

UNIVERSITY
OF
CALIFORNIA

Sustainability impacts investing.

The world around us is changing—profoundly, and undeniably. Irresistible forces of transformation are converging on many fronts at once—technical, environmental, economic, political, demographic, you name it. The changes are global in their sweep, but a real and present fact of everyday life in every locale... We live in a crossroads moment. And where we end up is not predestined. Will we find new ways to work and live together... to build a prosperous, hopeful society that embraces diversity, not runs from it? To harness technology for the benefit of all, and not just for the fortunes of a few... To protect the environment, even as our growing population places ever greater pressures on its resources? We can shape the answers to these and other fundamental questions. We can shape the future.

Janet Napolitano
President, University of California



Guiding our investment decisions.

The University of California is committed to environmental sustainability, social responsibility and prudent governance at every level of the university's 10 campuses, five medical centers, three national laboratories, and agricultural and natural resources centers.

Under the leadership of Janet Napolitano, we have launched many new ventures in sustainability across the UC system, including the Global Food Initiative and the creation of a Global Climate Leadership Council that will guide UC's efforts to achieve carbon neutrality by 2025. Our campus in Davis, California, has the largest demonstration net zero energy community in the United States. **And, at the Office of the Chief Investment Officer of the Regents, we believe that institutional investors like the University of California are well positioned to provide early-stage capital that can support the transformation of breakthrough technologies into lasting, profitable opportunities for smart investors. That is why we have allocated more than \$1 billion to climate solutions. And, through our UC Ventures program, we are promoting entrepreneurship and innovation at our university.**

The Office of the Chief Investment Officer of the Regents ("OCIO") is guided by these same principles. Sustainability is a fundamental input that guides our investment decision making. While many of our stakeholders focus on sustainability from a values perspective, we consider sustainability in risk assessment and due diligence.

Investing in businesses with principled ethics and sound environmental and social practices simply makes good business sense. While short-term gains can be garnered from businesses taking excessive risks in governance, environmental or social standards, such strategies often end in calamity as demonstrated for long-term investors by destroyed value during the Enron scandal, the 2008 financial crisis and the BP Macondo accident. Such gains can erode quickly and drastically; therefore, we must take a measured approach to the risk and rewards available in the universe of investment options. Even top money managers find that it is not easy to know when to exit such high-risk positions, often leaving their clients exposed to sizable losses. We believe that high-risk holdings are not always in the best interest of pension stakeholders.

We believe that integrating risk evaluation of environmental sustainability, social responsibility and prudent governance (ESG) factors more systematically into our evaluation processes is increasingly necessary to provide the most accurate risk-reward calculation. Failure to do so would conflict with the performance of our duty as fiduciaries by neglecting how risk-adjusted performance of assets might change over the medium and long term. Often relevant externalities are mispriced in the present but can be a factor changing valuation over time.

What do we mean
by “sustainability?”

“Collaboration within the University of California informs our understanding of sustainability and its importance in the world around us. Harnessing the collective wisdom and cutting-edge research of our UC community will deepen our understanding of evolving long-term risks and opportunities such as climate change, water scarcity, energy transitions and food security.”

Amy Myers Jaffe

Senior Advisor, Energy and Sustainability,
Office of the Chief Investment Officer of the Regents
Chair, The Future of Oil and Gas, World Economic Forum (Davos)

The Brundtland Commission defines sustainable development as economic activity that meets the needs of the present without compromising future generations' ability to meet their own needs. We use that same framework to think about our role as “sustainable investors.” We must meet the needs of our current operations and the current requirements of our retirees without compromising our ability to serve future students, staff members and faculty.

There are many viewpoints on how best to implement sustainable investment. We have studied the best ideas from experts, stakeholders and advocates.

We are fortunate that over the past year, our stakeholders—students, faculty, staff and the public—have shared with us their views on how best to manage our investments in ways that effectively promote our common aspiration for a safer and better world while improving returns in the process. We have learned a lot from this exchange of ideas. Our journey to integrate environmental sustainability, social responsibility and prudent governance factors more comprehensively into our risk evaluation process has been enhanced by this dialogue. The process, nonetheless, is complex. It will need to be ongoing and measured rather than a process that can end on a deadline with a singular action. Our policy on environmental sustainability, social responsibility and prudent governance is evolving. We intend to develop expert capabilities that can flexibly

expand and contract to new requirements for knowledge and expertise and best tap the UC ecosystem to optimize access to the specialized knowledge within the UC system.

This document is intended to respond to the ongoing dialogue on how we are integrating environmental sustainability, social responsibility and prudent governance evaluation into our investment decision making.

