Sempra Energy®

Delivering Energy With Purpose

2018 Corporate Sustainability Report

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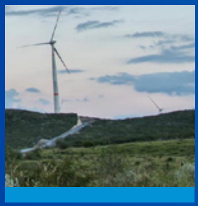
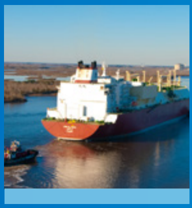




On our cover:
Delvin Rideau, marine coordinator, at the Cameron LNG terminal in Hackberry, La.

Please consider the environment before printing. This report is accurate as of June 15, 2019.
See sempra.com for the most up-to-date version of this report.

Letter from our chairman and CEO

"At Sempra Energy, we believe there will be tremendous change in the energy landscape over the next 10 years. I've never been more excited about our potential."

JEFFREY W. MARTIN
Chairman and Chief Executive Officer

We will succeed not by following convention, but by charting our own path and by celebrating what makes us special: **our people**, their bold ideas and a willingness to find new and better ways to serve our customers.

LETTER FROM OUR CHAIRMAN AND CEO

Delivering energy with purpose is more than the title of this year's sustainability report. It is our vision – it is how we improve the lives of those we serve and is an integral part of who we are.

At Sempra Energy, we believe there will be tremendous change in the energy landscape over the next 10 years. Two worldwide trends are driving this:

- Increasing demand for cleaner energy; and
- The transformation of the United States into an energy leader whose exports play an increasingly important role in the global energy markets.

Our company stands at the intersection of these trends, and I've never been more excited about our potential. We are working every day to capitalize on this once-in-a-generation opportunity and fulfill our mission of becoming North America's premier energy infrastructure company.

We've already made great progress.

- With the acquisition of a majority stake in the largest investor-owned utility in Texas, Oncor Electric Delivery Company LLC (Oncor), Sempra Energy is now the utility holding company with the largest U.S. customer base, with operations in the most attractive markets in North America.
- Our utilities regularly receive best-in-class rankings for customer service, innovation, reliability and safety.
- Our California utilities, San Diego Gas & Electric and Southern California Gas Co., combine to form a leading utility platform serving more than 25 million consumers.
- Our subsidiary IEnova, has invested more than $8 billion in energy infrastructure, creating one of the largest energy companies in Mexico.

We're also a leading developer in the liquefied natural gas (LNG) export market, with five LNG projects in North America under development, including two at a strategically advantaged location on the West Coast, which could enable customers to reach markets in Asia in as little as 12 days. Sempra Energy is well positioned to be a leader in the export of LNG, with the goal of developing roughly 45 million tonnes per annum (mtpa) of export capacity to support U.S. producers' access to global markets.

A revitalized workforce will be the key to maximizing Sempra Energy's potential for tremendous growth. We've made significant progress in this area as well, by making a commitment to invest in a high performing culture. To ensure our success, in the past year we've refreshed our company's vision, mission and values, with abundant input from employees.

We strongly believe in **our vision** of delivering energy with purpose. And we want each of our 20,000 employees to recognize the opportunity they have to put their thumbprint on the future. Our work in LNG provides a good example: These operations have an impact that goes beyond providing a clean fuel alternative to the world – they create high-skilled U.S. jobs; will help to reduce the U.S. trade deficit; and improve the energy security of U.S. allies.

A revitalized workforce will be the key to maximizing Sempra Energy's potential for tremendous growth.

We're working to fulfill **our mission** to become North America's premier energy infrastructure company. Our "path to premier" is based on six critical success factors: world-class safety; energy choice, security and reliability; innovation and technology; a talented, diverse and engaged workforce; financial excellence; and energy leadership with purpose. You can read about our approach to each of these areas in this report.

And finally, **our values:** do the right thing, champion people and shape the future. These define who we are, what we stand for and why we come to work each day.

Together, these principles provide a shared sense of purpose for our talented employees. Nothing is more important.

As I look ahead to 2019 and beyond, I see incredible potential at Sempra Energy. As demand for cleaner energy continues to climb, North America will rise to meet this challenge and our company will step forward to deliver energy with purpose.

As always, sustainability will play a critical role. With strong performance in safety, a focus on limiting our environmental impact and steady support for the values of diversity and inclusion, our company will deliver cleaner energy to the world – with purpose – and with pride.

We will succeed not by following convention, but by charting our own path and by celebrating what makes us special: our people, their bold ideas and a willingness to find new and better ways to serve our customers. At this unique moment in time, I am confident that together, we can take our remarkable company and make it even better and more valuable to all our stakeholders.

Thank you for your continued interest and support.

Jeffrey W. Martin
Chairman and Chief Executive Officer

Our business

INTERVIEWS/SPOTLIGHTS:

Anoush Melikyan, labor relations specialist, at a SoCalGas facility.

Year in review

2018 was a transformative year for Sempra Energy®. We celebrated our 20th anniversary, completed the largest acquisition in company history and announced changes in key leadership positions across the company, including the appointment of Jeffrey W. Martin as our new chairman and chief executive officer.

The company outlined a five-year plan for growth with an emphasis on strengthening our North American energy infrastructure platform. As part of this strategic focus, we announced our intention to sell U.S. wind, solar and non-utility natural gas storage facilities.

The company published human rights and stakeholder engagement policies, outlining the company's expectations for employees and other stakeholders in these areas.

A group of Sempra Energy shareholders proposed changes to our business strategy. Details can be found on page 39 of our 2018 Annual Report on Form 10-K.

ELECTRIC INFRASTRUCTURE

Sempra Energy acquired a majority interest in Oncor Electric Delivery Company LLC[1] (Oncor) for cash consideration of $9.45 billion. The acquisition made Sempra Energy the utility holding company with the largest customer base in the U.S.

Oncor announced an agreement to acquire 100 percent of the equity interests of InfraREIT, Inc. (InfraREIT) and its subsidiary, InfraREIT Partners, LP, for approximately $1.275 billion, not including InfraREIT debt. InfraREIT owns regulated electric transmission assets in the state of Texas. Sempra Energy also announced a separate agreement to acquire a 50-percent limited partnership interest in Sharyland Holdings, LP for approximately $98 million. Both transactions closed in May 2019.

