho Resources	0.156	0.084	0.239
<b>60</b>	Bandanna Energy	0.971	<b>60</b>	QEP Resources	0.099	0.115	0.214
<b>61</b>	Berau Coal Energy	0.942	<b>61</b>	Crescent Point Energy	0.198	0.016	0.214
<b>62</b>	Kangaroo Resources	0.938	<b>62</b>	EP Energy	0.154	0.051	0.205
<b>63</b>	Open Joint Stock Novolipetsk Steel	0.865	<b>63</b>	WPX Energy	0.081	0.119	0.200
<b>64</b>	Wesfarmers	0.837	<b>64</b>	Tourmaline Oil	0.027	0.168	0.195
<b>65</b>	New World Resources	0.824	<b>65</b>	Newfield Exploration	0.113	0.071	0.184
<b>66</b>	Meijin Energy	0.784	<b>66</b>	Mitsui	0.073	0.109	0.182
<b>67</b>	Mongolian Mining	0.767	<b>67</b>	MEG Energy	0.180	0.000	0.180
<b>68</b>	United RUSAL	0.764	<b>68</b>	Cimarex Energy	0.084	0.083	0.167
<b>69</b>	Jizhong Energy	0.742	<b>69</b>	SM Energy Company	0.093	0.069	0.161
<b>70</b>	ALLETE	0.723	<b>70</b>	Lundin Petroleum	0.155	0.005	0.160
<b>71</b>	Moreton Resources	0.708	<b>71</b>	Det Norske	0.158	0.000	0.158
<b>72</b>	Monnet Ispat & Energy	0.706	<b>72</b>	Santos	0.020	0.130	0.150
<b>73</b>	Sable Mining Africa	0.679	<b>73</b>	Memorial Resource	0.069	0.078	0.148
<b>74</b>	Vedanta	0.674	<b>74</b>	Oil India	0.096	0.049	0.145
<b>75</b>	ArcelorMittal	0.668	<b>75</b>	Ultra Petroleum	0.014	0.127	0.141
<b>76</b>	Coal Energy	0.588	<b>76</b>	Maersk	0.138	0.000	0.138

Rank	Coal Companies	Coal Gt CO <sub>2</sub>	Rank	Oil and Gas Companies	Oil Gt CO <sub>2</sub>	Gas Gt CO <sub>2</sub>	Total O&G Gt CO <sub>2</sub>
<b>77</b>	Shanxi Asian American Daning Energy	0.567	<b>77</b>	GDF SUEZ	0.039	0.097	0.136
<b>78</b>	Hwange Colliery	0.562	<b>78</b>	Energen	0.110	0.024	0.134
<b>79</b>	Energy Australia	0.552	<b>79</b>	Seven Generations Energy	0.070	0.062	0.132
<b>80</b>	Steel Authority of India	0.551	<b>80</b>	National Fuel Gas	0.014	0.117	0.131
<b>81</b>	Indo Tambangraya Megah (Banpu)	0.550	<b>81</b>	MOL	0.079	0.051	0.131
<b>82</b>	PT. Bayan Resources	0.524	<b>82</b>	JX Holdings	0.052	0.073	0.124
<b>83</b>	LG International	0.519	<b>83</b>	Denbury Resources	0.120	0.002	0.122
<b>84</b>	Vimetco	0.512	<b>84</b>	Polish Oil & Gas	0.031	0.091	0.122
<b>85</b>	Kinetic Mines and Energy	0.507	<b>85</b>	ARC Resources	0.045	0.074	0.118
<b>86</b>	Hallador Energy	0.504	<b>86</b>	Oando Energy	0.051	0.064	0.114
<b>87</b>	Southern Copper	0.496	<b>87</b>	Galp Energia	0.100	0.013	0.113
<b>88</b>	Black Hills	0.495	<b>88</b>	SandRidge Energy	0.052	0.061	0.112
<b>89</b>	Matra Eromu ZRT (RWE Power)	0.491	<b>89</b>	Peyto E&D	0.007	0.102	0.110
<b>90</b>	Huadian Power International	0.472	<b>90</b>	Centrica	0.031	0.077	0.108
<b>91</b>	FirstEnergy	0.463	<b>91</b>	Birchcliff Energy	0.011	0.096	0.107
<b>92</b>	Prairie Mining	0.428	<b>92</b>	TAQA	0.057	0.048	0.106
<b>93</b>	Tata Power	0.424	<b>93</b>	DNO International	0.103	0.000	0.103
<b>94</b>	African Rainbow Minerals	0.418	<b>94</b>	Xcite Energy	0.100	0.001	0.101
<b>95</b>	Rhino Resource Partners	0.411	<b>95</b>	Freeport-McMoRan	0.086	0.015	0.101
<b>96</b>	Feishang Anthracite Resources	0.389	<b>96</b>	Oil Search	0.021	0.079	0.100
<b>97</b>	Golden Eagle Energy	0.386	<b>97</b>	PDC Energy	0.062	0.036	0.098
<b>98</b>	Semirara Mining and Power	0.378	<b>98</b>	Painted Pony Petroleum	0.008	0.088	0.095
<b>99</b>	Barmer Lignite Mining	0.369	<b>99</b>	Great Eastern	0.000	0.095	0.095
<b>100</b>	Up Energy Development	0.355	<b>100</b>	Gulfport Energy	0.008	0.085	0.093