

CalPERS' Response to the Taskforce on Climate-Related Financial Disclosure (TCFD) and Senate Bill 964

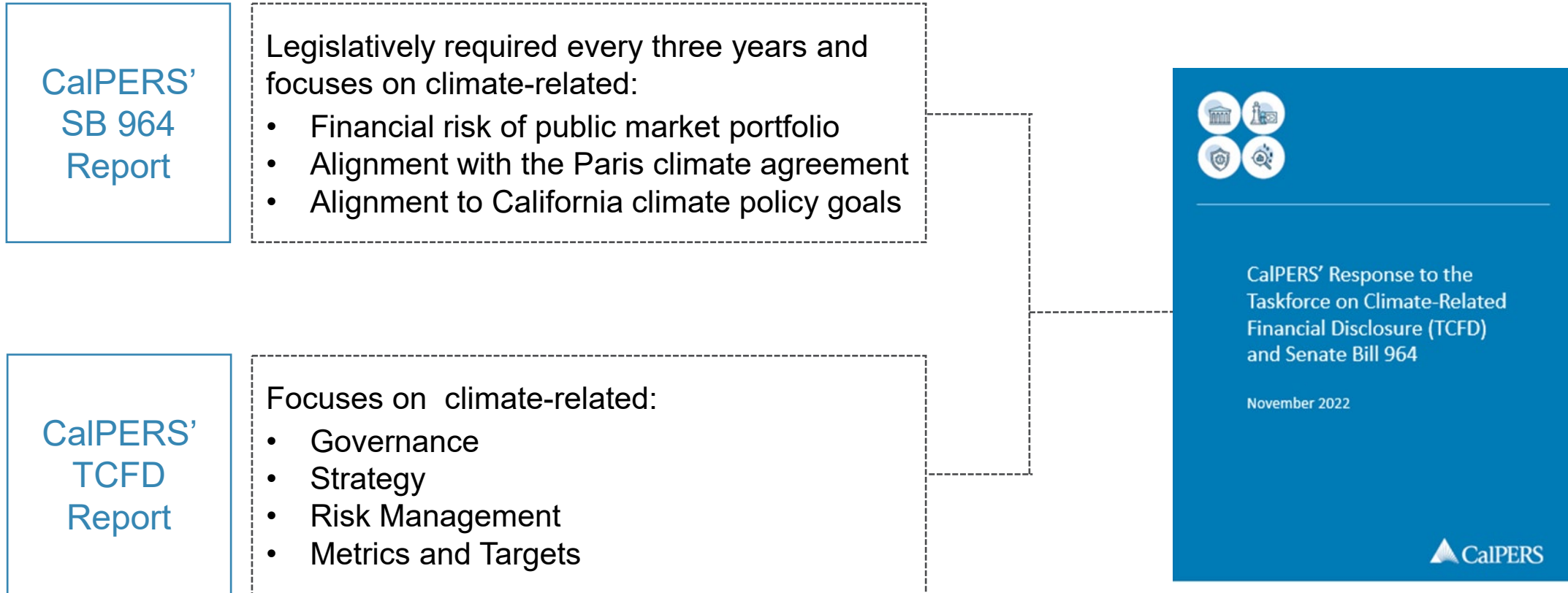
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Sustainable Investing