SDG&E submitted a proposal to the California Public Utilities Commission (CPUC) seeking approval to build charging infrastructure to support 3,000 medium/heavy-duty electric vehicles.

[1] *Although ring-fencing measures, governance mechanisms and commitments limit our ability to direct the management, policies and operations of Oncor, we include 100-percent data for the full year from this business due to its significant impact on our financial performance. Data exclusions or additions are noted throughout the report.*

The CPUC approved 83.5 megawatts of energy storage and 4.5 megawatts of demand response to improve electric reliability in SDG&E's service territory.

The city of San Diego announced its intention to form a Community Choice Aggregation (CCA) program to purchase electricity for its residents. Under the proposed CCA program, SDG&E® would continue to operate the system that delivers the electricity. SDG&E pledged to help the city with the transition.

Our subsidiary PXiSE Energy Solutions, LLC (PXiSE) signed an equity investment agreement with Mitsui & Co., Ltd. for the development and sale of PXiSE's patented software (Active Control Technology) that manages and integrates renewable energy resources with traditional energy resources.

Horizon Power selected PXiSE's Active Control Technology software to manage distributed energy resources in Western Australia.

NATURAL GAS INFRASTRUCTURE

With all major construction activities complete, Sempra Energy's joint venture, Cameron LNG Holdings, LLC, (Cameron LNG), initiated the commissioning process for the support facilities and first of three liquefaction trains of Phase 1 of its Hackberry, La. liquefaction-export project. The project is expected to enable the export of approximately 12 mtpa of liquefied natural gas (LNG). Production of LNG commenced in May 2019.

Sempra Energy entered into an agreement with Total S.A. that provides a framework for cooperation in the development of North American LNG export projects.

Sempra LNG and IEnova signed Heads of Agreements with affiliates of Total S.A., Mitsui & Co., Ltd. and Tokyo Gas Co., Ltd. for the full export capacity of Phase 1 of the proposed Energía Costa Azul (ECA) LNG liquefaction project in Baja California, Mexico: Their ultimate participation in the potential ECA LNG export project remains subject to finalization of definitive agreements, among other factors. The proposed project is expected to enable the sale of approximately 2.4 mtpa of LNG.

Port Arthur LNG and the Polish Oil & Gas Company agreed to the terms of a 20-year contract for delivery of 2 mtpa of LNG from the proposed Port Arthur liquefaction facility, beginning in 2023. The agreement is subject to conditions precedent, including Port Arthur making a positive final investment decision. The siting, construction and operation of the facility was approved by the Federal Energy Regulatory Commission (FERC) in April 2019.

SoCalGas reached a settlement agreement with several government agencies related to the 2015-16 natural gas leak at the Aliso Canyon storage facility. In May 2019, a third party directed by the CPUC and the California Department of Conservation's Division of Oil, Gas and Geothermal Resources released a report detailing its analysis of the root cause of the leak.

SoCalGas® injected the first California-produced renewable natural gas (natural gas from the decomposition of organic matter) into its pipeline system.

2018 was a transformative year for Sempra Energy.

IEnova's liquid fuels terminals are expected to increase Mexico's liquid fuels storage capacity by approximately **25 percent.**

With partners, SoCalGas demonstrated technology that can convert carbon dioxide into methane (natural gas). This could reduce the emissions from biogas operations, where carbon dioxide is normally vented to the atmosphere.

SoCalGas entered into a partnership to advance a technology that can convert natural gas to hydrogen, carbon fiber and carbon nanotubes. The technology could dramatically decrease the cost of producing hydrogen from natural gas, enabling the wider use of hydrogen as a transportation fuel.

IENOVA

Sempra Energy's Mexican subsidiary, IEnova, announced plans to develop, build and operate a liquid fuels marine terminal at the La Jovita Energy Hub near Ensenada, Mexico, and signed long-term contracts with affiliates of Chevron Corp. and BP for the facility's capacity.

IEnova was awarded a 20-year contract to build and operate a liquid fuels marine terminal in Sinaloa, Mexico, and signed long-term contracts with affiliates of Chevron Corp. and Marathon Petroleum Corporation for the facility's capacity.

When completed, the La Jovita and Sinaloa projects, combined with IEnova's other liquid fuels terminals under development, are expected to increase Mexico's liquid fuels storage capacity by approximately 25 percent.

Consolidated data	2016	2017	2018
Dollars in millions, except per-share amounts			
Revenues	$10,183	$11,207	$11,687
Earnings	$1,370	$256	$924
Adjusted earnings attributable to common shares[1]	$1,267	$1,368	$1,503
Earnings per share of common stock:			
Basic	$5.48	$1.02	$3.45
Diluted	$5.46	$1.01	$3.42
Adjusted diluted[1]	$5.05	$5.42	$5.57
Weighted average common shares outstanding (diluted, in millions)	251.2	252.3	269.9
Total assets	$47,786	$50,454	$60,638
Dividends declared per common share	$3.02	$3.29	$3.58
Debt to total capitalization	53%	56%	57%
Book value per common share	$51.77	$50.40	$54.35

[1] Sempra Energy adjusted earnings and adjusted diluted earnings per common share are non-GAAP financial measures (GAAP represents accounting principles generally accepted in the United States of America). For an explanation and reconciliation of these non-GAAP financial measures to Sempra Energy earnings and diluted earnings per common share, the most directly comparable financial measures calculated in accordance with GAAP, please see "Reconciliation of Non-GAAP Financial Measures (unaudited)" on pages 83-84 of this report.

An interview with Juancho Eekhout, chief development officer, IEnova

INTERVIEW:

Liquid fuels projects improve reliability, support IEnova's growth

Q: Why the new focus on liquid fuels?

A: IEnova builds different types of energy infrastructure in Mexico to support the development of the country and increase its access to reliable and cost-competitive energy. Our natural gas pipelines bring U.S. natural gas to industrial customers and power-generation plants in Mexico. And we deliver renewable energy to Mexican consumers through our renewables business.

Mexico has about three days' worth of refined fuels inventory. Comparable countries have 60 to 90 days' worth. At IEnova, we are rising to the challenge. We're developing refined fuels terminals to increase energy security and supply reliability. It's an exciting time. These projects strengthen Mexico's energy resilience by providing additional points of entry for fuels – and they strengthen Mexico's energy security by providing storage close to areas where energy is consumed.

