

# 2023

## SUSTAINABILITY REPORT



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# INTRODUCTION



Fore River Energy Center, MA

# CEO LETTER

Throughout 2023, Calpine continued to deliver on our commitments to driving sustainability, maintaining reliability and operating the premier, competitive power company in the U.S.

As we reflect upon the past year and celebrate our 40<sup>th</sup> anniversary in 2024, we share an enduring pride in leading a company which has long exemplified environmental stewardship. Since 1984, Calpine has delivered sustainable power nationwide through state-of-the-art, efficient power plants. As the world progresses toward decarbonization and electrification, Calpine continues to play a pivotal role in the energy transition by ensuring a sustainable and reliable power supply as the nation continues to integrate more intermittent resources like wind and solar.

Beyond our fleet of efficient and reliable power plants, in 2023 we remained at the forefront of investing in technologies that will further reduce our environmental impact. Across our footprint, Calpine teams continued to make significant advances on large-scale battery storage and carbon capture and sequestration (CCS) initiatives. We are thrilled that our Baytown and Sutter decarbonization projects were selected by the Office of Clean Energy Demonstrations within the Department of Energy (DOE) to enter into cost-sharing agreements to build, subject to completion of certain milestones, commercial-scale CCS projects with the potential to store up to 2 million and 1.75 million metric tons of carbon dioxide each year, respectively. While we know there will be challenges ahead, we are excited to move these technologies forward as part of the energy transition.

Calpine's retail arms continue to offer empowering energy solutions to our customers to help them achieve their sustainability goals while mitigating risk. In 2023, we launched several custom carbon roadmap solutions and carbon-differentiated product solutions for our customers. Our retail businesses are continually

recognized for their sustainable offerings and practices—evident in accolades such as Calpine Energy Solutions' ongoing status as a CDP Accredited Solutions Provider and receipt of the EcoVadis bronze medal.

Calpine's contributions to sustainability and reliability through the energy transition are driven not only by our capabilities, our assets and our power plants, but also by our employees, who live our ASPIRE values every day. Our ASPIRE values are embedded in our company's policies, practices and business decisions. We are successful because of our people. Accordingly, we remain unwavering in our commitment to cultivate a safe, diverse, inclusive and engaging workplace and culture. In 2023, we continued our efforts in these areas, introducing new employee resource groups (ERGs), hosting our 20<sup>th</sup> Texas Regional Annual Charity Golf Tournament and furthering our engagements in our communities.

As we look to the future, our vision remains clear: to operate the nation's premier, competitive power company. Our focus on reliability, sustainability and customer focused excellence have proven successful in driving our mission forward. We take pride in our 2023 accomplishments and are optimistic about the opportunities ahead. Calpine's unique and integrated approach—leveraging our assets, capabilities, people and partnerships—uniquely positions us to navigate and address the challenges of the energy transition while delivering sustainable value to our stakeholders. We thank you for your continued interest in our shared goals and efforts and look forward to advancing our initiatives to make a positive impact on the environment, society and the economy in the years to come.

Sincerely,

**THAD HILL**

**Executive Chairman** effective October 1, 2024

*Former Chief Executive Officer*



**ANDREW NOVOTNY**

**Chief Executive Officer** effective October 1, 2024

*Former President and Chief Operating Officer*





# 2023 PERFORMANCE HIGHLIGHTS

**\$13.7**

BILLION IN REVENUES

**215,598**

RESIDENTIAL RETAIL CUSTOMERS

**\$2.4+**

MILLION IN CHARITABLE GIVING

**12,940**

COMMERCIAL AND INDUSTRIAL RETAIL CUSTOMERS

**118+**

MILLION MEGAWATT-HOURS (MWH) GENERATED

**2,400+**

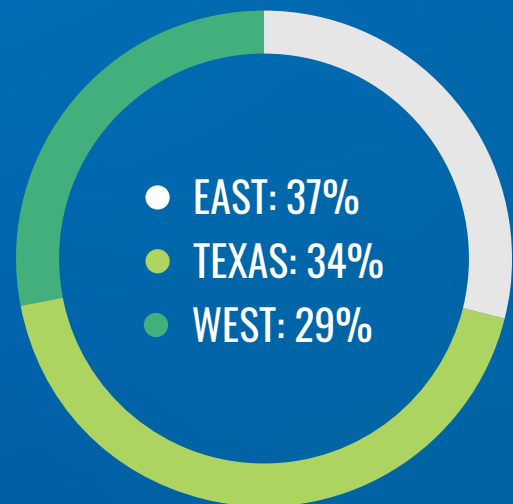
FULL-TIME EMPLOYEES

**75**

POWER PLANTS AND ONE BATTERY STORAGE FACILITY IN OPERATION, ALONG WITH THREE BATTERY STORAGE FACILITIES UNDER CONSTRUCTION

CALPINE ENERGY SOLUTIONS RECOGNIZED BY CDP AS AN ACCREDITED SOLUTIONS PROVIDER AND RECEIVED AN ECOVADIS BRONZE MEDAL FOR ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) POLICIES AND PRACTICES.

## GEOGRAPHIC DIVERSITY OF GENERATION



# ABOUT CALPINE

Calpine is America's premier competitive power company. We own and operate primarily natural-gas fired and geothermal power plants in North America and have a significant presence in major competitive wholesale and retail power markets in California, Texas and the Northeast and Mid-Atlantic regions of the U.S. With 75 power plants and one battery storage facility in operation, along with three battery storage facilities under construction, we are one of the largest power generators in the U.S. as measured by power produced. Calpine sells power and related services to wholesale customers who include commercial and industrial end users, utilities, state and regional wholesale market operators and retail customers. We strive to deliver long-term value to our stakeholders by focusing on operational excellence at our power plants and in our customer and commercial activity.

Since our inception in 1984, we have been an industry leader in environmental stewardship, invested in developing, constructing, owning and operating an environmentally responsible portfolio of flexible and reliable power plants. Our natural gas technologies consist of: simple cycle, combined cycle and cogeneration, which were more efficient and environmentally friendly than traditional coal-fired plants that dominated power generation at the time. Natural gas-fired and steam turbines make up the majority of the Calpine fleet, while our geothermal conventional steam turbines offer a unique option for reliable renewable production. We are among the world's largest owners and operators of power generating industrial gas turbines and cogeneration power plants. Our Geysers assets located in northern California are the largest geothermal power plant complex in the world.

Our assets and our strategy are well aligned with the decarbonizing economy. Electrification will be the primary focus of decarbonization, further increasing the importance of the power sector and electric reliability to our economy as load growth and demand for clean electricity increases. In this context, our natural gas fleet is critical to producing reliable energy in all markets and will be for decades to come.

As we continue to focus on world-class reliability and safety within our gas fleet, we also work to further decarbonize our business mix. Electrification will be a primary focus of decarbonization, further increasing the importance of the power sector and electric reliability to our economy as load growth and demand for clean electricity increases. This includes a major effort to organically grow our retail businesses, modest expansion of our geothermal footprint at The Geysers, our large-scale energy storage development effort—initially in the West and with expectations to expand in the East, and potentially most significantly, the industry leading effort to attempt to develop profitable CCS facilities at natural gas plants. We know fighting climate change and driving decarbonization hinges on reliable, sustainable and affordable energy—and Calpine is well-positioned to continue serving as a leader in the sector for decades to come.

## OUR GOAL

Our goal is to continue being recognized as the premier competitive power company in the U.S. by our stakeholders, including our employees, customers, policymakers and communities, among others. To achieve this goal, we strive to:

- Be the best power plant operator on the planet.
- Excel as a customer-centric business across wholesale and retail operations.
- Innovate and evolve in delivering reliable and sustainable energy solutions.
- Live by our ASPIRE values.

## OUR VALUES

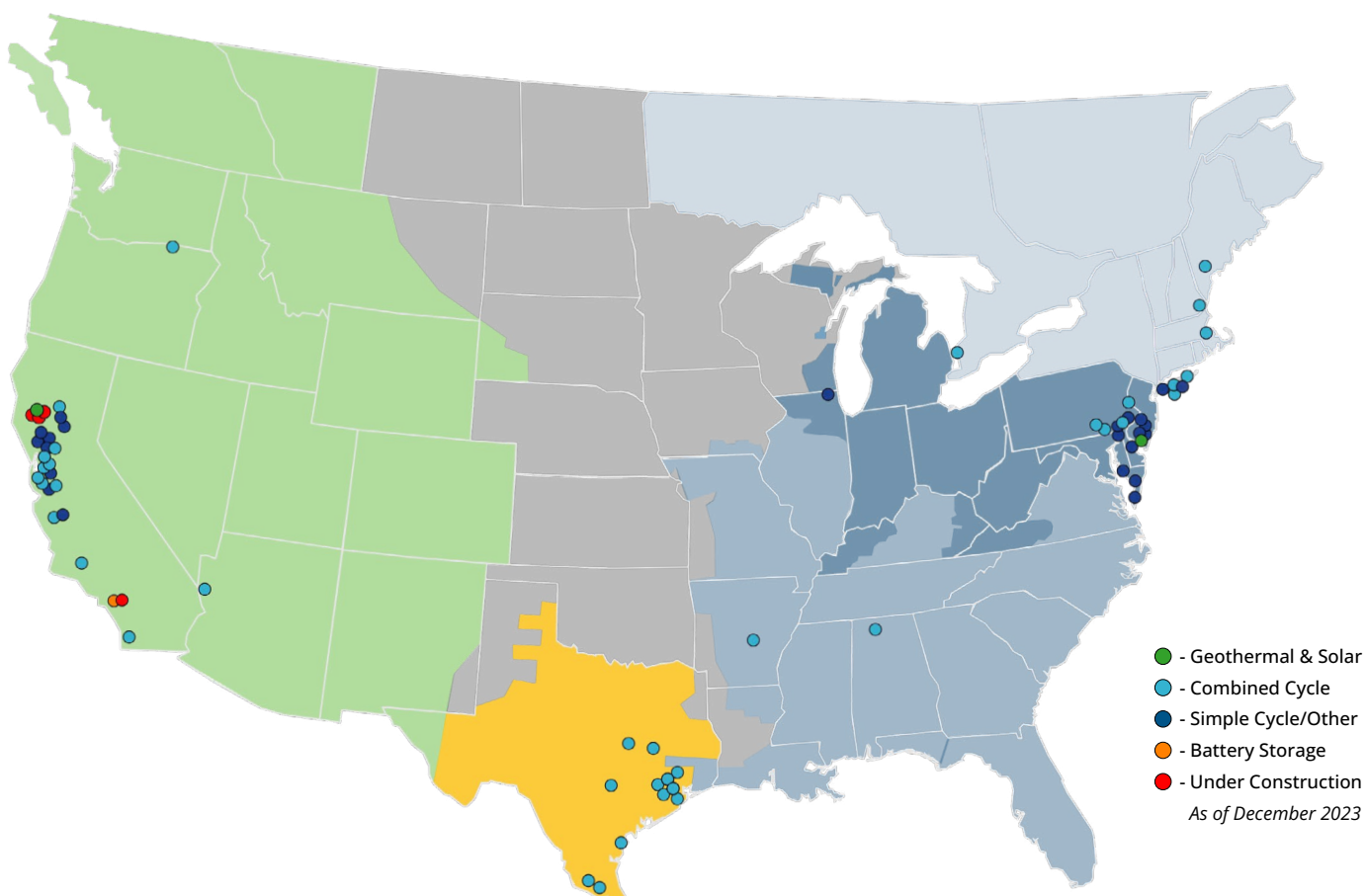
- A** ACCOUNTABILITY
- S** SAFETY
- P** PASSION
- I** INTEGRITY
- R** RESPECT
- E** ESPIRIT DE CORPS

## GENERATED ELECTRICITY

REFERENCE		2021	2022	2023
Total electricity generated		105,608,579 MWh	107,460,740 MWh	118,165,601 MWh <sup>(17)</sup>
Percentage of generation capacity by major energy source				
Combined Cycle Non-Cogeneration	SASB IF-EU-000.D	65% (16,903 MW)	65% (16,921 MW)	66% (17,448 MW)
Combined Cycle Cogeneration		23% (5,949 MW)	23% (5,957 MW)	22% (5,957 MW)
Simple Cycle/Other		9% (2,365 MW)	9% (2,365 MW)	9% (2,635 MW)
Renewables and Storage		3% (749 MW)	3% (769 MW)	3% (809 MW)
Percentage of electricity generated in regulated markets		5,031,899 MWh produced in regulated markets, 4% of total	6,313,930 MWh produced in regulated markets, 6% of total	6,636,597 MWh produced in regulated markets, 6% of total
Total wholesale electricity purchased	SASB IF-EU-000.E	54,968,160 MWh	56,361,714 MWh	52,600,060 MWh

## OUR LOCATIONS

As of December 31, 2023, our wholesale power plant portfolio consisted of 75 power plants and one battery storage facility in operation along with three battery storage facilities under construction. We had an aggregate generation capacity of 26,579 MW and 718 MW of battery storage capacity under construction.