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Reporting Evolution



CalPERS' Sustainable Investing Approach

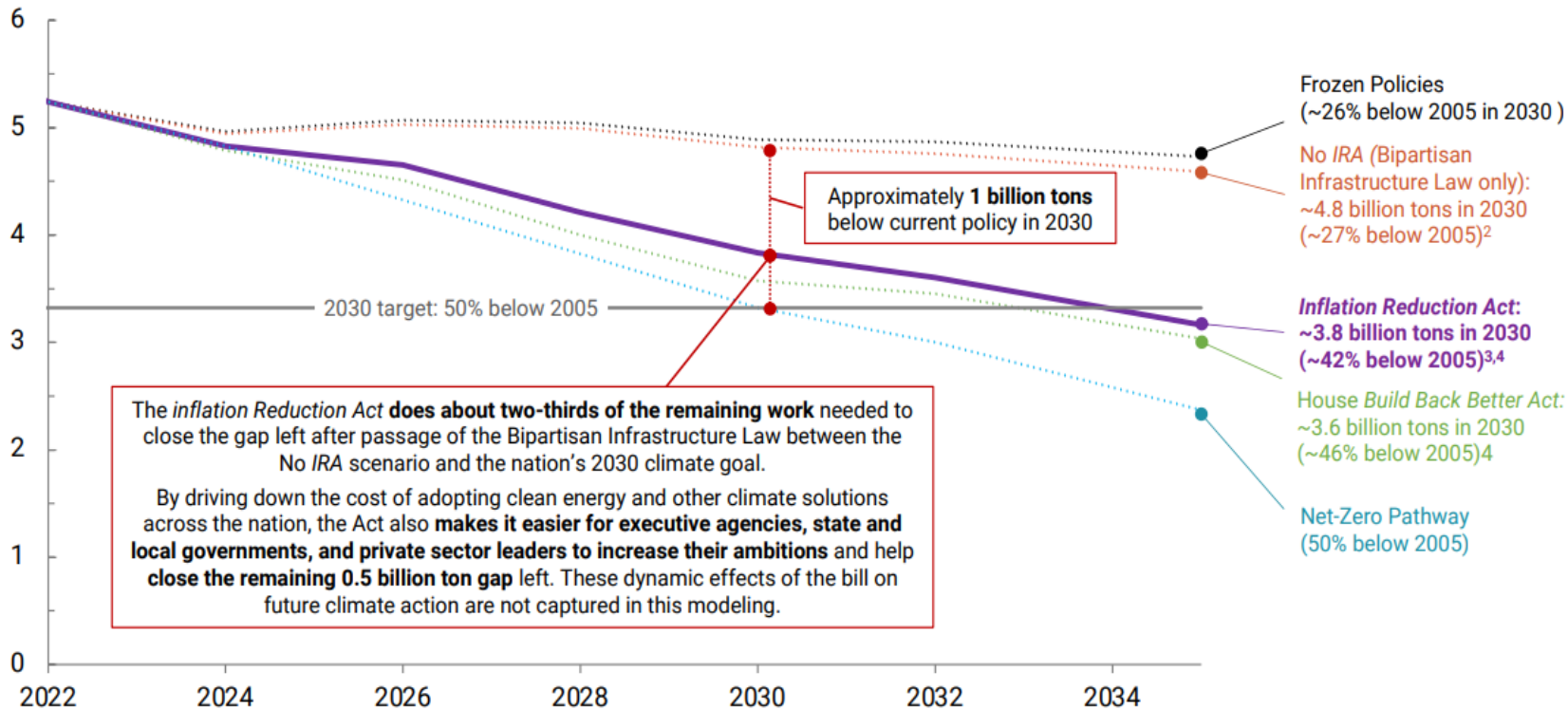
| Advocacy | Engagement | Integration and Investment | Partnership |
|---|--|---|---|
| <p>Objective</p> <p>Provide education and influence governmental bodies to take ambitious inclusive action to address climate change and catalyze a low carbon transition</p> | <p>Objective</p> <p>Ensure portfolio companies consider climate risks and pursue opportunities that create value over the long-term</p> | <p>Objective</p> <p>Mitigate climate-related risks and capture opportunities that arise from a transition to a low carbon economy</p> | <p>Objective</p> <p>Utilize aligned investors and organizations to share experiences, pool resources, and amplify our influence throughout financial markets</p> |
| <p>Tools & Levers</p> <ul style="list-style-type: none"> • Comment letters • Meetings with policy makers, regulators and stakeholders • Staff participation on key committees | <p>Tools & Levers</p> <ul style="list-style-type: none"> • Engage corporates, management and boards of directors • Proxy voting • Exempt solicitations • Shareowner Proposals | <p>Tools & Levers</p> <ul style="list-style-type: none"> • Investments: Allocation and security selection • Manager selection and expectations • Investment due diligence and processes • Sustainable Research | <p>Tools & Levers</p> <ul style="list-style-type: none"> • Coalitions • Working groups • CA 100+, Ceres, UN NZ AOA, PRI, ICGN, UN GISD, EDCI, IIAG, NCREIF PREA, and more |

Strategy: Advocacy

Inflation Reduction Act (IRA)