These terminals are also anchored by customers who have signed long-term contracts.

Q: What other opportunities is IEnova exploring?

A: There's a lot of activity in terms of hydrocarbons exploration in Mexico right now. Following a competitive bidding process, a number of companies – both domestic and international – have been granted contracts for exploration and production.

Many of the new production fields are in areas with no pipeline and terminal infrastructure. And while we won't be participating directly in exploration and production, we are looking to develop the midstream infrastructure to support the production of these resources – which are so important for Mexico.

We're also looking to enter the underground natural gas storage business. Mexico imports more than 50 percent of its natural gas and does not currently have the storage capacity needed to help ensure supply reliability.

Oncor – a story of growth

In 2018, Sempra Energy acquired a majority interest in Oncor Electric Delivery Company LLC (Oncor).

Oncor is the largest regulated electric transmission and distribution provider in Texas, serving approximately 10 million consumers through 137,000 miles of electric lines. The company benefits from Texas' strong growth, serving four of the 10 fastest-growing counties and six of the 10 fastest-growing cities in the U.S. In 2018, Oncor connected a record 70,000 new customer meters to its system and received 86 requests for higher capacity (69 kilovolt or more) interconnection – far more than the company receives in a typical year.

To meet the needs of these customers, the amount of energy connected to Texas' power grid is increasing – and is increasingly clean. In 2018, energy in the grid from renewable sources increased to 20 percent, up from just 10 percent in 2013. And more than 80 additional gigawatts of solar, wind and storage capacity were being reviewed for interconnection to the grid.

Oncor plans to interconnect much of this new energy to the grid. And with its acquisition of InfraREIT, the company has expanded its geographic reach to include portions of West Texas and the Texas Panhandle.

Read More:
sempra.com/newsroom

Strategy and assets

Sempra Energy is an energy infrastructure company with 2018 revenues of more than $11.6 billion. Our companies' 20,000 employees serve more than 40 million consumers worldwide. Our mission is to become North America's premier energy infrastructure company.

At Sempra Energy, we expect that the global economy will continue to shift toward lower-emission sources of energy: climate change impacts are increasing and the price per kilowatt hour of renewable energy is declining. We have incorporated this expectation of a lower-carbon economy into our long-term business strategy: our mission is to become North America's premier energy infrastructure company, and to play a key role in the delivery of cleaner energy to customers in North America and – through our LNG business – worldwide. It is an exciting time for our company.

SEMPRA UTILITIES

Southern California Gas Company has the largest customer base of any U.S. natural gas distribution utility, providing safe, reliable and affordable service to 21.9 million consumers.

San Diego Gas & Electric is an electric and gas utility that provides safe and reliable energy to 3.7 million consumers in San Diego and southern Orange counties.

Sempra South American Utilities* invest in electric generation and transmission to provide energy service to more than 6.7 million consumers in Chile and Peru.

Oncor is the largest regulated electric transmission and distribution company in Texas, providing safe and reliable service to approximately 10 million consumers.