The beliefs and values that guide us.

“At the University of California we believe that the challenges of environmental sustainability, social responsibility and governance risk represent an opportunity, not a conflict, with fiduciary duty. In fact, we believe that fiduciary duty now requires systematic attention to sustainability factors.”

Jagdeep Singh Bachher

Chief Investment Officer,
Office of the Chief Investment Officer of the Regents

Every investor has core beliefs and values that guide him or her in investment decision-making and selection of investment opportunities or fund managers. Investors who are attentive to changing market conditions must be willing to learn from their experience and new approaches in market research.

For our part, we have learned that strengthening the environmental sustainability, social responsibility and prudent governance component of our risk evaluation improves the clarity of our analysis.

These kinds of evolutionary changes in investing are not new. For example, there was a time not so long ago when pension funds limited investments to holdings that put no capital at risk and would generate predictable returns—such as government bonds and public utilities. More recently, pension funds have favored asset allocation where higher yields can be achieved by having a basket of different kinds of investments whose well-considered risks and time scales balance and offset each other.

We know that asset allocation is an important driver of performance. To make effective investment decisions, we must achieve the appropriate combination of risk and return in our asset allocation. To do this, we must maintain a clear and balanced understanding of stakeholders' unique financial requirements, relevant time horizon, risk tolerances, liquidity and other constraints underlying their investment objectives.

We work with the Committee on Investments of the UC Board of Regents to determine the most appropriate balance of asset allocation strategies and long-term goals to meet the UC community objectives. We implement these strategies in a manner that leverages our size and scale, our ability to take a long term view, and the competitive advantage that comes with being the University of California. All of these considerations require us to keep sustainability in mind as we evaluate new opportunities and risks, and stress-test our existing holdings.

The best investors recognize that markets are constantly fluctuating and that no good idea lasts forever. Understanding how markets are changing is critical to our ability to secure the best results for the university and its many stakeholders. Environmental sustainability, social responsibility and prudent governance factors inform our understanding of the future business environment, and this helps us navigate evolving risks.

Some stakeholders argue that our “fiduciary duty” prevents us from considering any values that are more intrinsic than the best possible risk adjusted returns available in markets. In other words, they say we must earn the most money possible, regardless of the “moral” dimension of the source of those funds. Indeed, there are well-respected studies that prove statistically how exclusionary policies can hurt the performance of pension investment.

But there also are growing reasons to believe that the full remit of fiduciary duty may now require systematic attention to sustainability factors.

And of course, most of us do consider our values and beliefs in our everyday lives; at the Office of the Chief Investment Officer of the Regents, we believe that certain core sustainability values are needed to keep us grounded as we attempt to respond to new and dynamic market conditions. We keep these beliefs in mind as we aim to ensure the best return on investment for our university and its many stakeholders.

**What are the
specific core
sustainability
values and beliefs
that guide our
investment
process?**

We believe that evolving long-term risks and opportunities, such as global climate change, water scarcity, income inequality, and the sharing economy movement, to mention a few, will influence investment returns in the future.

We cannot just ignore sustainability because it doesn't fit neatly into the legacy financial criteria still practiced by many business schools and financial institutions. We must recognize how businesses' sustainability-oriented practices are bound to affect return on capital and bottom lines in the future. Ignoring such factors makes our investing vulnerable to unacceptable levels of risk to unexpected events such as major environmental accidents, sudden disclosures of poor corporate ethics, or critical supply chain disruptions—all of which can cripple returns.

Some of our stakeholders have voiced concerns about how environmental sustainability, social responsibility and prudent governance risks could impact the future growth of our endowment and retirement funds. We have listened carefully to these concerns through town meetings, one-on-one encounters, and written exchanges. We agree that certain kinds of environmental sustainability, social responsibility and prudent governance factors will increasingly become a focus of risk assessment for long-term value creation. We have followed up this process with our own examination of the vast research on risk associated with environmental sustainability, social responsibility, and prudent governance factors. We continue to actively study how our peers and other fund managers are improving measurements of these variables for integration into investment decision making and are working to bring environmental sustainability, social responsibility, and prudent governance factors evaluation

more holistically into our investment culture. This process, however, is not one that can be done rapidly. It requires a thoughtful, careful process that taps the improvements to analysis that can be garnered from environmental sustainability, social responsibility, and prudent governance (ESG) data and learnings, but avoids any pitfalls or unnecessary losses that could come from arbitrarily divesting from holdings without due diligence.