# SUSTAINABILITY AT CALPINE

Calpine was founded 40 years ago on principles of sustainability, and we remain committed to these principles today. Our 2023 Sustainability Report focuses on our approach for managing environmental, social and governance topics across our business and features relevant performance highlights and sustainability data from the past calendar year. Our reporting is informed by topics considered to be significant by our business and our stakeholders, which were identified through a materiality assessment led by a third-party consultant in 2020.



## ENVIRONMENT

- Air Quality
- Climate Strategy
- Greenhouse Gas Emissions
- Water Management



## SOCIAL

- Community Relations
- Corporate Philanthropy
- Diversity and Inclusion
- Emergency Preparedness and Response
- Employee Relations
- Occupational Health and Safety



## GOVERNANCE

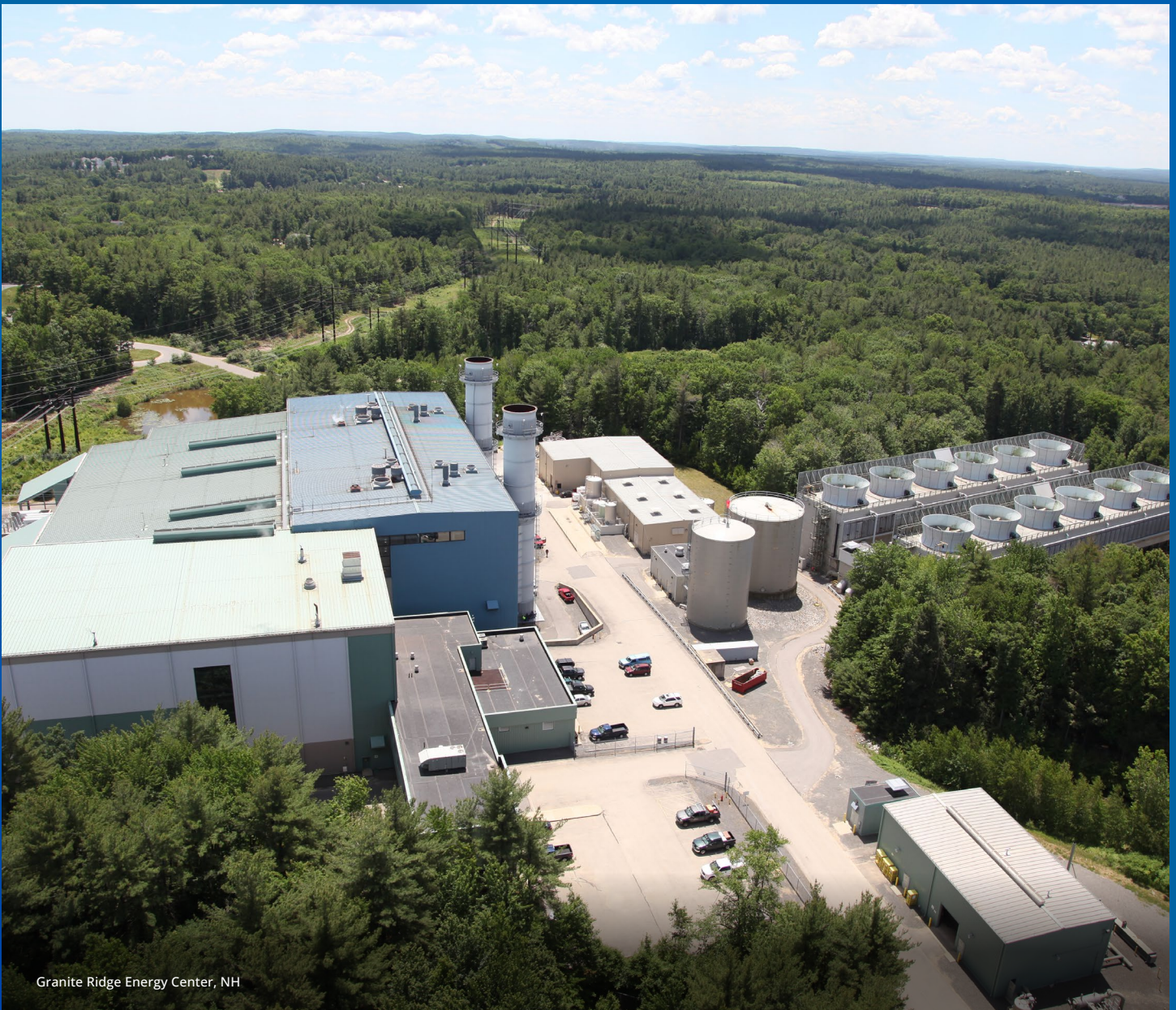
- Business Ethics
- Corporate Governance
- Cybersecurity
- Government Relations and Public Policy
- Risk Management
- Supply Chain Management
- Technology Adoption

The Geysers, CA



- Climate Strategy and GHG Emissions →
- Environmental Management →
- Air Quality →
- Water Management →
- Technology Adoption →
- Retail Services →

# ENVIRONMENT



Granite Ridge Energy Center, NH

# CLIMATE STRATEGY AND GHG EMISSIONS

At Calpine, we acknowledge the pressing challenge climate change poses to our world and our business. We are steadfast in our commitment to addressing this challenge and developing long-term and forward-thinking solutions through cleaner energy and advanced technology.

## CALPINE RELIABILITY ENABLING THE ENERGY TRANSITION

**Electrification will be the primary focus of decarbonization, further increasing the importance of the power sector and electric reliability to our economy as demand for clean electricity increases. In this context, our natural gas fleet is critical to producing reliable energy in all markets and will be for decades to come.**

## WHAT WE STAND FOR

### Reliability

Americans should not have to pick between reliable and affordable clean energy. We are committed to providing electric reliability and innovative sustainability solutions, both of which will accelerate the country's transition to clean energy. We operate the world's largest geothermal power plant complex and have invested in cutting-edge energy storage solutions to keep the power grid up and running during peak periods of use.

### Carbon Capture and Sequestration

Calpine is at the forefront of investing in technologies that will further reduce our environmental impact, including battery storage and potentially carbon capture sequestration. We have completed or commenced front-end engineering design studies for post-combustion carbon capture technology at five facilities. Our fleet includes multiple facilities located proximate to favorable carbon dioxide sequestration geology, and we have identified a number of sites where post-combustion carbon capture technology is potentially favorable.

### Economy-Wide Focus on Emissions

Calpine believes in an economy-wide approach to tackling climate change. To rapidly expand the role of intermittent sources like solar and wind, we must have backup capacity against blackouts and spikes in electricity costs that would threaten our progress toward the nation's climate goals. Our nation's cleanest and most energy-efficient gas-fired power plants are ready to fill that need.

### Markets over Mandates

We believe markets are the best mechanism for incentivizing investment and reducing emissions—including CO<sub>2</sub>.

### Comprehensive Electrification

To achieve significant reductions in carbon emissions, we must establish comprehensive electrification across sectors such as transportation, the leading source of emissions. For this shift to be effective, the nation must substantially increase generation capacity to power vehicles, heat homes, support commercial spaces and supply the burgeoning technology sector.



## CALPINE'S DECARBONIZATION STRATEGY

Our decarbonization strategy has remained consistent over time. We are transitioning toward a low-carbon economy and expanding our operations at The Geysers. The central focus points of our decarbonization strategy include making advancements in battery storage, progressing our efforts in CCS and supporting our customers by responsibly managing their energy portfolios. Please read more about these themes below.

### CARBON CAPTURE AND SEQUESTRATION

Calpine is actively advancing the development of new carbon capture facilities as well as progressing the deployment of carbon capture technology at existing sites. Learn more about our commitment to CCS in the case studies featured here and by visiting [calpinecarboncapture.com](https://calpinecarboncapture.com).



Sutter Energy Center, CA

## Baytown and Sutter Decarbonization Projects Selected by the DOE to Advance Carbon Capture and Sequestration Infrastructure

In December 2023, Calpine celebrated a significant milestone in the advancement of CCS technology when the DOE's Office of Clean Energy Demonstrations selected Calpine's Baytown and Sutter Decarbonization Projects to enter into cost-sharing agreements that add up to \$270M each to build commercial scale CCS technology.

Located in Baytown, Texas, the Baytown Energy Center is an existing 896-megawatt natural gas combined heat and power facility that provides steam and power to the adjacent Covestro chemicals manufacturing facility as well as power to the Texas electric grid. Adding post-combustion carbon capture equipment to this facility would reduce the carbon dioxide emissions intensity of two of its three combustion turbines at a design capture rate of 95%, resulting in low CO<sub>2</sub> steam and power for chemicals manufacturing and power for the electric grid. After being captured, the CO<sub>2</sub> will be permanently sequestered.

The Sutter Decarbonization Project plans to retrofit the Sutter Energy Center, an existing 550-megawatt natural gas combined-cycle energy facility located in Sutter County, California. Utilizing ION Clean Energy's post combustion carbon capture technology, the Sutter Decarbonization Project is critical to achieving California's ambitious emissions goals while maintaining grid reliability and affordable customers rates.

While many milestones remain, by securing DOE support Calpine is well-positioned to play a pivotal role in national and regional efforts to transition to a low-carbon future.

## Project Enterprise Unveiled at Los Medanos Energy Center

In a bold step towards achieving California's ambitious net-zero greenhouse gas emissions goals, Calpine partnered with ION Clean Energy to launch Project Enterprise, a pioneering carbon capture demonstration pilot. Located at the Los Medanos Energy Center (LMEC), this innovative project is designed to test and validate ION Clean Energy's advanced carbon dioxide capture technology. Over approximately 15 months, the pilot will monitor emissions and operational requirements to capture at least 95% of CO<sub>2</sub> emissions from LMEC.

The \$25 million Project Enterprise is funded by a DOE-NETL Cooperative Agreement with contributions from ION Clean Energy and Calpine. By utilizing ION Clean Energy's proprietary solvent-based technology, the project aims to demonstrate the feasibility of commercial-scale CCS in California. Successful validation of this technology could position California as a key hub for further DOE funding and CCS infrastructure development, crucial for meeting the state's environmental targets while ensuring reliable energy production and position Calpine as a pioneer in the space.

The success of Project Enterprise at LMEC will inform future CCS infrastructure investments, enabling Calpine and other stakeholders to maximize clean and reliable electricity production across California. This project serves as a critical case study for deploying similar technologies nationwide, supporting the broader mission of achieving a zero-carbon future.



Los Medanos Energy Center, CA



## BATTERY STORAGE

Calpine is leading the way in large battery storage installations. Our pipeline of identified projects is primarily comprised of sites where we have existing land, infrastructure and/or transmission rights, which greatly facilitate the development of new battery storage. Please read more about one of our most significant projects in the case study below.

### CASE STUDY

## The Nova Power Bank



Calpine's Nova Power Bank battery energy storage system (BESS) reflects Calpine's enduring commitment to cleaner energy generation. With phases I-V under construction in 2023, when completed, our Nova battery storage facility will have up to 680 MW of capacity, making it one of the largest battery storage projects in the world. It marks a significant milestone as the first project of its scale, featuring over 1,000 battery containers and serving multiple customers, including investor owned utilities.

The Nova project signifies a shift in the energy landscape. By addressing the challenge of renewable energy overload during peak daylight hours, it reduces strain on the California grid and prevents negative pricing fluctuations. By strategically shifting energy consumption to higher-priced periods, the batteries not only stabilize the market but also contribute to direct carbon abatement, thereby advancing decarbonization.

Additionally, Calpine's revitalization of the Nova Power Bank site (a decommissioned natural gas facility unable to accommodate the growing presence of renewables) into a cutting-edge battery facility showcases technological progress, Calpine's commitment to economic development, creation of skilled job opportunities within the community and supports the goals of the states in which we operate.