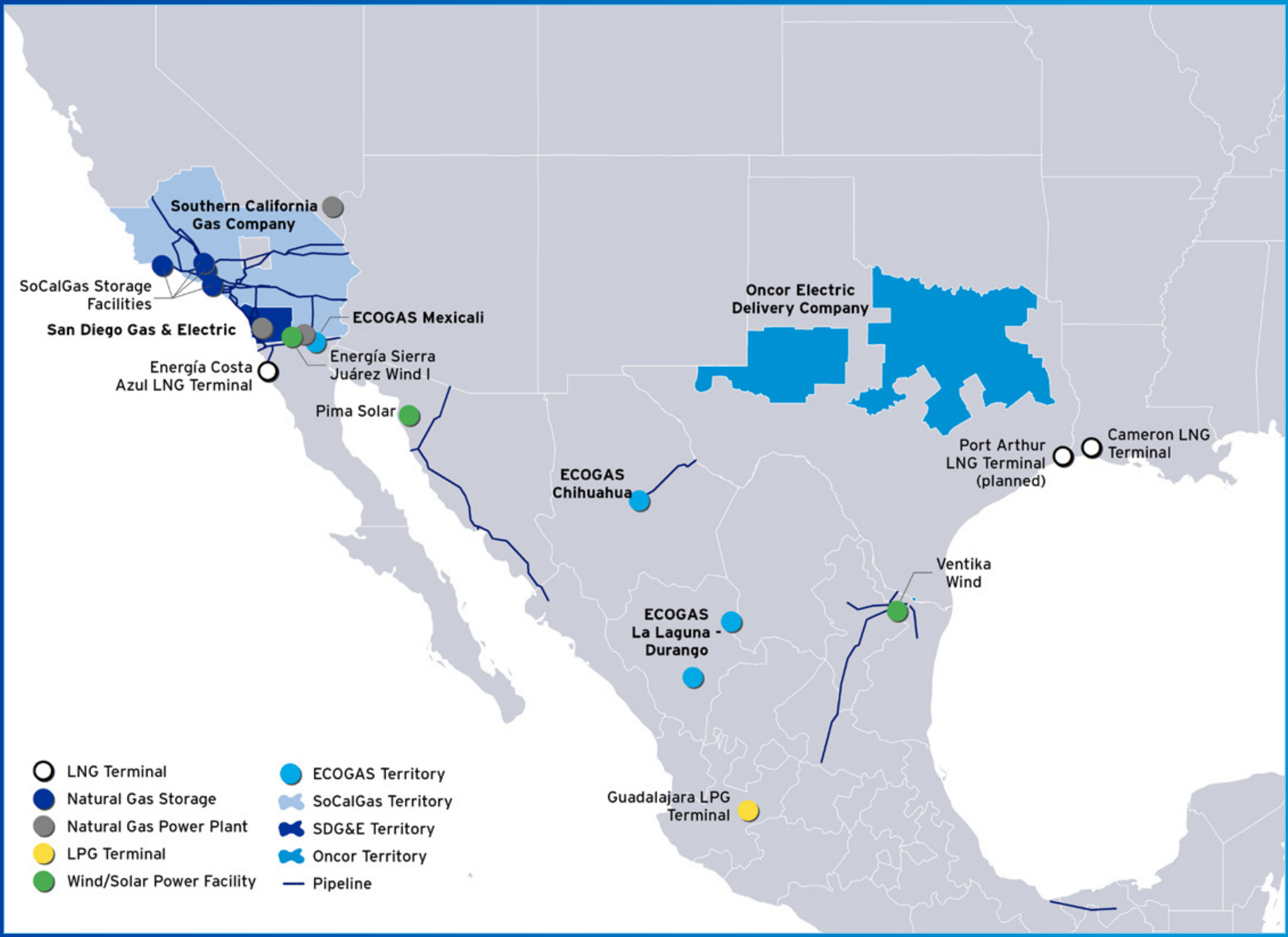
SEMPRA NORTH AMERICAN INFRASTRUCTURE

Sempra Mexico includes IEnova, one of the largest private energy companies in Mexico. IEnova develops, builds, operates and invests in energy infrastructure in Mexico.

Sempra LNG develops, builds and invests in liquefied natural gas facilities and natural gas pipelines and storage.

** Sempra Energy launched a formal sale process in January 2019 to sell its equity interests in the South American Utilities and expects to complete the sale process by the end of 2019.*

Our energy assets



Sempra South American Utilities, Sempra North American Infrastructure, Sempra LNG, Sempra Mexico, Sempra Texas Utility, Oncor Electric Delivery Company LLC (Oncor) and Infraestructura Energética Nova, S.A.B. de C.V. (IEnova) are not the same companies as the California utilities, San Diego Gas & Electric Company (SDG&E) or Southern California Gas Company (SoCalGas), and Sempra South American Utilities, Sempra North American Infrastructure, Sempra LNG, Sempra Mexico, Sempra Texas Utility, Oncor and IEnova are not regulated by the California Public Utilities Commission.

The United Nations' Sustainable Development Goals

The energy we deliver improves the quality of life for the customers and communities we serve.

In 2015, the United Nations (U.N.) released its 2030 Development Agenda, which included 17 sustainable development goals and supporting targets. Our work contributes to these targets, as follows:

ENSURE ACCESS TO AFFORDABLE, RELIABLE, SUSTAINABLE AND MODERN ENERGY FOR ALL.

7.1. By 2030, ensure universal access to affordable, reliable and modern energy services:

- Our utilities serve more than 40 million consumers; they use innovative tariffs to encourage customers to use energy efficiently and assistance programs to help customers reduce their energy bills.
- We encourage policymakers to maintain the stable energy policy framework critical to the development of critical energy infrastructure, where projects often require long lead times and significant financial commitments.
- To demonstrate the capabilities of smart grid technology, SDG&E developed a microgrid in the community of Borrego Springs that reacts to changing environmental and system conditions – and can disconnect and function independently during emergencies, improving reliability.

7.2. By 2030, increase substantially the share of renewable energy in the global energy mix:

- Over 80 gigawatts of solar, wind and storage capacity are being reviewed for interconnection to the Texas power grid – much of this potential new generation is in Oncor's service territory.
- Approximately 45 percent of the electricity SDG&E delivers to its customers comes from renewable sources. Per California law, this must increase to 60 percent by 2030 and 100 percent by 2045.
- SoCalGas has also made a bold commitment that by 2030, renewable natural gas will make up 20 percent of the natural gas it delivers to core customers.
- IEnova, with partners, can generate more than 400 megawatts of wind power and 110 megawatts of solar power, and has an additional 374 megawatts of wind and solar power under development.
- Our subsidiary PXiSE developed and commercialized a technology that makes it easier to integrate renewable energy into the grid.

7.3. By 2030, double the global rate of improvement in energy efficiency:

- Time-of-use tariffs in California encourage our electric utility customers to reduce energy use during periods of peak demand.
- We set and achieve energy efficiency goals.
- Our California utilities are building the infrastructure to support alternative-fueled vehicles, a more-efficient alternative to gasoline-fueled vehicles. (pages 6 and 29)

BUILD RESILIENT INFRASTRUCTURE, PROMOTE INCLUSIVE AND SUSTAINABLE INDUSTRIALIZATION AND FOSTER INNOVATION.

9.4. By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities:

- We track and report on our greenhouse gas emissions and intensity. (page 30)
- We have a goal that our LNG operations will enable the delivery of approximately 45 mtpa, allowing consumers around the world to shift away from coal toward lower-emissions natural gas.
- Our utilities' operations include integrated energy storage, smart meters, electric vehicles, time-of-use rates and customer engagement strategies. All these activities serve to improve energy efficiency and reduce environmental impact.

TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS.

13.1. Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries:

- We identify, manage and disclose climate change risks. (page 26)
- We disclose our greenhouse gas emissions. (page 30)
- We improve operational efficiency and work to make our infrastructure more resilient in the face of potential climate-related impacts. (page 28)

13.2. Integrate climate change measures into national policies, strategies and planning:

- We encourage policymakers to maintain an energy policy framework that addresses climate change and energy in a coordinated manner. (page 36)

The **changing climate** has operational, regulatory and reputational impacts on our businesses.