Modeled Net U.S. Greenhouse Gas Emissions (Including Land Carbon Sinks)

billion metric tons CO₂-equivalent (Gt CO₂-e)¹



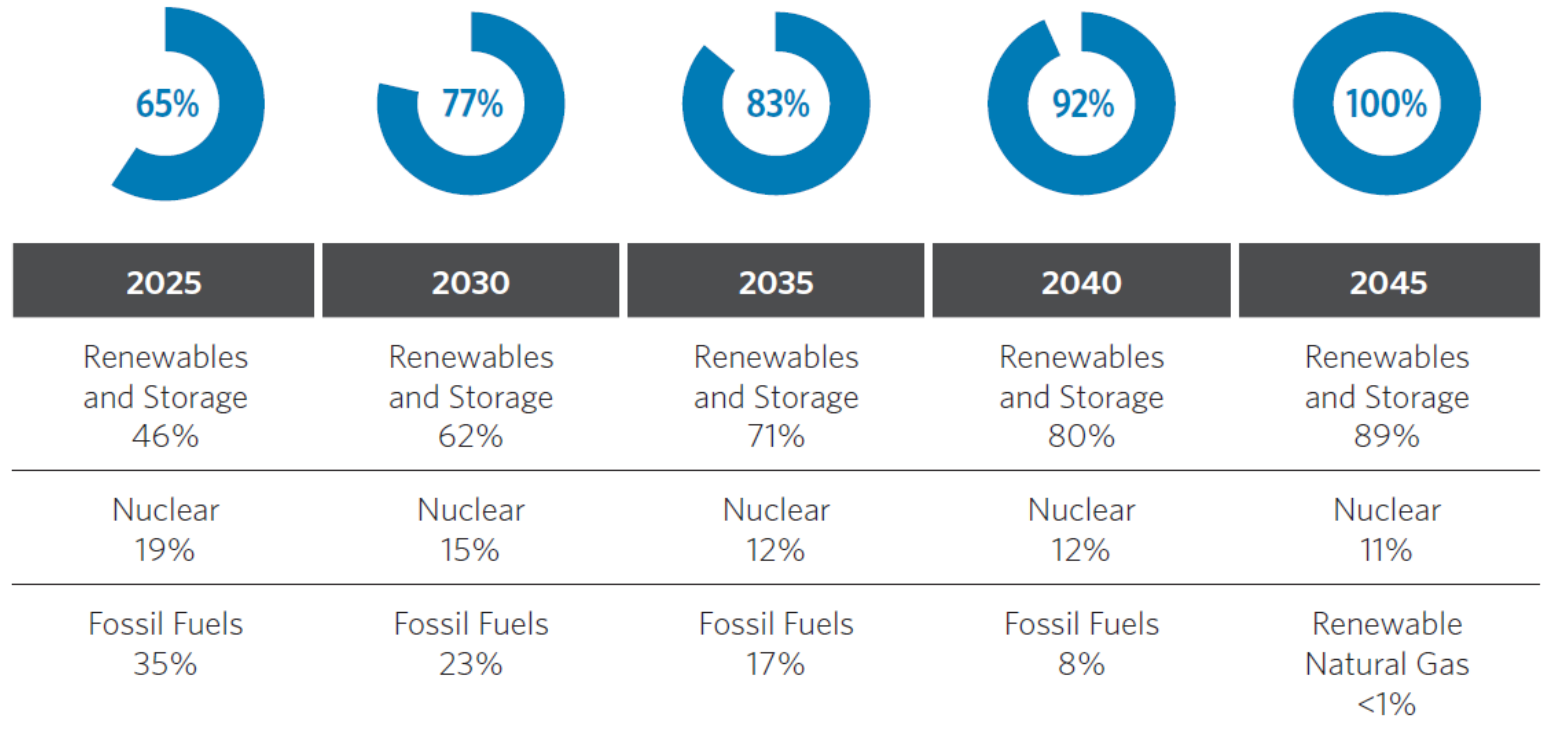
IRA Impact

- \$369 billion investment in climate, clean energy, and environmental justice
- Drive ~42% U.S. GHG emissions reduction compared to 2005
- Creates incentives for prevailing wages and job creation
- Creates 10 years of underwriting certainty
- Tax credit changes → Includes direct pay and transferability provisions → Tax exempt organizations will receive credits in the amount equal to the tax benefits they would have received
- Provides CalPERS with an added incentive to invest in certain renewable projects.