## PERFORMANCE METRICS

Calpine carefully monitors a series of metrics to assess our climate-related progress, including our steam-adjusted GHG intensity and average implied heat rates. These rates are favorable when compared to the rate in the U.S. for all thermal generation (including coal/gas/oil), and also when compared to all natural gas generation in the U.S. Leveraging this data, we can evaluate and assess our climate-related impact and gauge progress toward our climate and business goals.

### AVERAGE AVAILABILITY OF CALPINE'S FLEET

REFERENCE		2021	2022	2023
Average availability of Calpine's fleet <sup>[1]</sup>	–	86%	84%	86%

### IMPLIED HEAT RATE MMBTU/MWH

REFERENCE		2021	2022	2023
Implied Heat Rate (MMBTU/MWh): U.S. Fleet of Natural Gas Generation <sup>[2]</sup>	–	7.69	7.74 <sup>[3]</sup>	7.74
Implied Heat Rate (MMBTU/MWh): Calpine Fleet (steam adjusted)	–	7.36	7.38	7.41

### U.S. CO<sub>2</sub> EMISSIONS RATES FOR THE ELECTRIC POWER SECTOR

REFERENCE		2021	2022	2023
U.S. CO <sub>2</sub> emissions rates for the electric power sector (Mt/MWh): Thermal generation rate <sup>[4]</sup>	–	0.66	0.65 <sup>[5]</sup>	0.58 <sup>[6]</sup>
U.S. CO <sub>2</sub> emissions rates for the electric power sector (Mt/MWh): Natural gas generation rate <sup>[2]</sup>	–	0.41	0.41 <sup>[5]</sup>	0.41 <sup>[6]</sup>
U.S. CO <sub>2</sub> emissions rates for the electric power sector (Mt/MWh): Calpine rate (steam adjusted) <sup>[7]</sup>	–	0.35	0.36	0.36

## GHG EMISSIONS

REFERENCE		2021	2022	2023
Gross global Scope 1 emissions (metric tons CO <sub>2</sub> e)	SASB IF-EU-110a.1 GRI 305-1	43,586,132	44,356,429	48,915,527
Percentage of gross global Scope 1 emissions covered under emissions-limiting regulations	SASB IF-EU-110a.1	30%	33%	29%
Percentage of gross global Scope 1 emissions covered under emissions-reporting regulations		100%	100%	100%
GHG emissions intensity (kgCO <sub>2</sub> e/MWhnet)	GRI 305-4	413	413	411



# ENVIRONMENTAL MANAGEMENT

Calpine's dedication to rigorous environmental management and continuous improvement is evident in our history of superior environmental performance.

Calpine is committed to strong environmental management at all levels of our business. Calpine's Executive Vice President of Power Operations has oversight of our environmental, health and safety (EHS) performance and the Executive Safety Committee (which is comprised of both executive level managers and plant-level employees) is updated quarterly on EHS performance and key issues. Further, EHS training is provided across the organization through our learning management system alerts, newsletters and in-person meetings. At the start of each year, mandatory EHS training is identified and assigned to our teams. For certain roles, monthly training is required.

The foundation of our approach to EHS is Calpine's Environmental, Health and Safety Policy, which establishes roles and responsibilities and promotes accountability for EHS across our operations. This policy is supported by systems designed to ensure our EHS program enables regulatory compliance and best-in-class performance. We also utilize an EHS Compliance Management System to help all personnel, from senior management to plant operators, meet or exceed our environmental responsibilities.

Internal and external auditing further drive environmental excellence at Calpine. Aspects of our EHS systems are subject to internal audits on an annual basis, and we also contract with third parties to audit our plants in alignment with our established systems and policies.

Together, our oversight structures, policies and procedures support a comprehensive and cohesive approach to environmental management across the organization.

Otay Mesa Energy Center, CA

# AIR QUALITY

Air quality influences the health of the environment and of our communities. Calpine deploys strong air quality management practices that enable us to maintain regulatory compliance and manage costs. Our efforts to monitor and manage air emissions aim to drive both operational excellence and the well-being of our communities.

Calpine is proud to operate a fleet of efficient, clean-burning natural gas-fired power plants that consume notably less fuel for power generation than traditional boiler/steam turbine power plants and generate significantly lower emissions to air per MWh of power than equivalent coal or oil-fired plants. Calpine also maintains a program of proprietary operating procedures which aim to reduce natural gas consumption and further minimize air emissions per MWh of power generated.

We employ a robust approach to managing our air emissions, which includes actively integrating our environmental policies and practices with the federal, state and local laws and regulations. Our plants are equipped with advanced emission control technologies, such as low nitrogen oxide (NO<sub>x</sub>) burners and selective catalytic reduction systems, which effectively and significantly reduce NO<sub>x</sub> emissions. We take pride in maintaining air pollutant emission levels that rank among the lowest of all major U.S. power producers.

## Utilizing Infrared Cameras for Enhanced Emissions Oversight



Emissions are continuously monitored across Calpine's power plants via permanently installed sensors on specific equipment enclosures, and we strictly adhere to all applicable laws. Another way we monitor for and detect fugitive emissions is by utilizing a specialized portable infrared video camera, which enables us to perform inspections throughout our fleet of power plants. Using this equipment allows us to locate, identify and promptly address any leaks that may not be detectable without the aid of specialized cameras.

### AIR QUALITY MANAGEMENT

REFERENCE		2021	2022	2023
<b>Air emissions (metric tons) of the following pollutants:</b>				
NO <sub>x</sub> (excluding N <sub>2</sub> O)	SASB IF-EU-120a.1 GRI 305-7	5,868	6,248	6,732
SO <sub>x</sub>	SASB IF-EU-120a.1 GRI 305-7	284	270	249
Particulate matter (PM <sub>10</sub> ) <sup>[8]</sup>	SASB IF-EU-120a.1 GRI 305-7	1,291	1,285	1,308
Lead (Pb)	SASB IF-EU-120a.1	0.38	0.20	0.19
Mercury (Hg)	SASB IF-EU-120a.1	0.003	0.006	0.004



# WATER MANAGEMENT

Calpine is committed to responsible utilization of the water resources we share with our communities, maintaining water-related compliance and reducing the costs associated with our water use.

## CALPINE'S WATER MANAGEMENT STRATEGIES—NATURAL GAS FLEET

Calpine has made significant investments in technology to continually improve our water management systems and approach.

### RECIRCULATING TECHNOLOGY

The majority of Calpine's combined-cycle fleet uses recirculating cooling towers to provide cooling to the Calpine condensers converting low-pressure steam back into water after extracting the useful energy from the steam.

### RECYCLED WASTEWATER

We collaborate with communities nationwide to reduce our reliance on local freshwater sources by using recycled municipal wastewater for cooling at natural gas-fired power plants. Over 4,000 MWs of our power plants re-purpose treated water from municipal treatment systems for cooling. Using this approach, we can avoid surface and groundwater for cooling.

### AIR-COOLED CONDENSERS

At three of our power plants (Sutter Energy Center, Otay Mesa Energy Center and Fore River Energy Center), we utilize air-cooled condensers for cooling, eliminating the need for cooling water. Additionally, we have over 1,500 MWs from peaking facilities that also do not rely on water for cooling.

**Several of Calpine's plants are zero-liquid discharge, meaning that any water generated is recovered.**

## Sustainable Water Practices at The Geysers

At The Geysers, the world's largest geothermal power plant complex, Calpine is expanding and sustaining power generation from this renewable resource through innovative recycled water recharge projects. Clean, reclaimed water from local communities is injected into the geothermal resource where it is converted into steam for electricity production while providing an environmentally sound recycled water discharge solution for neighboring communities. Representing a model of strategically using water recycling to address other local environmental problems, for over 20 years, these successful partnerships continue to increase the long-term productivity of The Geysers, a critical renewable resource because of its baseload generation character. During dry summer months, gravity-fed catchment systems are strategically located across The Geysers region to provide drinking water for wildlife. These practices ensure that The Geysers continues to generate clean, renewable energy and support local ecosystems.

## SPILLS

In addition to our efforts to efficiently manage water use, Calpine has established protocols to prevent operational spills with zero significant spills in 2023. We monitor and record all spill events and conduct thorough incident investigations to mitigate the risk of future occurrences. Spill data is tracked in the Calpine Incident Collection System (CICS), which is an incident management and notification system that provides valuable metrics for analyzing and understanding trends in our EHS performance.

## WATER MANAGEMENT<sup>[9]</sup>

REFERENCE		2021	2022	2023
Total water consumption (megaliters)	SASB IF-EU-140a.1 GRI 303-5	72,558 <sup>[10]</sup>	74,538 <sup>[10]</sup>	83,451 <sup>[11]</sup>
Surface water—fresh		57,102 <sup>[12]</sup>	58,048 <sup>[12]</sup>	67,191
Ground water		0 <sup>[12]</sup>	0 <sup>[12]</sup>	0
Surface water—seawater		744	1,054	1,512
Municipal water supply		2,376 <sup>[12]</sup>	2,967 <sup>[12]</sup>	2,369
Reclaimed water		12,336 <sup>[12]</sup>	12,470 <sup>[12]</sup>	12,379
Percentage of total in a region of high or extremely high base water stress		28%	25%	22%
Number of significant spills <sup>[13]</sup>	–	0	0	0
Volume of significant spills <sup>[13]</sup>	–	0	0	0
Water injected into the steam field at The Geysers (megaliters)	–	30,903	28,982	37,127

## TECHNOLOGY ADOPTION

Innovating through technology adoption remains critical to Calpine's strategy, both in driving operational efficiencies and in supporting decarbonization. Our fleet of modern, natural gas-fired, combined-cycle power plants is flexible, dependable and efficient—uniquely positioning Calpine to meet demand and maintain grid reliability while advancing sustainability.

### STRATEGIC MODERNIZATION AND GROWTH

Calpine strives to maintain a modern fleet that allows us to continually serve our customers as efficiently as possible. In support of this commitment, we have implemented cloud computing for data collection and advanced analytics to refine plant performance

and technology deployment across our fleet. This technology allows Calpine to increase optimization through standardized reporting and automated resource management, ensuring resources are used only when needed, reducing waste of energy and decreasing our carbon footprint.

Calpine's approach to technology adoption also includes leveraging modern drilling techniques at The Geysers. Enhanced drilling speeds have reduced overall costs and increased efficiency. Calpine is testing drill bit designs and techniques for its geothermal production in collaboration with the DOE, with the lessons learned potentially having broader applicability in our future operations.

Additionally, Calpine has introduced Simulator Training, which is a technology that focuses on routine plant evolutions (such as steam turbine-generator start up) and off-normal plant events (such as incomplete steam turbine-generator trip) to enhance safety- and emergency response-related training for our power plant operators.

# RETAIL SERVICES

Our retail brands, Calpine Energy Solutions® (Solutions) and Champion Energy Services® (Champion), continue to meet the diverse energy needs of residential, commercial and industrial customers nationwide. As of December 31, 2023, the retail energy portfolio managed by Champion and Solutions represents customers in all 13 deregulated electricity states and the District of Columbia. Champion continues to pursue strategic growth within the commercial and industrial sectors while maintaining a customer-centric focus on its residential business, consistently being recognized for delivering exceptional customer experiences. Solutions remains one of the United States’ largest retail energy providers for the commercial and industrial space, with a data-driven approach to strategically manage the cost, risk, carbon and resiliency of corporate energy portfolios. In 2023, our two retail brands delivered 52.6 million MWh of reliable electricity to our customers.

**In 2023, Calpine’s retail businesses launched several custom carbon roadmap solutions and carbon-differentiated product solutions for our customers.**

Retail choice empowers corporations and individuals to manage the cost, risk and carbon emissions associated with their electricity consumption—which our customers leverage to drive sustainable practices, create a competitive advantage and increase profitability. In light of broader U.S. decarbonization and electrification initiatives, we strive to serve as the partner of choice for customers of all sizes who are working to responsibly manage their energy portfolios and reduce Scope 2 and Scope 3 emissions. Across both businesses, we continue to evolve product offerings and risk management solutions to best serve our customers—whether that be in response to a specific market condition, to address the challenges of a certain industry or to craft a tailored solution for one organization.

Calpine’s retail programs and platforms prioritize transparency and customer education. In addition to bringing best-in-class risk management analytics to the market, we also allocate significant resources to educating our customers through our daily market dashboards, educational webinars, customer symposiums and more. Because our approach has always been risk-centric, data-driven and proactive, our customers have remained empowered to make decisions with best-available information and well-positioned to navigate dynamic energy markets while meeting their own emissions reduction goals.