Key risks

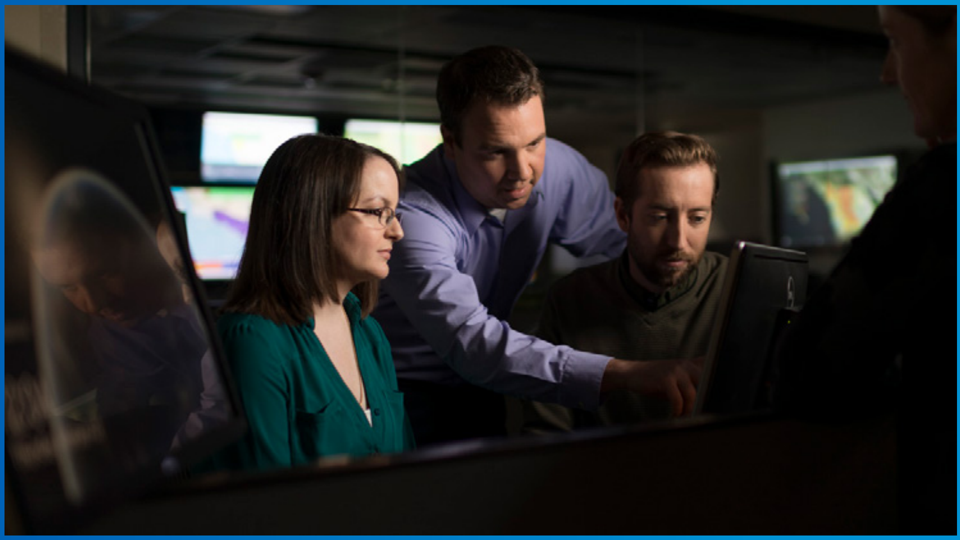
As a core part of our value proposition to stakeholders, Sempra Energy identifies, assesses and, where possible, mitigates a broad and complex set of risks commonly associated with the energy industry, as well as risks specific to our company. Our 2018 Annual Report on Form 10-K describes these risks on pages 36–65.

We assess different types of risk, including:

- Financial risk: Sempra Energy's cash flows, ability to pay dividends and ability to meet its debt obligations largely depend on the performance of its businesses and the ability to utilize the cash flows from its businesses.
- Operational risk: Severe weather conditions, natural disasters, catastrophic accidents or acts of terrorism could materially adversely affect our businesses, financial condition, results of operations, cash flows and/or prospects.
- Safety risk: There are inherent public and employee safety risks associated with operating energy generation, processing, storage, transmission and distribution facilities and other energy infrastructure.
- Cybersecurity risk: The malicious use of technology could present a risk to our information systems, including customer information; the integrity of our energy systems and infrastructure; and our operating, financial and administrative systems.
- Legislative and regulatory risk: Our businesses are subject to government regulations and may be materially adversely affected by changes in regulations and laws, or in their interpretation or implementation.
- Environmental compliance risk: Our businesses incur environmental compliance costs, and future environmental compliance costs could have a material adverse effect on our cash flows and results of operations.
- Reputational risk: The reputation of our companies is fundamental to our license to operate in or near communities, including our ability to site projects and receive needed approvals and permits from local governments and regulatory and permitting agencies.
- Climate-related risk: An amalgam of risks: the changing climate has operational, regulatory and reputational impacts on our businesses.

Information on our risk management process begins on page 15.

We assess and, where possible, mitigate a broad and complex set of risks.



A network of 177 weather stations provides data on wind speed, humidity and temperature.

SPOTLIGHT:

Climate risk – an example from SDG&E

Climate risk is an area of special focus. It includes short-, medium- and long-term risks: we prepare for the next wildfire season (see below); we work to meet two- to three-year regulatory targets; and we plan for the potential impact of sea-level rise, which may be decades away.

SDG&E has developed a comprehensive 2019 Wildfire Mitigation Plan, as discussions about climate change and wildfires continue to influence policy priorities in California. This bold plan is designed to help prevent electric equipment-related fires, improve the ability of the regional power grid to withstand extreme weather conditions and support the company's highest priority: keeping customers and communities safe.

"Every year, climate change presents new risks and challenges," said Caroline Winn, chief operating officer for SDG&E. "At SDG&E, we are rising to the challenge. Our engineers, fire-science and climate-adaption experts are continuing to develop and implement industry-leading wildfire mitigation strategies to help protect the communities we serve. There is no higher priority for us than the safety of our customers."

SDG&E's plan builds upon the wildfire mitigation programs the utility has been developing and implementing over the past decade. It includes three main components:

- Operations and engineering: system hardening by upgrading wood poles to fire-resistant steel poles; aggressive vegetation management (tree trimming); and the use of SDG&E's firefighting helitanker.
- Situational awareness and weather technology: advanced meteorology and fire-science capabilities with a network of 177 weather stations to provide readings of wind speed, humidity and temperature in fire-prone areas.
- Customer outreach and education: regular collaboration with local agencies to help ensure effective outreach and communications to the public about the risk of wildfires, fire prevention and community resource centers.

Our response to CDP's (formerly known as Carbon Disclosure Project) annual survey at cdp.net includes more detail on climate-related risks and opportunities.

What does it mean to be North America's premier energy infrastructure company?

Our path to premier is based on six critical success factors:

- World-class safety
- Energy choice, security and reliability
- Innovation and technology
- Talented, diverse and engaged workforce
- Financial excellence
- Energy leadership with purpose

Governance and risk management

Sempra Energy's vision, mission and values serve as the foundation of our commitment to building a vibrant, high-performing culture. Our board of directors sets our strategic direction. Our employees and contractors complete their tasks each day with integrity and care. And our risk management and compliance departments are designed to help ensure we operate with safety and prudence, abiding by the policies and procedures we have established and avoiding or transferring risk when possible.

VISION, MISSION AND VALUES

In 2018, with input from employees across the organization, we developed a bold vision to improve the lives of our customers by delivering energy with purpose; establishing a clear mission to be North America's premier energy infrastructure company; and refreshing our core values:

- Do the right thing: We are guided by our ethics, our focus on safety and our willingness to stand for what is right.
- Champion people: We invest in people and value diversity and inclusion because it elevates performance and helps us partner responsibly.
- Shape the future: We are forward thinkers who innovate and collaborate with stakeholders to make a positive difference.

When each Sempra Energy stakeholder – every employee, customer, business partner and shareholder – has a clear sense of why we exist, where we are going and how they can contribute, our company thrives.

Our employees and contractors complete their tasks each day with integrity and care.

Our board of directors provides experienced and independent leadership.