Strategy: Engagement

NextEra Energy Decarbonization Milestones with Projected Generation (GWh) by Fuel Type through 2045

NextEra Energy is the first company committed to moving past net zero all the way to Real Zero



Strategy: Integration and Investment

CalPERS exposure to low-carbon and climate solutions investments

Global Equity

\$18.9 billion of our Global Equity portfolio is invested in companies designated as Low-Carbon Solutions

Global Fixed Income Corporate

\$1.2 billion of our Global Fixed Income Corporate Credit portfolio is invested in companies designated as Low-Carbon Solutions

Real Estate

More than 37%, or \$17.9 billion of the Real Estate portfolio net asset value, is invested in assets that have sustainability certifications

Infrastructure

More than 51%, or \$4.76 billion of the Infrastructure portfolio net asset value, is invested in renewable energy, energy efficiency infrastructure, sustainability certified, and carbon-neutral assets



- Low-carbon and climate solutions investments full methodology is provided in CalPERS' Response to the Taskforce on Climate-Related Financial Disclosure (TCFD) and Senate Bill 964 glossary.
- Public Markets used MSCI's Low-Carbon Transition Risk framework to assess our exposure to climate solutions
- Private Markets referenced the green project categories from the Green Bond Principles to assess exposure to low-carbon and climate solutions investments

Strategy: Partnerships



- CalPERS convened and co-founded [Climate Action 100+](#) in order to scale up engagement with the world's largest greenhouse gas emitters
- Investor-led initiative is represented by 700 investors with \$68 trillion in assets and is engaging 166 companies



- CalPERS co-founded the [ESG Data Convergence Initiative](#) in 2021
- Initiative represents 215 general and limited partners, and more than 2,000 portfolio companies
- Creates a critical mass of meaningful, performance based, comparable ESG data from private companies

UN-convened Net-Zero
Asset Owner Alliance

- CalPERS was a founding member of the [UN Net Zero Asset Owner Alliance](#).
- Alliance is a group of 74 institutional investors with \$10.6 trillion in asset under management that is committed to accelerating decarbonization in line with limiting global warming to 1.5 degrees Celsius (°C) by 2050

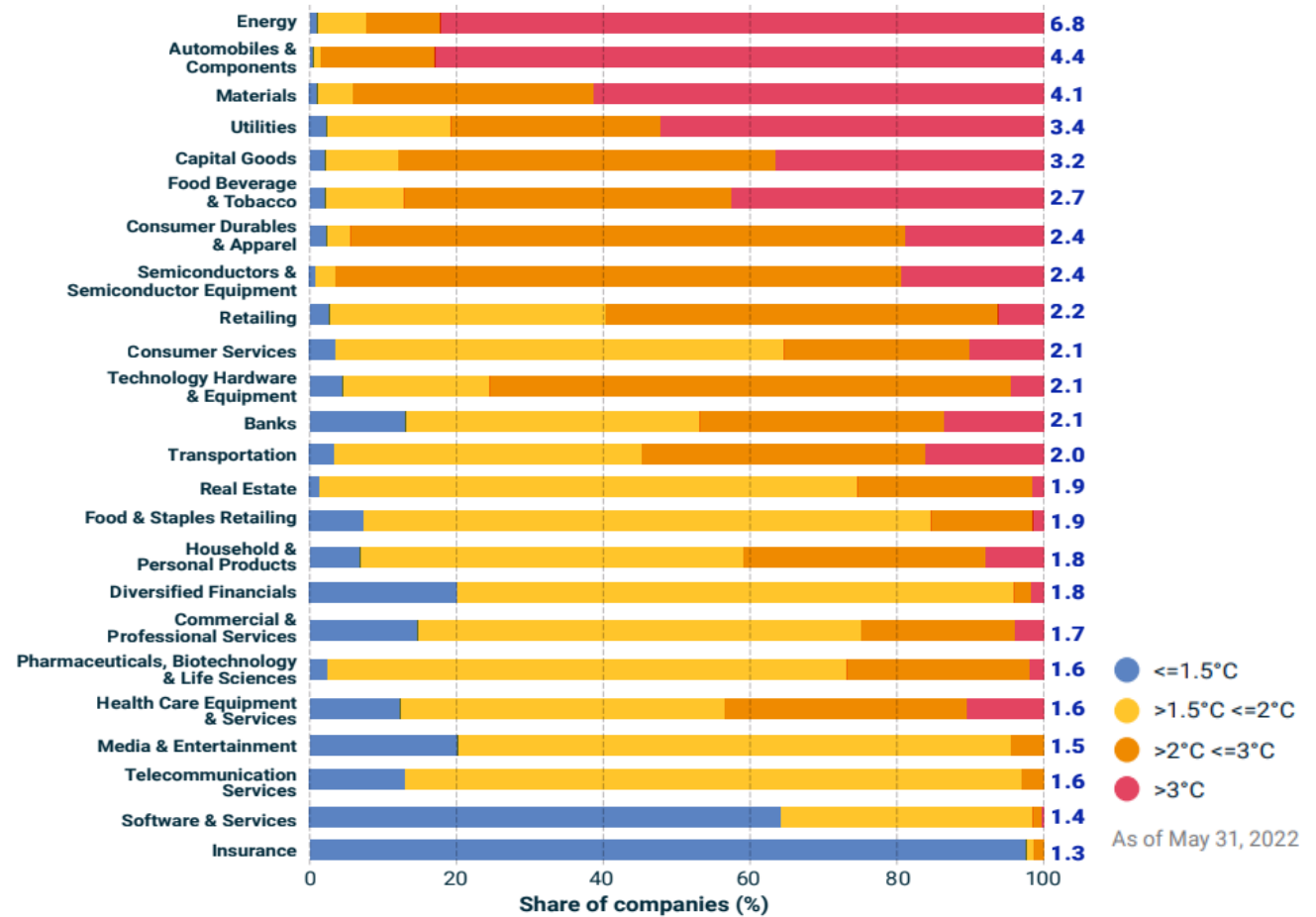
Risk Management: Alignment with the Paris Agreement