## TOTAL ELECTRICITY DELIVERED TO CUSTOMERS

REFERENCE		2021	2022	2023
Total electricity delivered to residential customers	SASB IF-EU-000.B	2.76MM MWh	3.02MM MWh	2.96MM MWh
Total electricity delivered to commercial customers		52.21MM MWh	53.34MM MWh	49.64MM MWh
Total electricity delivered to industrial customers				
Total electricity delivered to all other retail customers		All retail customers are included in the lines above.		



## ENERGY SOLUTIONS: HIGHLIGHTS

Many of our customers turn to Solutions for our commitment to quality and our rigorous approach to energy and carbon management. They recognize the value of aligning with a partner who shares their sustainability objectives and offers innovative and risk-managed solutions.

Solutions continues to help customers track their portfolio key performance metrics via our ever-evolving reporting platform. Our customers have consistent access to their portfolio data via tools like our daily market dashboard, monthly portfolio status reports and annual strategy performance benchmark review. These offerings provide customers with detailed energy usage information, enabling them to easily monitor their consumption and manage their strategy. Our reporting and data governance processes also enable us to support Solutions customers with voluntary and mandatory carbon emissions and electricity consumption reporting. Calpine is proud to leverage high quality data and analytical capabilities to help our customers make informed energy decisions, minimize risk and achieve their sustainability goals.

We also continue to support customers via Sensible Sustainability™, a scalable, repeatable business process that enables data-driven decisions evaluated through a spectrum of cost, risk and carbon impacts. Overall, Sensible Sustainability establishes parameters that guide business decisions to harmonize sustainability-related objectives with cost and risk objectives. In 2023, we

leveraged our existing Sensible Sustainability business process to launch an innovative go-to market approach where our customers arrive to the market “contract-ready,” having already developed a policy and a strategy to manage their cost, risk and carbon goals.

Solutions’ commitment to sustainability is evident in our engagement with organizations such as CDP and EcoVadis. In 2023, we maintained our status as a CDP Accredited Solutions Provider, which formally recognizes our business as a leading provider of services that can accelerate the transition to a low-carbon, nature-positive economy. We were also awarded an EcoVadis Bronze Medal for our practices across four key themes: environment, labor and human rights, ethics and sustainable procurement. Our ongoing dedication to data excellence and continuous improvement is exemplified by our continued maintenance of the ISO 9001:2015 certification. This certification sets us apart as a licensed energy retailer that consistently demonstrates a commitment to quality systems and delivery of superior service.

## CHAMPION ENERGY SERVICES: HIGHLIGHTS

Champion remains committed to delivering value through unparalleled customer service and competitive electricity pricing for retail customers in the Texas, Northeastern and Midwestern power markets. Through collaboration with commercial customers, Champion tailors energy solutions to address companies’ unique electric power needs, budget considerations, risk tolerance and sustainability objectives.

While Champion serves all segments within the Texas retail market, its residential division has consistently earned recognition for excellence. Champion’s residential business in Texas is a six-time winner for residential customer satisfaction through the JD Power Retail Electric Provider Residential Customer Satisfaction Study. Additionally, Champion’s dedication to customer service led to it being named the “Best Texas Electricity Provider” by Texas Electricity Ratings in 2023, alongside recognition from the Better Business Bureau as a Winner of Distinction with an A+ rating.



# PEOPLE AND COMMUNITIES



# OCCUPATIONAL HEALTH AND SAFETY

Safety is a core value at Calpine and part of our DNA that defines who we are and how we execute our work. Our Health and Safety programs are predicated on an active and caring culture built on collaboration, communication and a shared commitment to keep each other healthy and safe. We believe that all tasks carry risk, and every action, regardless of how repetitive, also contains risk. We operate under the premise that circumstances can change in an instant, and we all must be prepared to respond to the unexpected. Our goal in Health and Safety is to achieve Event-Free Operations through continuous improvement and operational excellence.

Day-to-day safety practices across our facilities and offices are governed by Calpine's Three Safety Tenants (Personal Responsibility, Hazard Recognition and Mitigation and Active Caring), Event-Free Operations Guidelines and our Six Cardinal Rules of Hazard Recognition & Mitigation.

Our caring culture, and by extension our Health and Safety programs, is bonded in trust that we will all do our jobs, evaluate and isolate hazards, and most importantly, stop work when required to ensure safety. We mandate that our teams take the time necessary to execute each task correctly, use the right tools, understand the work details and to suspend operations if conditions change or unforeseen circumstances arise. Our safety programs are effective because we hold each other accountable to maintain a safe work environment. Safety trumps all other obligations.

Fundamentally, the success of our Health and Safety programs is driven by our value system, our culture and our ability to trust one another. Each of us, regardless of our position, is accountable to one another, needs to be trustworthy and must share our commitment to achieving Event-Free Operations.





## PROCESS AND PROCEDURES

Our robust health and safety programs, processes and procedures are founded on Occupational Safety and Health Administration (OSHA) requirements set forth in U.S. law. In some cases, Calpine's obligations are more restrictive.

All Calpine team members are obliged to follow and adhere to all Calpine's health and safety policies, procedures and protocols. In addition, all contractors working on Calpine sites are required to abide by the more restrictive requirements of our health and safety policies, procedures and protocols or their own organizational requirements.

Calpine recognizes that programs and processes only work if we make them work. There are three key elements for any process to be effective:

1. Our leadership must clearly set expectations, monitor performance and listen.
2. Each team member owns the process and must recognize that failure to follow the requirements potentially puts themselves and others in harm's way.
3. We all must adapt and adjust as required.

Our Plant Management teams are ultimately responsible for ensuring that all team members are safe, preserving the environment and safeguarding our equipment. All work performed must follow the Safety Elements of the Work Management process that includes the Safe Work Permit and Risk Assessment process. The requirements are detailed in Calpine's Safe Work Standard that was updated in 2024.

## COMMUNICATION

A key component of any Health and Safety program is effective, timely communication of relevant information to team members. Accordingly, we have established multiple channels for communication and collaboration, including without limitation, our Executive Safety Committee, our employee-led Plant and Office Safety Committee, our Good Catch/Near Miss Program and our Best Practice Program. In addition, we utilize several programs to further log and disseminate event and safety information, such as our Event Notification System (ENS), the J5 Log Book, Maximo Whiteboard and the Calpine Incident Collection System (CICS).



## PERFORMANCE

Calpine strives to proactively identify risks and uphold excellent safety conduct. To promote a safety culture of high performance and continual improvement, we benchmark our own performance against peers, conduct internal and 3<sup>rd</sup> party safety audits and consistently monitor compliance orders and expectations—adjusting our standards and processes as needed based on our findings.

When safety events or near misses do occur, they are reported in our Event Notification system and recorded in our CICS which enables us to understand our performance, identify lessons learned and refocus our training strategies and preventative measures accordingly. All serious Safety incidents are investigated to determine the root cause of the event. Investigation teams include key staff members in plant operations and our EHS team. For more significant events, or cardinal safety rule violations, an independent team conducts the investigation.

Calpine achieved a TRIR of .48 in 2023, demonstrating that our safety performance continues to rank among the best in our industry. We are committed to upholding and improving this level of performance into the future as part of our efforts to be a leading power plant operator.

## Good Catch Program



In 2023, to strengthen safety performance across our fleet, Calpine implemented the Good Catch Program, which promotes and acknowledges employees for the early recognition and intervention of hazards and risks. By actively identifying hazards ahead of time, Calpine is encouraging employees to speak out and share to prevent unwanted consequences. In 2023 alone, 26 good catches were reported. The Good Catch Program exemplifies 'See It, Own It, Share It' and has proven to be a valuable resource in promoting proactive safety measures.

## OCCUPATIONAL HEALTH AND SAFETY

REFERENCE		2021		2022		2023	
Worker training on occupational health and safety (percentage of employees who completed safety training)		GRI 403-5	100% of plant employees.				
Workers covered by an occupational health and safety management system		GRI 403-8	100%—All employees and contractors working on Calpine sites are required to abide by our health and safety procedures and protocols.				
Employee rates							
Total Recordable Incident Rate (TRIR)		SASB IF-EU-320a.1 GRI 403-9	0.53	0.61	0.48		
Lost Time Incident Rate (LTIR)			0.18	0.28	0.04		
Fatalities			1	0	0		
Contractor rates							
Total Recordable Incident Rate (TRIR)		SASB IF-EU-320a.1 GRI 403-9	0.98	1.27	1.72		
Lost Time Incident Rate (LTIR)			0	0.2	0.2		
Fatalities			0	0	0		
Facilities with zero recordable safety injuries		–	57	56	53		



# EMERGENCY PREPAREDNESS AND RESPONSE

As an essential power provider, Calpine understands the importance of preventing, preparing for and responding to emergencies. Upholding business and service continuity and minimizing disruptions are important components of our responsibility to the communities who depend on us. We are committed to providing reliable power to our customers and communities—and our ability to do so is supported by our readiness to respond to ever evolving challenges.

Calpine dedicates substantial resources and attention to its robust emergency preparedness and response programs. These organization-wide efforts are closely overseen by Calpine's Executive Team, ensuring a strong and coordinated approach to managing potential emergencies. Our Business Continuity Management

Team (BCMT) further supports company-wide emergency planning and response. At the operational level, trained responder teams are in place to undertake emergency response efforts.

Calpine also regularly engages local first responders and emergency management officials to review response protocols and conduct training exercises. We maintain relationships with local branches of federal bureaus. Additionally, Calpine collaborates with our communications network providers so that in the event of an emergency we have a first responder network priority and can communicate and coordinate with local emergency management to support the safety and well-being of communities.

Each business unit and site is required to have a detailed business continuity response plan, which is reinforced by trainings on a periodic basis. We regularly update our relevant policies and procedures as new risks emerge at our sites and in the market. In addition, we continue to train employees and conduct drills to support our techniques and preparedness for events that may arise. Each year, all plants train on their respective seasonal response plans and stay prepared for winter and summer events.



# CALPINE IN THE COMMUNITY

Calpine cares deeply about the communities where we live and work. Our employees share this passion and value the opportunity to identify meaningful activities through which we can give back. Community members are key stakeholders, and our commitment to supporting them is reflected in our ASPIRE Value: Passion for our communities.

The Calpine Foundation is a 501(c)(3) nonprofit and is one of the avenues through which Calpine is able to provide support for our communities. The Foundation makes financial contributions to charitable organizations aligned with our strategic focus areas, which are outlined below. Calpine's Executive Team works closely with the Foundation to identify opportunities and organizations where we can make an impact. In addition to the Foundation's broader efforts, each Calpine facility manages an annual budget for local community-based activities. This grassroots approach to giving is ingrained in our culture and something our employees take great pride in.

## HIGHLIGHT STORY

### 2023 Calpine in Our Communities Day

During the summer of 2023, Calpine office and plant locations took part in the third-annual Calpine in Our Communities Day—a company-wide volunteer event dedicated to supporting local charities in the areas where we live and work. From packing food at local food banks to planting trees in neighborhood parks, employees from across the company united to give back and make a difference.

All of our charitable giving, whether through the Foundation or at the plant level, is aligned with Calpine's Philanthropic Guidelines, which outline our giving philosophy, areas of focus and applicable restrictions. In 2023, we continued to focus our outreach efforts on three key impact areas:

#### COMMUNITY DEVELOPMENT

- Programs that provide robust employee engagement opportunities to strengthen communities where they live and work.
- Programs that provide relief and recovery services to communities impacted by natural disasters.
- Programs that provide economic development opportunities in underserved areas, including community revitalization efforts, entrepreneurship, small business skills training, etc.
- Programs that use innovative and/or collaborative approaches to address key community health and human services issues.

#### EDUCATION AND WORKFORCE ADVANCEMENT

- Programs that help students successfully complete high school and/or prepare for and gain access to college, technical/trade school or meaningful employment.
- Programs that help students successfully complete post-secondary education.
- Job training programs that prepare individuals for meaningful employment.
- Educational programs that develop community, civic engagement and leadership capacity.
- Educational programs and investments that drive innovation and/or technology to foster new solutions to challenges facing the energy/utilities industry.

#### ENVIRONMENT/SUSTAINABILITY

- Programs that support environmental sustainability initiatives to strengthen communities and preserve natural resources.

## CHARITABLE GIVING AND VOLUNTEERING ACTIVITIES

Charitable giving and volunteer activities are key examples of how Calpine contributes to our communities. In 2023, Calpine supported numerous outreach efforts, including:

- **Calpine Scholarship and Vocational Grant Program**

We continued to run the Calpine Scholarship and Vocational Grant Program in 2023, through which we offer educational funding for dependent children of full-time Calpine employees who are planning to earn bachelor's degrees or attend vocational/technical schools or community colleges. In 2023, we awarded \$49,500 to these future leaders: \$46,000 in scholarships and \$3,500 in grants.