BOARD OF DIRECTORS

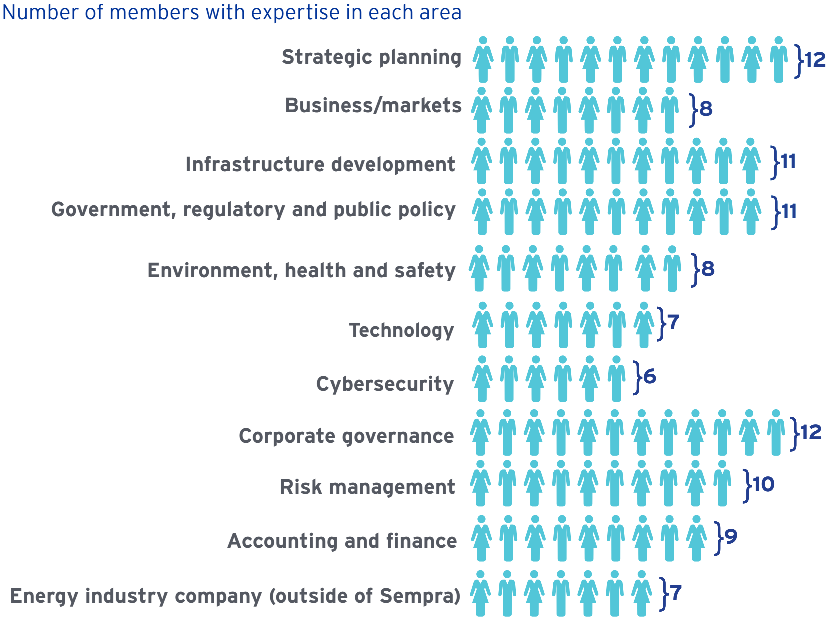
The Sempra Energy board of directors directs the management of Sempra Energy, providing experienced and independent leadership.

The board has established five standing committees: the Audit Committee; the Compensation Committee; the Corporate Governance Committee; the Environmental, Health, Safety and Technology (EHS&T) Committee; and the Executive Committee. The EHS&T Committee is responsible for reviewing this report each year. Committee charters may be found in the Investors section of sempra.com.

The board establishes corporate governance policies that guide Sempra Energy's activities. It reviews companywide succession planning as well as business plans and performance. It also provides oversight of risk management including the strategic, financial, legal, operational, regulatory, climate, reputational and compliance risks facing the company.

Board member areas of expertise[1]

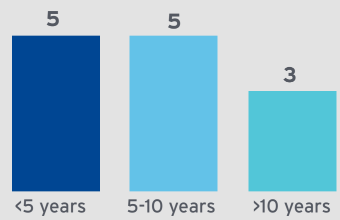
Number of members with expertise in each area



[1]Reflects board composition as of May 9, 2019.

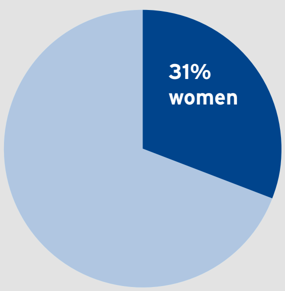
Board tenure (years)[1]

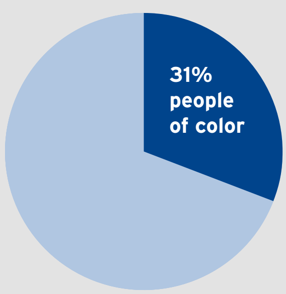
Average: 6.6 | Median 5.8

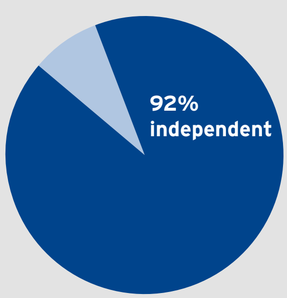


[1] Reflects board tenure as of March 23, 2019.

Board diversity[1]







[1] Reflects board composition as of May 9, 2019.

Throughout the year, the full board and its committees review and discuss specific risks in detail. In October 2018, we added two new directors to our board. As of May 9, 2019, the date of our most recent annual meeting, 12 of our 13 board members, or 92 percent, were independent according to the principles and standards established by the New York Stock Exchange.

Our board recognizes that diversity takes many forms and brings many benefits. Diversity, including gender diversity, is one of the factors the board considers when it identifies potential new members.

Sempra Energy's board of directors is accountable to shareholders. Each year, in conjunction with our annual meeting, each shareholder can vote: for or against the election of each member of our board of directors; to ratify the selection of our independent public accounting firm; and to cast an advisory vote on the company's executive compensation program. In addition to these routine annual proposals, the board periodically submits proposals for shareholder consideration.

Shareholders may also submit proposals: a shareholder who has held $2,000 of voting shares of Sempra Energy stock for at least one year may submit one proposal per year with respect to how we conduct business. These proposals are either: published in our annual proxy statement and voted on by shareholders in conjunction with the annual meeting; excluded, according to U.S. Securities and Exchange Commission guidelines; or withdrawn by the shareholder.

In 2018, Sempra Energy management met with shareholders representing approximately 59 percent of our total outstanding shares (including approximately 45 percent of our institutional share ownership) to discuss corporate governance, executive compensation, business strategy, environmental and social matters, board composition, and management's commitment to fostering a vibrant, high-performing culture.

Proxy vote summary

	Percent vote "For"[1]				
Proxy item	**2015**	**2016**	**2017**	**2018**	**2019**
Election of directors (average)[2]	99	96	99	99	99
Ratification of independent auditors[2]	99	99	99	98	98
Advisory vote on executive compensation[2]	97	71	98	97	96
Approval of 2019 long-term incentive plan[2]	-	-	-	-	95
Advisory vote on how often shareholders will provide advisory vote on executive compensation (Board recommendation was annually)[2]	-	-	90	-	-
Shareholder proposal on requiring the chairman of the board to be independent[3]	16	-	-	-	43
Shareholder proposal on enhanced proxy access for shareholders to nominate directors[3,4]	-	-	-	20	-

[1] Defined as For/(For + Against), expressed as a percentage. Abstentions and broker non-votes are not included in the calculation.

[2] Proposals submitted by the board.

[3] Proposal submitted by a shareholder in accordance with U.S. Securities and Exchange Comission rules.

[4] The shareholder proposed increasing from 20 members to an unlimited number of members of a nominating group that would be required to hold 3 percent of company common stock for three years in order to require the company to put director candidates selected by the nominating group in the proxy statement as a matter to be voted on by shareholders. The shareholder also proposed to increase the number of candidates, in certain circumstances, that a nominating group could nominate to be voted on by shareholders.

SPOTLIGHT:

Board governance of climate change issues

Sempra Energy's oversight and management of climate change-related issues is robust and comprehensive.