One specific concern that has been raised by stakeholders is that continued investment in fossil fuels will result in ownership of “stranded assets,” that is, assets that will lose their value over time because they will not be able to be monetized into the global marketplace that will have switched to other more climate-friendly alternatives. Fossil fuels should, and will, sunset some day, but today hundreds of millions of people all around the world are highly dependent on existing infrastructure for their mobility, heat and lighting. To transition the world's massive energy and transportation network to low-carbon fuel sources obviously will require multi-generational effort.

Given the long time horizon of the needed transition, we believe that investing in solutions will have more impact than our decisions about how and when we exit certain markets or assets. We recognize that access to long-term capital will be critical to the success of low-carbon fuels, renewable energy assets, energy storage and emerging energy efficiency technologies. Engaging incumbents on best-in-class practices offers some benefits but may not be effective unless appropriate substitutes and alternative businesses can achieve the necessary scale.

In our role as the investment professionals for the University of California, it is hard to miss the fact that there is no shortage of breakthrough technologies being developed in universities, national labs, and garages that could be transformative to the problem of climate change. We believe that a small set of new ventures related to resource innovation—energy, agriculture, waste and water—can “scale” over time to become some of the most profitable companies for generations to come.

In other words, we have the opportunity now to invest in our future and potentially reap large profits as these new “green” ventures and technologies reach millions of consumers. As long term investors, we can play a catalytic role in generating solutions to climate change while also achieving competitive, risk-adjusted, long term investment returns over the next two decades rather than over the next few months.

We believe that investing in climate solutions will have a greater and more positive impact on future generations than simply exiting coal holdings as some other institutions have done.

We have created this document to share with our stakeholder community the societal values and environmental sustainability, social responsibility and prudent governance (ESG) risks that we believe are driving new economic and financial trends and can guide us as we make investment decisions and select fund managers. This list is not intended to be static, but represents important core universal principles we keep in mind as we aim to ensure the best return on investment for our university and its many stakeholders.

Framework for Sustainable Investing

1 Climate change

Continued emissions of greenhouse gases will cause further warming and changes in all components of the climate system.¹ A transition to a lower carbon economy, including low-carbon sources of energy, is necessary to ensure the health and well-being of future generations. Given the scale of existing infrastructure and the challenge to quickly shifting the transportation sector to low-carbon fuel sources, this transition requires a multi-generational effort.

2 Food and water security

Global climate change, population growth and rapid urbanization are intensifying the strain on global water and agricultural systems. Human well-being is inexorably linked to water and food security, and failure to adequately ensure these basic needs for future generations will undermine global economic welfare, human security and political stability.

3 Inequality

Addressing inequality is not only a responsibility but also an opportunity.² Solving inequality of opportunity can create new demographics that can contribute to economic progress and widen the market for goods and services, thereby creating a more profitable and sustainable business climate.

4 Ageing population

Rapid aging of populations will be a transformational force affecting society and the global economy, requiring new approaches to health systems, workforce organization, intergenerational relations and public finance.

5 Diversity

Diversity enhances economic, social and environmental outcomes for business and society.

6 Human rights

Businesses whose profits are derived from direct harm to public safety, the unlawful deprivation of human dignity, or the exploitation of children or other vulnerable workers undermine universally approved United Nations principles and create a serious threat to the conditions needed for a well-functioning, market-based global system.

7 Circular economy

The “take, make, dispose” pattern of growth is an unsustainable economic paradigm. We must transition to a more circular economy in which intelligent design allows us to decouple economic growth and development from consumption of finite resources.

8 Ethics and Governance

Our market economy system relies on trust as a fundamental cornerstone. Good corporate governance and proportionate, transparent and responsible regulation are vital to well-functioning and sustainable financial markets. As long term investors, we seek the sustained returns associated with strong governance, rather than the rapid gains that can vanish quickly if they are rooted in corruption, fraud or falsification. Recent financial crises highlight how destructive such fraud and corruption can be to the proper functioning of credit markets and the preservation of personal and corporate wealth.

1. Intergovernmental Panel on Climate Change (IPCC), the leading informational body for the assessment of climate change. The IPCC was established in 1988 by the United Nations Environment Programme and the World Meteorological Organization (WMO) to provide a clear scientific view on the current state of knowledge on global climate change.

2. World Economic Forum (Davos)



How do we
integrate our
beliefs and
values into our
**investment
strategy?**

Sustainability is not a “checked box,” but rather, a fundamental concern that we incorporate into decision making. We focus particularly on how sustainability can improve investment performance.

We do not seek merely to establish a “sustainability policy” for our holdings, but rather to embed sustainability analysis into our investment culture.