- **Employee Relief Fund**

Established in 2017 in the wake of Hurricane Harvey, the Calpine Employee Relief Fund is perpetually available to support Calpine employees who have suffered uninsured losses and expenses resulting from natural disasters or other tragedies that create financial hardship.

- **United Way Employee-Giving Pilot Campaign**

For the first time, we piloted an employee-giving campaign in collaboration with the United Way of Greater Houston, through which all Houston-area employees had the opportunity to make a donation to one of the chapter's partner charities. Employee donations were matched dollar for dollar by Calpine. Together, employees and Calpine raised more than \$285,000 for Houston-area charities.

- **Santa Ana Energy Storage Project Event**

Calpine's Santa Ana Energy Storage Project is an 80 MW/320 MWh facility that can power 80,000 homes for up to four hours and enhances energy and grid reliability in Orange County. To celebrate the completion of its final phase, Calpine hosted an event with Delhi Center, donating \$15,000 to support their community programs and future STEAM initiatives, with attendance from notable local and labor union representatives.

## 20<sup>th</sup> Annual Texas Regional Charity Golf Tournament



Calpine held its 20<sup>th</sup> annual charity golf tournament in September 2023, raising more than \$250,000 for 13 deserving charities located in and around our Texas-based plants and office locations (Bridge Over Troubled Waters, Casa de Esperanza, Cure RTD Foundation, Hill County Child Protective Services, Kids' Meals, Pleasant Hills Children's Home, Ray E. Martin Fund, Shriners Hospitals for Children, The Laurel's Army, The Rose, Women Together, SHAPE Community Center and Woods & Water Kids). The continued success of this event stems from the passion of our employee volunteers who spend months preparing and work tirelessly on the day of play. Their commitment and enthusiasm have made this annual event Calpine's largest and most impactful philanthropic activity.

## CHARITABLE GIVING

REFERENCE	2021	2022	2023
Charitable giving <sup>(14)</sup>	Over \$3.1 million	Over \$2.3 million	Over \$2.4 million



# EMPLOYMENT AT CALPINE

The dedication and engagement of our employees is vital to the long-term success and execution of our business strategy, and we strive to cultivate a workplace and a culture of inclusion and belonging that attracts and retains top talent. Calpine's training and development, recruitment, recognition and well-being initiatives are some of the ways we build a rewarding work environment. Calpine's Chief Administrative Officer has oversight of human resource matters, including talent acquisition, organizational development and compensation and benefits.

## EMPLOYEE TRAINING AND DEVELOPMENT

We support the professional development of all employees by actively creating opportunities within the organization to help them advance their capabilities and skills. Calpine provides a variety of opportunities that prepare and empower employees to take on expanded roles within the company, including a wide range of training and development programs. Our core development programs provide individual and cohort opportunities. Key programs include the Power Operations Leadership Program, Virtual Learning Circles, Mentorship Match, Leader Series and Leadership Connect. These programs provide employees opportunities to expand their business acumen and leadership skills.

As part of our ongoing efforts to provide current, meaningful development content, Calpine introduced a number of new, self-service, micro-learning courses in 2023 that allow employees to earn digital badges to share on social media as well as targeted content supporting continuing education credits. In 2023, approximately 600 employees accessed over 11,000 different types of content—earning 731 digital badges and attending 46 continuing professional education programs. In total, employees completed 66,604 hours of training in 2023, an average of 27.7 hours per employee.

## Leadership Connect Series

A cross between leadership roundtables and speed mentoring platforms, these 1-hour virtual events are an opportunity to gain career insights from a diverse group of Calpine leaders. During each session, leaders share valuable insights on their personal career challenges and offer tips for success as they discuss career development questions based on their own experiences. Sessions are recorded and can be accessed anytime in our learning management system. In 2023, topics covered at these events included "Impact in Action—Discussion with ERG Leaders" and "Effective Career Management."



## LEADERSHIP CONNECT TESTIMONIALS

- “ I felt like all of the presenters were really authentic and represented their respective ERGs well. I believe it is important to listen to our fellow employees' stories and understand and appreciate the insights and experiences they bring to table.”
- “ What struck me most about the session was the authenticity and vulnerability displayed by the leaders. They openly shared their triumphs and failures, allowing us to gain a deeper understanding of the challenges they encountered and the strategies they employed to overcome them.”

## ANNUAL PERFORMANCE REVIEW PROCESS

Employee development is a key part of the annual performance review process at Calpine. While we encourage feedback throughout the work year, we maintain an annual process where employees and managers discuss prior year performance results and set plans and goals for the upcoming year. This annual process includes functional and cross-functional calibration discussions where employee contributions are discussed to help ensure those who are seen as having contributed at higher levels for the prior work year are rewarded appropriately.

## TALENT PIPELINE

At Calpine, we are committed to investing in our employees and believe in promoting from within. Our workforce planning promotes the long-term stability of our business and the success of our employees. Employee retention and engagement help us meet our strategic goals, and we are proud to report that over 40% of our workforce has been with Calpine for 10 years or longer.

Calpine has a robust hiring and development program for early career talent, including several rotational programs that support building our talent pipeline with candidates from a variety of backgrounds.

- **Our Commercial Rotation Analyst and Associate Program** consists of three rotations of approximately eight months each that span a variety of wholesale and retail departments. In 2023, seven participants entered into the program.
- **Our Power Operations Rotation Engineer Program** focuses on the recruitment and development of entry-level engineers by providing participants with a broad base of knowledge and exposure to plant operations and maintenance practices, including exposure to other employee groups.
- **The Co-Op Program** develops talent for Operations and Maintenance positions in our power plants by providing experiential, hands-on learning to students.

- **Our Retail Rotation Program** provides a unique opportunity to learn about Retail Energy from the ground up. Over a 24-month period, participants rotate through six different four-month long assignments, gaining a wealth of experience from across our retail business.
- **Our Company-Wide Summer Internship Program** provides hands-on experience to students from diverse schools across the U.S. Over the past few years, our internship class has grown to over 60 participants including interns from our Historically Black Colleges and Universities (HBCU) partners. Over 30 interns worked in our Power Operations group in 2023.

As part of our Diversity and Inclusion (D&I) initiatives, we are actively working to diversify our talent pipeline by recruiting at HBCUs, recruiting at job fairs that are focused on diverse candidates and promoting participants from our rotational programs—which encourage the advancement of women and minorities in science, technology, engineering and math fields. For example, Calpine recruits from over 111 colleges and universities and in 2023 selected 62 interns of which 45% were ethnically diverse.





## AWARDS AND RECOGNITION

Calpine recognizes outstanding results and exemplary performance through several award programs, including our Stellar Awards, Spot-On Awards and the Company's highest employee honor, the Jack A. Fusco ASPIRE Award.

**Stellar Award:** The Stellar Award is a quarterly system that honors employees who have performed above and beyond their normal duties and responsibilities and recognizes extraordinary actions.

**Spot-On Award:** The Spot-On Award is a program where any employee can be recognized by co-workers, managers or others for activities that demonstrate Calpine's ASPIRE values.

**Jack A. Fusco ASPIRE Award:** The Jack A. Fusco ASPIRE Award is Calpine's most prestigious honor where one employee or team annually is selected for outstanding performance and helping Calpine to advance its vision and mission through exemplary commitment to our ASPIRE values.

## EMPLOYEE WELL-BEING

Calpine is committed to the well-being of our employees, and we are proud to offer best-in-class benefits and incentives for our team to engage in healthy activities.

Our competitive compensation and benefits package includes:

- Medical.
- Dental.
- 401(k) with match and annual additional contributions.
- Merit/bonus based on company and individual performance.
- Deferred accounts for childcare and medical expenses.
- Family and Medical Leave Act, short- and long-term disability.
- Long-Term Insurance Care Program.
- Wellness and Employee Assistance programs.

We also offer eligible employees, regardless of gender, who have two or more years of service parental leave of up to 12 weeks of paid time off (PTO) to bond with a newborn or newly adopted child.

### TUITION REIMBURSEMENT

**Calpine provides a tuition reimbursement program to support employees who choose to further their education. We also provide competitive scholarships and vocational grant programs for qualifying dependents. In 2023, we provided approximately \$104,000 in tuition reimbursement and \$49,500 in scholarships and vocational grants.**



## OUR WORKFORCE

REFERENCE		2021	2022	2023
Total number of employees	GRI 405-1	2,237	2,268	2,404
Male		1,756	1,773	1,884
Female		481	495	520
39 and younger		649	701	813
40–64		1,481	1,459	1,471
65 and older		107	108	120
CEO and direct reports	GRI 405-1	9	9	9
Male		8	8	8
Female		1	1	1
39 and younger		0	0	0
40–64		7	7	8
65 and older		2	2	1
Manager/director (management)	GRI 405-1	466	472	492
Male		373	369	385
Female		93	103	107
39 and younger		75	74	73
40–64		366	376	387
65 and older		25	22	32
Vice president/senior vice president (senior management)	GRI 405-1	80	83	88
Male		60	62	67
Female		20	21	21
39 and younger		4	2	1
40–64		73	78	85
65 and older		3	3	2
All other positions	GRI 405-1			
Male		1,315	1,334	1,424
Female		367	370	391
39 and younger		570	625	739
40–64		1,035	998	991
65 and older		77	81	85
New hires	GRI 401-1	225	351	371
Male		164	260	292
Female		61	91	79
39 and younger		130	236	255
40–64		94	114	115
65 and older		1	1	1

REFERENCE		2021		2022	2023
Turnover	GRI 401-1				
Male		9%	11%	8%	
Female		4%	3%	2%	
39 and younger		5%	6%	4%	
40–64		7%	6%	4%	
65 and older		2%	2%	1%	
Voluntary turnover	GRI 401-1				
Male		7%	9%	7%	
Female		2%	3%	2%	
39 and younger		4%	6%	3%	
40–64		4%	5%	4%	
65 and older		1%	2%	1%	
Diversity and Inclusion					
American Indian/Alaskan Native	GRI 405-1	11	10	12	
Asian		205	217	241	
Black or African American		121	139	150	
Hispanic or Latino		351	371	412	
Native Hawaiian or other Pacific Islander		6	6	6	
Not specified		11	30	41	
Two or more races	GRI 405-1	43	41	48	
White		1,489	1,454	1,494	
Percentage of employees who are women		22%	22%	22%	
Percentage of employees who are minorities		33%	35%	36%	
Percentage of senior management who are women		24%	25%	23%	
Percentage of senior management who are minorities		18%	20%	20%	



# DIVERSITY AND INCLUSION

We know our goals can only be accomplished through continued—and intentional—development of a diverse, engaged and inclusive workforce. Our diverse workforce contributes valuable knowledge and fresh perspectives to foster better decision making, which in turn results in better outcomes for our communities and our business. By promoting inclusive collaboration and seeking input from a variety of voices, we strive to remove barriers and open doors for our individual and collective success. Accordingly, Calpine is committed to creating a work environment where all employees feel valued and respected and are always treated fairly.

At Calpine, our commitment to D&I is upheld by our leadership. The Diversity Advisory Committee has oversight of our strategy and objectives and is comprised of senior leaders who meet quarterly to provide leadership and guidance for all our D&I efforts, which is rooted in our D&I principles.

## CALPINE D&I PRINCIPLES

- Opportunity for all is a guiding principle in our work, community and philanthropic efforts.
- We will strengthen policies, procedures and practices that promote acceptance, inclusion and respect for all.
- We will practice and emphasize behaviors that build trust and understanding and strive to eliminate resentment and bias.
- We believe diverse teams and a merit-based culture lead to better business results.
- We do not believe there is a trade-off between diversity and meritocracy.
- We will acknowledge opportunities for improvement and correct course when warranted.

**Rooted in our ASPIRE Values and D&I Principles, Calpine has the following D&I goals:**

- Attract, engage and retain a diverse, inclusive and talented workforce.
- Engage with diverse communities and suppliers to volunteer, donate and spend.
- Meet the needs of our increasingly diverse customers and communities.

**To achieve these goals, we have implemented a number of initiatives including:**

- Expanded our Employee Resource Groups (ERGs).
- Supported managers in promoting our D&I concepts.
- New learning workshops, made available to all employees, which support our ongoing efforts to develop leader competencies and help create an inclusive workplace.
- Expanded our recruitment and job fair participation at colleges and universities with diverse student bodies and participated in national job fairs that bring together diverse candidates. This included growing our relationships with HBCUs.