Sempra Energy's board of directors discusses a range of issues related to climate change throughout the year, including climate-related risks. Physical risks related to climate change include more frequent and intense floods, drought, wind events, wildfires and temperature extremes as well as sea level rise. Transition risks related to society's response to climate change include policy/regulatory changes; reputational and legal risks; and the risk of technological disruption. We describe these risks in greater detail on page 26.

The potential financial impacts of these risks include disruption to production or operation of our energy infrastructure assets; disruption to our supply chain, including changes in the cost of the natural gas and electricity that we purchase and deliver; physical damage to our assets; and changes in demand for the energy we provide.

Our board also reviews and discusses strategies to maximize climate-related opportunities for our company. These include increased demand for lower-carbon energy and the infrastructure to deliver it; increased demand for LNG, including from countries that currently rely on coal or fuel-oil to generate power; increased energy efficiency requirements, which our utilities would help to implement; and increased demand for clean transportation, energy storage and renewable natural gas.

The Environmental, Health, Safety & Technology committee of our board oversees environmental, health, safety and technology-related risks, controls, processes, programs and performance. Many of these topics are closely related to climate change and the long-term sustainability of Sempra Energy.

For more on climate change impacts, risks and opportunities, please see page 26.

Sempra Energy's board of directors discusses physical risks, transition risks and the potential financial impacts of these risks.

Our Code of Business Conduct covers a wide range of topics, including:

- Safety
- Discrimination- and harassment-free workplace
- Information management, confidentiality and privacy
- Environmental protection
- Charitable activities
- Political participation
- Anti-trust, anti-corruption and bribery laws
- Fair competition, conflicts of interest and securities trading

COMPLIANCE AND MANAGEMENT SYSTEMS

At Sempra Energy, we operate using well-established management systems and processes. Our compliance program is based on five elements:

- Leadership oversight and accountability;
- Codes of conduct, policies and procedures;
- Education, communication and awareness;
- Risk assessments, auditing and monitoring ; and
- Reporting processes and procedures.

Sempra Energy's leaders are accountable for creating a culture of compliance: in their words and actions, they demonstrate integrity, honesty and respect.

Our Code of Business Conduct is the foundation of our compliance program. We expect each Sempra Energy director, officer, employee and supplier to understand and comply with the Code. Corporate policies, posted on our company website, provide further detail on what we expect from these stakeholders.

To support and educate employees, we require that they take ethics and compliance training each year. We supplement this formal training with surveys, videos and digiboards throughout the year.

Management systems and processes help us track performance and protect the company from exposure to unnecessary risk. These include:

- Our Audit Services department, which reports its key findings to the Audit Committee of the Sempra Energy board of directors, completed more than 120 internal audits in 2018.
- Cybersecurity-focused employee communications and town hall meetings, one-click reporting and other tracking and reporting tools help protect the company's information assets.
- An environmental and safety compliance management program, used at our California utilities, helps to ensure compliance with environmental and safety laws; rules and regulations; and company standards. Our other businesses utilize ISO14001 and other international standards.
- Business resumption plans outline how we will recover and resume operations following a natural or human-caused disaster or other unforeseen disruption.
- A lobbying activity tracking system helps us manage political activity and meet local, state and federal political reporting requirements.

We **monitor performance** and track progress against goals.

In addition to these systems and processes, Sempra Energy uses an enterprise-wide system to collect environmental, social and governance (ESG) data. We use this data to monitor performance and to track progress against goals – critical to our continuing efforts to improve the sustainability of our company.

Employees, contractors, customers and suppliers may report a compliance or ethics-related concern anonymously and without fear of retaliation through our Ethics & Compliance Helpline, available 24 hours a day, seven days a week. Every report is investigated.

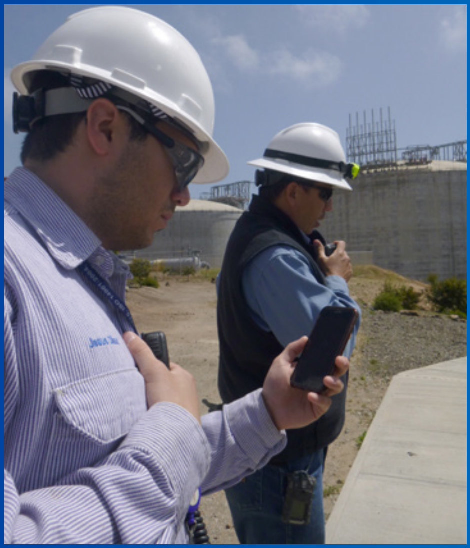
- SempraEthics.com
- From the U.S.: 800-793-7723
- From Mexico: 001-770-582-5249
- From Chile: 600-320-1700
- From Peru: 0800-7-0690

In addition to the helpline, employees may report their concern to their immediate supervisor, the next level of management above their supervisor, the Corporate Compliance department, the Human Resources department and Sempra Energy's chief ethics officer.

External certifications[1]

Compliance and management systems - external certifications		
ISO9001	Aguaprieta pipeline (construction and operations) Ecogas Energía Costa Azul Energía Sierra Juárez IEnova Gasoductos México (IGM) Luz del Sur	Rosarito pipeline (Gasoducto Rosarito) Termoeléctrica de Mexicali Transportadora de Gas Natural de Baja California (TGN) Transporte Oeste
ISO14001	Aguaprieta pipeline (construction and operations) Ecogas Energía Costa Azul Energía Sierra Juárez	IEnova Gasoductos México (IGM) Luz del Sur Rosarito pipeline (Gasoducto Rosarito) Transporte Oeste
OHSAS18001	Aguaprieta pipeline (construction and operations) Ecogas Energía Costa Azul Energía Sierra Juárez IEnova Gasoductos México (IGM) Luz del Sur	Rosarito pipeline (Gasoducto Rosarito) Termoeléctrica de Mexicali Transportadora de Gas Natural de Baja California (TGN) Transporte Oeste
ISO22301-2012	Energía Costa Azul	

[1]*This list does not include any certifications from government agencies.*



An interview with J. Kevin Selby, director of compliance, Sempra South American Utilities

INTERVIEW

Employees develop a safety "heat map" app

Sempra Energy teams track and monitor injuries, near misses, environmental events, vehicle accidents and security incidents.