Climate Indicators

CalPERS' Global Equity Implied Temperature Rise **2.6°C**

MSCI All Country World Investable Market Index (ACWI IMI) Implied Temperature Rise **2.9°C**

MSCI ACWI IMI Implied Temperature Rise by Industry



- Source: MSCI ESG Research, [The MSCI Net-Zero Tracker](#), June 2022, p. 7.
- Based on MSCI All Country World Investable Market Index (ACWI IMI). With 9,189 constituents, the index covers approximately 99% of the global equity investment opportunity set.

Metrics and Targets: Carbon Footprints

CalPERS' Global Equity Portfolio Carbon Footprint (Financed Emissions)

| Global Equity Portfolio | Total Financed Carbon Emissions (tons CO2e) | Financed Carbon Emissions (tons CO2e/\$M invested) |
|-------------------------|---|--|
| Scope 1+2 | 12,702,548 | 52.8 |
| Scope 3 - upstream | 20,763,982 | 86.3 |
| Scope 3 - downstream | 41,584,832 | 172.9 |

Benchmarking

- CalPERS' Global Equity Portfolio is **11% lower** than MSCI ACWI IMI for Scope 1+2 emissions.
 - 10.2% lower for Scope 3 – upstream emissions
 - 35.7% lower for Scope 3 – downstream emissions.

Decreasing CalPERS' Carbon Emission Intensity (Weighted Average Carbon Intensity)

CalPERS' Global Equity Portfolio

- **30% decrease** in Weighted Average Carbon Intensity since 2015

CalPERS' Global Fixed Income Corporate Portfolio

- **51% decrease** in Weighted Average Carbon Intensity since 2017



- Carbon footprint based on MSCI Climate Risk Report and tools as of Dec 31, 2021
- Financed Emissions used EVIC (Enterprise Value Including Cash) methodology and approximately 99.7% of the Global Equity portfolio was covered by the assessment
- Weighted average carbon intensity (WACI) approach across scope 1+2 emissions based on tons CO2e / \$M sales

Summary and Next Steps

Summary

- CalPERS' Sustainable Investing approach is having an impact on lowering real economy emissions and reducing risk for CalPERS' Total Fund. At the same time, the world is not on a 1.5°C by 2050 trajectory

Next Steps

- **Advocacy:** SEC Climate Disclosure Final Ruling, COP27-28, CA Net Energy Metering 3.0, Potential Federal Energy Transmission Bill
- **Engagement:** Climate Action 100+ Phase 2, Increasing company commitments to net zero
- **Integration and Investment:** Carrying out multiple internal Sustainability and Net Zero-related business initiatives that will be reported on in the future
- **Partnerships:** Continue driving adoption of ESG Data Convergence Initiative. Review initial assessment results and work with general partners to understand strategy to improve results and drive value creation
- **Hiring Sustainable Investing MID and developing next phase of CalPERS' climate strategy**

Questions

Appendix