## EMPLOYEE RESOURCE GROUPS

As a part of our commitment to D&I, Calpine's ERGs have expanded to seven active groups. These include the Veterans Employee Resource Group (VERG), Women's Initiatives & Networking (WIN), Hispanics Energizing Calpine (HEC), Black-African American ERG, Asian American ERG (AAERG), LGBTQ+ Coalition of Allies Advancing in Pride (CAPE) and the New Employee Resource Forum (NERF). Our ERGs are employee-led groups formed around a common dimension that serve as a community for members while also helping Calpine to achieve its business and D&I goals.

### In 2023, our ERGs hosted several engaging and impactful events, including:

- In honor of MLK Day, the Black-African American ERG and other Calpine volunteers spent time at the Fifth Ward of Houston, an underserved community. Houston-area employees, along with family and friends, volunteered at the Houston Local Organizing Committee's (HLOC) beautification project at the Julia C. Hester House. The Calpine team spent the morning planting trees, raking leaves and planting vegetables in the nearby community garden. The event culminated with the unveiling of an art installation at the adjoining Boyce-Dorian Park, paying homage to the Fifth Ward and local community leaders like Calpine, who helped make the project happen.
- AAERG celebrated the Lunar New Year to raise cultural awareness among employees. Many employees of Asian American heritage shared their stories, traditions and the significance of this holiday to honor and embrace their personal and professional lives. The AAERG also hosted a reception to celebrate Eid al-Fitr after the end of Ramadan to share the traditions of this holiday with employees.
- HEC celebrated Hispanic Heritage Month by hosting a performance by Segundo Barrio Chorus, Houston's first and only bilingual choir for children. The event featured a festive musical performance by the children accompanied by foods from a variety of Hispanic and Latino countries. Calpine also made a monetary donation to support the choir and their mission.
- NERF celebrated Employee Appreciation Day by reminding managers to pause and take time to show gratitude and appreciation for their team members. They also hosted Calpine summer interns to discuss the "Past, Present and Future of Electricity" with senior leaders to further their interest in power generation as a career path. Finally, NERF sponsored a "picture day" for employees to obtain headshots to promote professionalism and career growth.
- WIN engaged experts for several virtual events for its members to discuss professional development, negotiating skills and financial wellness.
- CAPE celebrated Pride Month with all-employee events throughout the company.
- VERG celebrated Veterans Day with a guest speaker, Vice Admiral John Alexander (Retired), who spoke of his service to our country and how those values apply to the civilian work environment. VERG also held our annual Challenge Coin Design Contest, which provides employees an opportunity to submit a design for an annual commemorative coin that is distributed to all our veterans to honor their service.

### HIGHLIGHT STORY

## ERG Leaders Conference and Workshop

Demonstrating our continued commitment to and investment in developing our ERGs, Calpine hosted an ERG Leaders Conference and Workshop facilitated by KPMG. This workshop included facilitated discussions on several topics, including advocacy for ERGs and their continuously evolving role in the workplace, inclusively leading by highlighting ERG benefits to the employees and business and leveraging event feedback and cross-functional business intelligence to measure and sustain ERG impact and success.

# GOVERNANCE





# CORPORATE GOVERNANCE AND BUSINESS ETHICS

Ensuring robust corporate governance practices remains critical to Calpine's success, enabling us to navigate the rigorous and evolving regulation of our industry. In alignment with our Accountability and Integrity ASPIRE Values, we aim to uphold the highest standards of responsible business conduct to build trust, mitigate risk and reach our goals.

**Calpine is unwavering in our commitment to accountability and actively cultivating a culture of compliance across all facets of our operations.**



In 2023, our Board of Directors, comprised of seven directors, had two standing committees: the Audit Committee and the Compensation Committee. The Audit Committee, comprising three members, examines reports from internal and external auditors and also monitors internal controls. Our Compensation Committee, comprising four members, oversees compensation and benefit programs. Our Board also remains actively engaged in our sustainability initiatives, including strategic planning and risk oversight. Calpine's Board and senior leadership regularly review corporate governance and regulatory requirements.

Calpine maintains various corporate governance policies and robust controls via our risk management, legal, accounting, internal audit, compliance, supply chain and strategic procurement functions to uphold integrity in all our corporate transactions. Amongst others, our policies include:

- Calpine Code of Conduct.
- Open Door Policy.
- Insider Trading Policy.
- Antitrust Policy.
- Sanctions and Export Controls Policy.
- Foreign Anti-Corruption Policy.
- Expenditure and Gift Policies.
- Responsible Contracting Policies
- Supplier Code of Conduct.

Annually, Calpine undertakes an assessment of governance policies, processes and procedures to evaluate improvements and identify changes that may be needed.

Employee training is an important element of Calpine's approach to corporate governance. We have robust compliance training programs that are continually evaluated for improvement, updating our programs annually where necessary.



BUSINESS ETHICS

As part of our commitment to operating in a safe and responsible manner, protecting our organization from legal or regulatory challenges and maintaining strong relationships with our stakeholders, Calpine strives to uphold ethical business practices across all aspects of our operations.

Our Code of Conduct sets forth our operating guidelines and emphasizes fair and honest dealings with all stakeholders. The Code applies to all directors, officers and employees. To reinforce the commitments outlined, all employees are required to complete training and confirm compliance with our Code of Conduct on an annual basis.

Our dedication to transparency and accountability is upheld through various reporting mechanisms. Through our Open Door Policy and ethics hotline, employees and suppliers are empowered to voice concerns without fear of retaliation. Our hotline is managed by an independent compliance organization to ensure anonymity for any callers, with all incoming issues documented and investigated thoroughly. The five-person Hotline Committee, including a Legal Department representative, oversees investigations and ensures timely corrective actions are taken and communicated in the event of any hotline call.

CORPORATE GOVERNANCE AND BUSINESS ETHICS

REFERENCE		2021	2022	2023
Number of hotline inquiries received	-	7	13	12
Percentage of employees who have acknowledged the Code of Conduct	-	Calpine requires every employee to annually acknowledge that they have read the Code of Conduct.		



# GOVERNMENT RELATIONS AND PUBLIC POLICY

Calpine maintains its position as a leader in the power industry by actively advocating for policies that prioritize reliability and environmental responsibility, both on a federal level and within the states where we operate. Our advocacy efforts are critical to our ongoing investment in clean, efficient, dispatchable power generation technology and to our commitment to sustainability.

Recognizing the complexities of energy regulation, we seek to educate regulators and policymakers about the impacts of their decisions. With our extensive experience as the

largest natural gas and geothermal power producer in the U.S., Calpine contributes an expert perspective to public policy dialogues at both state and national levels.

We continue to advocate for fair, well-structured, competitive power markets and environmentally responsible regulation that balances reliability and sustainability. Our stance favors market-driven solutions that provide nondiscriminatory forward price signals for investors and ensure a level playing field. We believe such solutions will incentivize investments in cleaner power generation, leading to a clean and sustainable future.

Carbon capture is a central focus for Calpine, reflecting one of the avenues through which we strive to drive both reliability and sustainability. We advocate for CCS initiatives, actively pursuing grants and support to advance these efforts. Additional information is available in the [Climate Strategy and GHG Emissions](#) section of this report.

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## TRADE ASSOCIATIONS AND ORGANIZATION MEMBERSHIPS

Calpine's engagement extends beyond direct advocacy to active participation in numerous trade associations and organizations. By collaborating with these groups at local, state and national levels, we amplify our voice and advance our public policy objectives. Some of the associations we engage with include:

- Business Council for Sustainable Development
- Business Council for Sustainable Energy
- California Council of Environmental and Economic Balance
- California Decarbonization Partnership
- California Women Lead
- Carbon Capture Coalition
- CDP Renewable Energy Partner Program
- Clean Energy Buyers Alliance
- Climate Action Campaign
- Climate Leadership Council
- Electric Power Supply Association
- Empowering Texans
- Greater Houston Partnership
- Houston Carbon Capture Alliance
- Independent Energy Producers Association
- Independent Power Producers of New York
- Industrial Environmental Association
- Local Government Commission: Community Matters Business Partnership Program
- Natural Gas Supply Collaborative
- New England Power Generators Association
- Northwest & Intermountain Power Producers Coalition
- PJM Power Providers
- Texas Competitive Power Advocates
- Western Power Trading Forum

POLITICAL CONTRIBUTIONS

Calpine makes political contributions to support causes and candidates aligned with our company and industry interests. We have a full government relations team that is dedicated to interacting with state and federal regulators and an employee led committee that oversees approval of political action committee (PAC) contributions.

Calpine's PAC donations are made in accordance with all applicable laws and include bipartisan contributions to state and federal candidates for elected office, as well as various ballot measures and committees.

GOVERNMENT RELATIONS

REFERENCE		2021	2022	2023
PAC contributions	GRI 415-1	\$141,050	\$200,800	\$161,250

RISK MANAGEMENT



In a highly dynamic business landscape, risk management is critical to protecting our people and operations and ensuring business continuity and success. Accordingly, Calpine takes a robust and structured approach to risk management across our organization.

Calpine has a Chief Risk Officer who reports directly to the Audit Committee of the Board. Additionally, the full Board of Directors receives quarterly updates on risk management. Our internal audit team further supports risk management efforts by providing independent oversight, reviewing policies and procedures, conducting audits across the business and providing support for investigations as needed. This team also conducts an annual survey to identify risks based on their likelihood and the potential magnitude of impact on Calpine's business to ensure we are appropriately monitoring key risks to the organization.

Our risk management framework is at the core of our approach and is reflected in key policies and procedures such as the Risk Management Policy, which outlines how we address, manage and report risks. Our framework has undergone minimal changes in recent years, which speaks to its robustness and effectiveness.

Together, the oversight and efforts described contribute to a comprehensive risk management program that supports the resilience of our organization.



# CYBERSECURITY

In an increasingly digital world, Calpine recognizes the importance of strong cybersecurity programs in maintaining business continuity and protecting the nation's critical infrastructure. Ensuring the digital safety of the grid is part of our commitment to providing reliable energy to our customers and communities.

**Calpine recognizes the importance of strong cybersecurity programs in maintaining business continuity and protecting the nation's critical infrastructure.**

In 2023, Calpine established a Cybersecurity Steering Committee. Together, the Chief Security Officer and Cybersecurity Steering Committee manage Calpine's cybersecurity policies and procedures, which are informed by our Cybersecurity Framework. Further, the Board and the Executive Team receive regular cybersecurity updates.

Calpine remains focused on continually strengthening our cybersecurity program. We are vigilant in our approach to monitoring threats and tracking our performance and strive to improve our cyber defense posture by leveraging internal resources, industry-leading advisors and external security control frameworks. We believe cybersecurity is the responsibility of every individual at Calpine, and in addition to requiring annual training on our cybersecurity policy, employees participate in regular cybersecurity drills and briefings. Calpine conducts internal drills multiple times annually to test response plans and ensure that all employees understand their roles in the event of an incident. In addition, Calpine also participates in external drills, such as GridEx, which helps us coordinate with other critical infrastructure.

Calpine regularly communicates and coordinates with industry partners, security organizations and government agencies where we are able to share threat actor information and best practices. As the cybersecurity landscape continues to evolve, we will adapt all Calpine's systems and procedures accordingly to ensure resilience, mitigate risks and protect our business, our employees and the critical infrastructure our communities rely on.



# SUPPLY CHAIN MANAGEMENT

At Calpine, our commitment to excellence goes beyond our direct operations and extends to how we manage our supply chain. We firmly believe the success of our business and our ability to provide reliable power to our customers and communities is influenced by our suppliers. Further, careful supplier selection helps to ensure the quality and dependency of the materials and services we rely on and has the potential to drive local economic growth and development—all while mitigating ethical, environmental and social risks. Accordingly, we are committed to working with suppliers whose performance is aligned with our values and hold them to the same high standards we apply to our own operations.

Calpine's [Supplier Code of Conduct](#) sets forth the expectations we have for all our suppliers, emphasizing ethical standards, environmental protection and compliance with all applicable laws and regulations. We require our suppliers to uphold principles of human rights, ensure safe and healthy workplaces and promote non-discrimination and freedom of association for all employees.