We cannot best meet the needs of our current stakeholders while preserving the needs of future generations of stakeholders simply by creating exclusionary lists or applying software applications that determine “metrics” whose scientific bases are not clear or precise. Rather, we need to integrate sustainability as an integral part of our high performance culture as the best means to achieve the optimum risk-adjusted return that meets the objectives of our various portfolios. By considering sustainability in every decision, we can best meet our obligations to manage the endowment, pension, retirement savings and working capital assets for the university.

It is our duty to ensure that we have sufficient financial growth to provide the retirement income for more than 138,000 UC employees and to support the university’s long-term health and continued excellence by managing its endowment. This important role requires us to be “sustainable investors,” that is, financial managers who recognize the importance of long-term investment horizons in addition to benefits of near term opportunities.

**Our commitment
to **action.****

We are taking actions to be part of the solution.

1

Joining with others to strengthen our voice.

The Office of the Chief Investment Officer of the Regents is a signatory of the United Nations Principles for Responsible Investment (“PRI”) and is participating in a number of additional collaborative initiatives, including the Ceres’ Investor Network on Climate Risk and CDP.

2

Putting our capital to work advancing solutions to the world’s most pressing environmental and societal challenges.

We have committed to allocating \$1 billion over five years to climate change solutions, a decision that was recognized by the White House as part of its Clean Energy Investment Initiative. We are building strategic partnerships with the public sector, with our financial peers, and with industry and academic groups. These strategic partnerships will give us access to new opportunities and magnify our collective voice in the pursuit of sustainability.

3

Leveraging the University of California ecosystem to access and scale sustainable investment opportunities.

We are proud to be a part of the University of California and view collaboration as one of our most valuable resources. As we incorporate the theme of sustainability into our investment culture, we are dedicated to collaborating with the University of California community to deepen our knowledge of ESG issues.



Implementing sustainable investment portfolios.

Investors have an important role to play in influencing the quality, sustainability and continuity of companies and markets. We believe it is our responsibility to use our voice as shareholders to promote transparency and disclosure, corporate social responsibility and corporate sustainability to help ensure a healthy economy and preserve our ability to achieve sustainable long-term returns.

We will develop a set of engagement guidelines and review our proxy voting policy to ensure our engagement with portfolio companies via dialogue, shareholder resolutions and proxy voting is aligned with our sustainability beliefs. We aim to partner with external fund managers, other asset owners and industry initiatives to magnify our voice and influence as shareholders.

We also are convinced that the economy is changing in ways that will benefit companies that are focused on solving sustainability problems. For example, as the economy re-tools, there will be substantial investment opportunities.

Indeed, the magnitude of the investment opportunity is hard to overstate—including in areas such as energy, transport, buildings, agriculture, human capital and others.

Professionals and Partners

We manage our money both internally and externally, drawing on the skills of professionals and partners. The Office of the Chief Investment Officer of the Regents has begun an ongoing dialogue with our managers to ensure they understand the priority we place on sustainability and to make sure we understand how our managers assess ESG risks in the investment process. For those who have not already done so, we will encourage our managers to become PRI signatories and report on their sustainability efforts. We have begun to apply oversight and monitoring of ESG policies of our external managers.

Over time, we will implement asset class-specific manager selection and monitoring guidelines that will, among other steps, integrate ESG criteria into manager due diligence, incorporate ESG criteria into manager agreements, and review manager performance against a set of key ESG performance indicators.

Professors and Scholars

We will continue prioritizing stakeholder engagement and partnering with the University of California community throughout this process as we work to establish the university's leadership on environmental, social and governance issues. We will continue to look to the UC community for advice, counsel and educational materials to inform our sustainability processes.

Peers and Platforms

We are always looking to collaborate and, where possible, invest with like-minded peers. The resource innovation ecosystem will require collaboration among long term investors to align together to deploy capital more efficiently into assets that would be left behind by traditional intermediaries, but hold promise for reducing greenhouse gas emissions at scale.

Fostering Sustainability Culture

We are at the beginning of this journey and have many more steps to take toward fully integrating sustainability into our investment process. We will continue to expand our resources and capabilities around sustainable investment by providing relevant education and training for OCIO staff, utilizing third-party research and tools, and learning from our peers.

Reporting Our Progress

To ensure transparency, accountability and progress, the OCIO will establish a reporting cycle with the Committee on Investments. We also will develop a separate sustainability page on the OCIO website to highlight and report on our sustainable investment efforts and the progress we are making. This resource also will provide links to important peer reviewed research, publications and editorials that can inform our staff, our stakeholders and the public. We hope, through this effort, to take an exemplary leadership role in sustainable investing in a manner that is not just symbolic but realistic and effective.