**Select Calpine employees leverage membership in the Institute for Supply Management, the world's oldest and largest supply management association, to stay abreast of supply chain management best practices.**

Our approach to procurement is center led, with our corporate arm serving in an advisory capacity and supporting local success by providing resources and trusted partnership as needed. While we strive to source

and purchase materials and services locally, purchasing decisions are ultimately made at the discretion of our business units so long as they comply with our corporate policies, procedures and budget considerations.

Monitoring supplier performance and identifying and managing risks associated with our supply chain is critical to business continuity and success. In addition to considering traditional supplier performance metrics such as timeliness, delivery and cost, Calpine also utilizes third-party platforms to understand supplier diversity and safety practices. Further, we audit select suppliers each year and review all suppliers upon contract renewal. Concerns regarding supplier performance can also be reported via our toll-free reporting hotline.

## HIGHLIGHT STORY

### Introducing a Cloud-Based Purchasing and Payment System

In late 2023, Calpine implemented Coupa, a cloud-based purchasing and payment system that streamlines our shared workflow—all free of cost for our suppliers. The new system has allowed for greater transparency, efficiency and communication with our suppliers, ultimately benefiting both parties. Specific benefits include:

- A centralized location for doing business with Calpine.
- Ability to view orders, receive purchase orders and submit invoices.
- Convenient anytime visibility into the status of orders, invoices and payments.
- Online catalogs to increase visibility of supplier goods and services for Calpine to purchase.
- Easy access to Calpine sourcing events.
- A messaging center to communicate with Calpine partners.



## SUPPLIER DIVERSITY

Calpine actively seeks out opportunities to support local and/or smaller businesses facing social and economic disadvantages to drive development in our communities. To support our supplier diversity focus across our business, we maintain regional, corporate and retail business unit supplier diversity representatives who help us identify diverse suppliers. We leverage the expertise and supplier verification process of a recognized, experienced and reputable third-party platform in connection with our supplier diversity efforts.

Calpine is a proud member of the National Minority Supplier Development Council, Supplier Diversity Advisory Council, Houston Minority Supplier Development Council and the Women’s Business Enterprise National Council—further underscoring our commitment to diversity and inclusion.

## SUPPLY CHAIN MANAGEMENT

REFERENCE		2021	2022	2023
New suppliers that were screened using environmental criteria	GRI 308-1	For purchases of materials and services that are critical to Calpine’s core business or have inherent environmental or safety risks, Calpine has a robust five-step sourcing process to select preferred suppliers. We monitor key performance indicators (KPIs) such as OSHA recordables and insurance coverage for these suppliers to ensure they continue to meet all requirements. We also apply a risk matrix to assess a supplier’s risk profile based on past performance in categories such as operational, safety and cybersecurity risks.		
Percent spend with diverse suppliers <sup>[15], [16]</sup>	GRI 204-1	9%	9%	9%
Percent of diverse suppliers as a total of all suppliers <sup>[16]</sup>	–	18%	19%	33%
Percent spend with socially and economically disadvantaged suppliers <sup>[16]</sup>	–	50%	54%	31%



# APPENDIX



The Geysers, CA

# DATA TABLES

TOPIC	REFERENCE	2021	2022	2023
Environment				
Climate Strategy and GHG Emissions				
Gross global Scope 1 emissions (metric tons CO <sub>2</sub> e)	SASB IF-EU-110a.1 GRI 305-1	43,586,132	44,356,429	48,915,527
Percentage of gross global Scope 1 emissions covered under emissions-limiting regulations	SASB IF-EU-110a.1	30%	33%	29%
Percentage of gross global Scope 1 emissions covered under emissions-reporting regulations		100%	100%	100%
GHG emissions intensity (kgCO <sub>2</sub> e/MWhnet)	GRI 305-4	413	413	411
Average availability of Calpine’s fleet <sup>[1]</sup>	–	86%	84%	86%
Implied Heat Rate (MMBTU/MWh): U.S. Fleet of Natural Gas Generation <sup>[2]</sup>	–	7.69	7.74 <sup>[3]</sup>	7.74
Implied Heat Rate (MMBTU/MWh): Calpine Fleet (steam adjusted)	–	7.36	7.38	7.41
U.S. CO <sub>2</sub> emissions rates for the electric power sector (Mt/MWh): Thermal generation rate <sup>[4]</sup>	–	0.66	0.65 <sup>[5]</sup>	0.58 <sup>[6]</sup>
U.S. CO <sub>2</sub> emissions rates for the electric power sector (Mt/MWh): Natural gas generation rate <sup>[2]</sup>	–	0.41	0.41 <sup>[5]</sup>	0.41 <sup>[6]</sup>
U.S. CO <sub>2</sub> emissions rates for the electric power sector (Mt/MWh): Calpine rate (steam adjusted) <sup>[7]</sup>	–	0.35	0.36	0.36
Management of material topics	GRI 3-3	Climate Strategy and GHG Emissions, <a href="#">2023 Sustainability Report</a>		
Air Quality				
Air emissions (metric tons) of the following pollutants:				
NO <sub>x</sub> (excluding N <sub>2</sub> O)	SASB IF-EU-120a.1 GRI 305-7	5,868	6,248	6,732
SO <sub>x</sub>	SASB IF-EU-120a.1 GRI 305-7	284	270	249

TOPIC	REFERENCE	2021	2022	2023
Particulate matter (PM <sub>10</sub> ) <sup>[8]</sup>	SASB IF-EU-120a.1 GRI 305-7	1,291	1,285	1,308
Lead (Pb)	SASB IF-EU-120a.1	0.38	0.20	0.19
Mercury (Hg)	SASB IF-EU-120a.1	0.003	0.006	0.004
Management of material topics	GRI 3-3	Air Quality, <a href="#">2023 Sustainability Report</a>		
Water Management <sup>[9]</sup>				
Total water consumption (megaliters)	SASB IF-EU-140a.1 GRI 303-5	72,558 <sup>[10]</sup>	74,538 <sup>[10]</sup>	83,451 <sup>[11]</sup>
Surface water—fresh		57,102 <sup>[12]</sup>	58,048 <sup>[12]</sup>	67,191
Ground water		0 <sup>[12]</sup>	0 <sup>[12]</sup>	0
Surface water—seawater		744	1,054	1,512
Municipal water supply		2,376 <sup>[12]</sup>	2,967 <sup>[12]</sup>	2,369
Reclaimed water		12,336 <sup>[12]</sup>	12,470 <sup>[12]</sup>	12,379
Percentage of total in a region of high or extremely high base water stress		28%	25%	22%
Number of significant spills <sup>[13]</sup>	–	0	0	0
Volume of significant spills <sup>[13]</sup>	–	0	0	0
Water injected into the steam field at The Geysers (megaliters)	–	30,903	28,982	37,127
Management of material topics	GRI 3-3	Water Management, <a href="#">2023 Sustainability Report</a>		
Social				
Occupational Health and Safety				
Worker training on occupational health and safety (percentage of employees who completed safety training)	GRI 403-5	100% of plant employees.		
Workers covered by an occupational health and safety management system	GRI 403-8	100%—All employees and contractors working on Calpine sites are required to abide by our health and safety procedures and protocols.		
Employee rates				
Total Recordable Incident Rate (TRIR)	SASB IF-EU-320a.1 GRI 403-9	0.53	0.61	0.48
Lost Time Incident Rate (LTIR)		0.18	0.28	0.04
Fatalities		1	0	0



TOPIC	REFERENCE	2021	2022	2023
Contractor rates				
Total Recordable Incident Rate (TRIR)	SASB IF-EU-320a.1 GRI 403-9	0.98	1.27	1.72
Lost Time Incident Rate (LTIR)		0	0.2	0.2
Fatalities		0	0	0
Facilities with zero recordable safety injuries	–	57	56	53
Management of material topics	GRI 3-3	Occupational Health and Safety, <a href="#">2023 Sustainability Report</a>		
Emergency Preparedness and Response				
Management of material topics	GRI 3-3	Emergency Preparedness and Response, <a href="#">2023 Sustainability Report</a>		
Community Relations and Corporate Philanthropy				
Charitable giving <sup>[14]</sup>	–	Over \$3.1 million	Over \$2.3 million	Over \$2.4 million
Management of material topics	GRI 3-3	Calpine in the Community, <a href="#">2023 Sustainability Report</a>		
Employment at Calpine				
Total number of employees	GRI 405-1	2,237	2,268	2,404
Male		1,756	1,773	1,884
Female		481	495	520
39 and younger		649	701	813
40–64		1,481	1,459	1,471
65 and older		107	108	120
CEO and direct reports	GRI 405-1	9	9	9
Male		8	8	8
Female		1	1	1
39 and younger		0	0	0
40–64		7	7	8
65 and older		2	2	1

TOPIC	REFERENCE	2021	2022	2023
Manager/director (management)	GRI 405-1	466	472	492
Male		373	369	385
Female		93	103	107
39 and younger		75	74	73
40–64		366	376	387
65 and older		25	22	32
Vice president/senior vice president (senior management)	GRI 405-1	80	83	88
Male		60	62	67
Female		20	21	21
39 and younger		4	2	1
40–64		73	78	85
65 and older		3	3	2
All other positions				
Male	GRI 405-1	1,315	1,334	1,424
Female		367	370	391
39 and younger		570	625	739
40–64		1,035	998	991
65 and older		77	81	85
New hires	GRI 401-1	225	351	371
Male		164	260	292
Female		61	91	79
39 and younger		130	236	255
40–64		94	114	115
65 and older		1	1	1

TOPIC	REFERENCE	2021	2022	2023
Turnover				
Male	GRI 401-1	9%	11%	8%
Female		4%	3%	2%
39 and younger		5%	6%	4%
40–64		7%	6%	4%
65 and older		2%	2%	1%
Voluntary turnover				
Male	GRI 401-1	7%	9%	7%
Female		2%	3%	2%
39 and younger		4%	6%	3%
40–64		4%	5%	4%
65 and older		1%	2%	1%
Management of material topics	GRI 3-3	Employment at Calpine, <a href="#">2023 Sustainability Report</a>		
Diversity and Inclusion				
American Indian/Alaskan Native	GRI 405-1	11	10	12
Asian		205	217	241
Black or African American		121	139	150
Hispanic or Latino		351	371	412
Native Hawaiian or other Pacific Islander		6	6	6
Not specified		11	30	41
Two or more races		43	41	48
White		1,489	1,454	1,494



TOPIC	REFERENCE	2021	2022	2023
Percentage of employees who are women	GRI 405-1	22%	22%	22%
Percentage of employees who are minorities		33%	35%	36%
Percentage of senior management who are women		24%	25%	23%
Percentage of senior management who are minorities		18%	20%	20%
Management of material topics	GRI 3-3	Diversity and Inclusion, <a href="#">2023 Sustainability Report</a>		
Governance				
Corporate Governance				
Management of material topics	GRI 3-3	Corporate Governance and Business Ethics, <a href="#">2023 Sustainability Report</a>		
Business Ethics				
Number of hotline inquiries received	–	7	13	12
Percentage of employees who have acknowledged the Code of Conduct	–	Calpine requires every employee to annually acknowledge that they have read the Code of Conduct.		
Management of material topics	GRI 3-3	Business Ethics, <a href="#">2023 Sustainability Report</a>		
Government Relations and Public Policy				
PAC contributions	GRI 415-1	\$141,050	\$200,800	\$161,250
Management of material topics	GRI 3-3	Government Relations and Public Policy, <a href="#">2023 Sustainability Report</a>		
Risk Management				
Management of material topics	GRI 3-3	Risk Management, <a href="#">2023 Sustainability Report</a>		
Cybersecurity				
Management of material topics	GRI 3-3	Cybersecurity, <a href="#">2023 Sustainability Report</a>		
Supply Chain Management				
New suppliers that were screened using environmental criteria	GRI 308-1	For purchases of materials and services that are critical to Calpine’s core business or have inherent environmental or safety risks, Calpine has a robust five-step sourcing process to select preferred suppliers. We monitor key performance indicators (KPIs) such as OSHA recordables and insurance coverage for these suppliers to ensure they continue to meet all requirements. We also apply a risk matrix to assess a supplier’s risk profile based on past performance in categories such as operational, safety, and cybersecurity risks.		

TOPIC	REFERENCE	2021	2022	2023
Percent spend with diverse suppliers <sup>[15], [16]</sup>	GRI 204-1	9%	9%	9%
Percent of diverse suppliers as a total of all suppliers <sup>[16]</sup>	–	18%	19%	33%
Percent spend with socially and economically disadvantaged suppliers <sup>[16]</sup>	–	50%	54%	31%
Technology Adoption				
Management of material topics	GRI 3-3	Technology Adoption, <a href="#">2023 Sustainability Report</a>		
Other				
Activity Metrics				
Total electricity delivered to residential customers	SASB IF-EU-000.B	2.76MM MWh	3.02MM MWh	2.96 MM MWh
Total electricity delivered to commercial customers		52.21MM MWh	53.34MM MWh	49.64MM MWh
Total electricity delivered to industrial customers				
Total electricity delivered to all other retail customers		All retail customers are included in the lines above.		
Total electricity generated	SASB IF-EU-000.D	105,608,579 MWh	107,460,740 MWh	118,165,601 MWh <sup>[17]</sup>
Percentage of generation capacity by major energy source				
Combined Cycle Non-Cogeneration		23% (5,949 MW)	23% (5,957 MW)	22% (5,957 MW)
Combined Cycle Cogeneration		3% (749 MW)	3% (769 MW)	3% (809 MW)
Simple Cycle/Other		9% (2,365 MW)	9% (2,365 MW)	9% (2,635 MW)
Renewables and Storage		65% (16,903 MW)	65% (16,921 MW)	66% (17,448 MW)
Percentage of electricity generated in regulated markets		5,031,899 MWh produced in regulated markets, 4% of total	6,313,930 MWh produced in regulated markets, 6% of total	6,636,597 MWh produced in regulated markets, 6% of total
Total wholesale electricity purchased	SASB IF-EU-000.E	54,968,160 MWh	56,361,714 MWh	52,600,060 MWh

# GRI CONTENT INDEX

TOPIC	REFERENCE	LOCATION OR DIRECT RESPONSE
<b>General Disclosures</b>		
Organizational details	GRI 2-1	About Calpine, <a href="#">2023 Sustainability Report</a> <a href="#">Calpine Ownership</a>
Reporting period, frequency and contact point	GRI 2-3	This report was published in November, 2024 and covers the 2023 calendar year. For questions about the reported information, please contact <a href="mailto:CorporateCommunications@calpine.com">CorporateCommunications@calpine.com</a> .
Restatements of information	GRI 2-4	Previously reported 2022 values for Implied Heat Rate (MMBTU/MWh): U.S. Fleet of Natural Gas Generation, U.S. CO <sub>2</sub> emissions rates for the electric power sector (Mt/MWh): Thermal generation rate, and U.S. CO <sub>2</sub> emissions rates for the electric power sector (Mt/MWh): Natural gas generation rate have been restated. Historical water consumption has been restated for 2021 and 2022. Historical water source allocation has been restated for 2021 and 2022. Please refer to the <a href="#">endnotes 3, 5, 10 and 12</a> for details.
External assurance	GRI 2-5	Calpine has not sought external assurance.
Activities, value chain and other business relationships	GRI 2-6	About Calpine, <a href="#">2023 Sustainability Report</a>
Employees	GRI 2-7	Data Tables, <a href="#">2023 Sustainability Report</a>
Governance structure and composition	GRI 2-9	Corporate Governance and Business Ethics, <a href="#">2023 Sustainability Report</a>
Role of the highest governance body in overseeing the management of impacts	GRI 2-12	Corporate Governance and Business Ethics, <a href="#">2023 Sustainability Report</a>
Communication of critical concerns	GRI 2-16	Business Ethics, <a href="#">2023 Sustainability Report</a>
Statement on sustainable development strategy	GRI 2-22	CEO Letter, <a href="#">2023 Sustainability Report</a>
Policy commitments	GRI 2-23	Corporate Governance and Business Ethics, <a href="#">2023 Sustainability Report</a>
Processes to remediate negative impacts	GRI 2-25	Business Ethics, <a href="#">2023 Sustainability Report</a>
Mechanisms for seeking advice and raising concerns	GRI 2-26	Business Ethics, <a href="#">2023 Sustainability Report</a>
Membership associations	GRI 2-28	Government Relations and Public Policy, <a href="#">2023 Sustainability Report</a>



# ENDNOTES

- 1 Average availability excludes power plants and units that are inactive. It represents the total hours during the period that our plants were in service or available for service as a percentage of the total hours in the period.
- 2 Represents approximate and estimated heat rates for industry-wide fossil fuel electricity generation as reported by EIA. See: [https://www.eia.gov/totalenergy/data/monthly/pdf/sec12\\_7.pdf](https://www.eia.gov/totalenergy/data/monthly/pdf/sec12_7.pdf).
- 3 2022 restated based on updated approximate heat rate for industry-wide fossil fuel electricity generation as reported by EIA. See: [https://www.eia.gov/totalenergy/data/monthly/pdf/sec12\\_7.pdf](https://www.eia.gov/totalenergy/data/monthly/pdf/sec12_7.pdf).
- 4 Represents data collected from Electric Power Annual as reported by the EIA.
- 5 2022 restated based on updated data collected from Electric Power Annual as reported by the EIA.
- 6 Represents estimated data calculated from Electric Power Monthly as reported by the EIA.
- 7 Data includes emissions from 100% controlling interest in Greenfield Energy Center starting September 2023. Calpine CO<sub>2</sub> Rate—Steam-Adjusted rate equals the total reported CO<sub>2</sub>e emissions divided by the sum of generated electricity (in MWh) plus steam equivalent of generated electricity (in MWh).
- 8 Totals for particulate matter emissions include data for combustion sources and exclude emissions from cooling towers.
- 9 Consists of cooling water consumption data from 100 MW and larger plants, excluding The Geysers.
- 10 Historical water consumption has been restated for 2021 and 2022 based on updated EIA definitions and calculation methods for Edge Moor Energy Center.
- 11 Data includes water consumption from 100% controlling interest in Greenfield Energy Center starting September 2023. Previous years do not reflect water consumption from Greenfield Energy Center.
- 12 Historical water source allocation has been restated for 2021 and 2022.
- 13 Significant Spill—Spill that is included in the organization's financial statements, for example due to resulting liabilities, or is recorded as a spill by the organization.
- 14 Reflects total donations by Calpine and the Calpine Foundation.
- 15 Diverse suppliers as defined by Dunn & Bradstreet and/or the National Minority Supplier Development Council.
- 16 Total spend for purchase orders only, does not include fuel spend, non PO spend, PCARD purchases, expense reimbursements.
- 17 Total electricity generated includes 100% controlling interest in Greenfield Energy Center starting September 2023.

# IMPORTANT LEGAL INFORMATION

This report contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Any “forward-looking statement” is made only as of the date of this report, and Calpine undertakes no obligation to update forward-looking statements. All statements, other than statements of historical facts are forward-looking statements. Words such as “may,” “could,” “will,” “should,” “likely,” “anticipate,” “attempt,” “expect,” “intend,” “seek,” “plan,” “project,” “believe,” “estimate,” “target,” “continue,” “strive,” “ensure,” “encourage,” “demonstrate,” “drive,” “support,” “aspire,” “lead,” and “goal” and the negative of these words or similar words or expressions identify forward-looking statements. These statements include, among other things, statements about expectations in connection with Calpine’s environmental, social and governance (“ESG”) initiatives, programs, projections, goals, targets, commitments, expectations, prospects, timeframes or plans. Calpine cautions that its forward-looking statements are not guarantees of future performance and are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements in this report. Such risks and uncertainties relate to and include, but are not limited to: our ability to gather and verify data regarding ESG impacts; the compliance of various third parties with our policies, plans, and procedures; environmental management; the integration and use of sustainable energy sources and modern plant technologies; carbon capture, usage, and storage activities; retail services to customers seeking to achieve energy transition goals; occupational health and safety performance; community and human rights impacts; employee and career development; diversity and inclusion and labor-related principles; supply chain management; risk management, including climate-related risks and opportunities; adoption of clean and reliable grid technologies; cybersecurity control; and operational and emergency preparedness and response management. Additional risks and uncertainties that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements in this report include, but are not limited to, the following:

- impacts to our business, operations and financial results as a result of general economic and market conditions, including the direction and magnitude of changes to interest rates, inflation and unemployment;
- price and supply volatility, and grid reliability, in gas and electricity markets;
- our ability to manage our capital and liquidity needs including collateral requirements, access the capital markets when necessary to comply with our existing financial obligations;
- the severity and duration of pandemics and their impact on our business, supplies, customers, employees and supply chains;
- extreme weather or climate events, such as winter storm Uri and California wild fires, that may cause plant outages, damage our generation assets, challenge our ability to meet contractual commitments or otherwise may affect our business, assets, the markets we serve, customers, employees, and/or supply chains;
- changes in demand for natural gas and geothermal energy supply, as well as carbon management solutions;
- international political and economic tensions (and any changes thereto), including the Russia-Ukraine conflict, that may cause disruptions to worldwide supply chains and impede worldwide growth;
- changes in laws, regulations and market rules in the wholesale and retail markets in which we participate and our ability to effectively respond to changes in laws, regulations or market rules or the interpretation thereof including those related to the environment, derivative transactions and market design in the regions in which we operate;
- governmental regulation, which could adversely affect our ability to achieve operational goals, technological developments of, and substantial investments in, geothermal and renewable energy and energy storage capabilities;
- success and/or potential impairments of our power development and construction activities; ability to maintain cost-effective operations and our competitive industry position while pursuing decarbonization objectives and investments; our ability to utilize our balance sheet or access capital markets in order to finance our geothermal, renewable energy and carbon capture initiatives;
- ensuring the integration of energy supply into client solutions;
- ability of our geothermal power operations to support our operations;
- declines in our competitive position, including due to adverse effects on performance caused by the introduction or expansion of competing technologies for power generation and demand-side management tools;
- environmental impacts, including air quality and emissions, biodiversity, contamination, and waste and water management;
- ability to satisfy service, residential or commercial energy related agreements, including with respect to the production of energy through renewable energy and energy storage resources;
- supporting electricity demand through the maintenance and expansion of an efficient gas-fired power plant fleet while integrating renewable energy resources;
- ability of suppliers to satisfy purchase orders on a timely basis or at all;
- present and possible future claims and litigation, including litigation arising out of Winter Storm Uri, and enforcement actions that may arise from noncompliance with market rules promulgated by the SEC, CFTC, FERC and other regulatory bodies;
- compliance with occupational health and safety regulatory requirements;
- ability to influence adoption of adequate health and safety and human rights procedures and processes throughout the value chain, including with respect to our suppliers;
- ability to attract, motivate, engage, and retain a diverse, inclusive and skilled workforce at the employee, management and supply-chain levels;
- the financial and operating conditions of the supply chain including, disruptions in or limitations on the transportation of natural gas or fuel oil and the transmission of power;
- success in securing quality local and/or diverse suppliers to source and produce materials;
- losses from, or the inability to identify and mitigate, risks inherent in operating in the global energy industry;
- high cost or unavailability of infrastructure, materials, equipment, supplies and/or personnel;
- losses of business continuity from power outages caused by weather, changes in demand, equipment maintenance, cyber-attacks or other factors;
- ability to minimize downtime in responding to leaks, spills, safety incidents, equipment outages or other emergency events or circumstances that may impact operations to our power plants, battery storage facilities, carbon capture facilities or losses of system loads;
- damage or disruptions to our power plants or losses of system loads caused by periodic wildfires in the West, particularly California and potential disruption of operations due to pandemics, war, employee and customer accidents, weather and seasonal factors, natural disasters, political events, civil unrest, cybersecurity, geopolitical, or terrorism acts or threats, economic downturns or other causes beyond our control;
- electrification, sustainable retail products, growing our retail business, renewable power resources including battery storage and their integration into the grid, our climate strategy, a lower-carbon economy, corporate governance, government relations and public policy, and hazard recognition and mitigation;
- reputational risks, stakeholder and consumer concerns, scrutiny or opposition relating to our operations;
- risks related to our geothermal resources, including the adequacy of our steam reserves, unusual or unexpected steam field well and pipeline maintenance requirements, variables associated with the injection of water to the steam reservoir and potential regulations or other requirements related to seismicity concerns that may delay or increase the cost of developing or operating geothermal resources;
- extensive competition in our wholesale and retail businesses, including challenges from renewable sources of power, interference by states in competitive power markets through subsidies or similar support for new or existing power plants, new and existing federal subsidies, lower prices and other incentives offered by retail competitors, and other risks associated with marketing and selling power in the evolving energy markets; and
- other risks identified in this report.

Other unpredictable or unknown factors not discussed in this report could also have material adverse effects on forward-looking statements.

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Except where noted, the information covered in this report highlights Calpine’s ESG performance and initiatives in fiscal year 2023.

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