As part of our vision of delivering energy with purpose, a team of employees challenged convention by turning these lagging indicators into leading indicators. They developed and released HEATmap, a geographic information system (GIS)-based mobile app that uses historical data to identify geographic areas of elevated risk and notifies users as they enter and leave these areas. With HEATmap, users can:

- Receive real-time alerts when entering a high-risk area
- See the location of key company infrastructure and assets
- See corporate and satellite office locations

Q: Where did the idea for HEATmap come from?

A: I was on a trip to see a newly implemented fleet management platform at our electric utility in Chile. I thought we might be able to use that platform to analyze third-party data, such as reported injuries, to identify geographic areas where there was higher risk – and then push active alert notifications to employee smartphones.

Q: What were some of the roadblocks you faced in moving forward with this idea?

A: Most of them were technology-based. We were developing an app for both the iOS and Android operating systems. The nature of the application (location tracking, push notifications, etc.) meant that we had to comply with strict security standards imposed by Apple and Google as well as country-specific regulations.

Q: What were some early results?

A: Shortly after launch, data from the platform helped us identify 12 geographic areas where there was higher risk. We immediately worked with the operations folks to help them update their risk management processes with this new and valuable information.

Q: What else might you be able to do with this system?

A: Moving forward, we are scaling up the system to integrate other data sources. For example, we plan to add crime and weather data from publicly available sources.

We also plan to add fleet tracking capability. Knowing where our crews are could be vital in emergency response scenarios. It could also help Operations Center employees provide directions to the nearest urgent care center in the event of an accident.

Finally, we want to develop a two-way communication function so employees can contact their local operations center and vice-versa. Quick, effective communication is key in accident prevention and response. When real-time risk information and real-time communications support are just a tap away, we expect additional improvements in employee safety and well-being.

Risk management teams and systems support the stable operation of our businesses.

RISK MANAGEMENT

At Sempra Energy, we work to identify, assess and mitigate risk.

At the enterprise level, the Sempra Energy board of directors provides governance for all risk areas. Our president and chief operating officer chairs the compliance and enterprise risk committee, which comprises six senior executives.

At the individual business level, the head of each business is responsible for managing business outcomes. This includes the identification, assessment, management and monitoring of key risks. Risk management teams and systems support the stable operation of our businesses by identifying and preparing for adverse events and uncertainties. These teams use a range of risk-related tools and resources, including:

- Risk frameworks: policies and standards to identify, assess, manage and monitor risks;
- Risk composition: qualitative and quantitative assessment of the components of risks;
- Risk registers: documentation of risks and mitigating actions taken to manage them;
- Sensitivity analysis and stress testing: identification of potential exposure to risks under different hypothetical scenarios;
- Identification of emerging risks: monitoring newly developing or changing risks;
- Risk maps: communication of risks through data visualization; and
- Outside experts: use of subject matter experts to identify, assess, manage and monitor risks.

Once a risk has been identified and assessed, we look to mitigate, share or transfer the risk. We do this in a number of ways, including by enhancing operations; sharing counterparty/liquidity risk in joint ventures; using guarantees or long-term contracts; and purchasing insurance.

Supplier selection and monitoring* is an example of risk management at Sempra Energy. Our businesses must provide reliable energy service. They need suppliers that can deliver essential equipment, parts and services – even in adverse conditions.

Procurement procedures and policies guide our businesses as they select and monitor suppliers and business partners. We are committed to using local suppliers, when feasible. Working with a wide range of suppliers (small, mid-sized and large companies; new as well as more established companies; DBEs*; and companies with operations in different locations) helps ensure system reliability, and results in better service and lower costs.

** Please see page 57 for general information on suppliers, including our use of Diverse Business Enterprises (DBEs). Please see page 36 for information on the environmental impact of our supply chain.*

Once a supplier has been selected, supply chain managers at our businesses monitor performance to assess whether suppliers deliver goods or services as expected and whether their operations are in alignment with Sempra Energy's values and standards. This includes acting with integrity; complying with applicable laws and regulations (including anti-bribery and anti-corruption laws); achieving strong health and safety performance; respecting employee rights; and minimizing impacts on the environment.

To complement the work of supply chain managers, our Audit Services group conducts supplier audits, reviewing safety procedures and performance; training programs; subcontracting policies; and other areas.

We mitigate risk by enhancing operations.

The environment

IEnova's Ventika Wind Farm in in Nuevo León, Mexico.

Portfolio review

In the coming years, our vision of "delivering energy with purpose" will only grow in significance.

By the year 2050, it is projected that our planet will be home to nearly 10 billion people. They will need water to drink, food to eat, clean air to breathe, good jobs to support their families and energy to power their lives.

Today, we serve approximately 40 million consumers with a focus on efficiency, reliability and safety. And we are pursuing LNG opportunities in North America with a combined export capacity of approximately 45 mtpa. By delivering cleaner energy to individual customers as well as international markets, we will look for ways to minimize our environmental footprint while supporting the needs of customers around the world as the transition to cleaner fuels gains greater traction.

In 2018, following a comprehensive strategic portfolio review, we made a decision to sell our U.S. renewable generation assets and certain non-utility natural gas storage assets. In early 2019, we announced our intention to sell our South American businesses.

This refined geographic focus allows management to target our capital investments on the fastest growing markets in North America while maintaining our commitment to minimize our environmental impact. By growing our energy infrastructure businesses, we will connect even more consumers with cleaner energy, supporting greenhouse gas emissions reduction efforts worldwide.

With EcoChoice, customers can choose renewable energy

With just a few clicks, and for just a few dollars more per month, SDG&E customers can opt to have 100 percent of their electricity come from renewable sources through a program called EcoChoice℠

- Using an online calculator, an interested customer estimates their monthly costs and enrolls in the program
- SDG&E purchases renewable power specifically for EcoChoice customers; and
- The customer begins receiving power attributable to renewable sources.

A customer can specify how much of their power will come from renewable sources – from 50 percent to 100 percent.

SDG&E already delivers power from renewable sources – approximately 45 percent was from renewable sources in 2018. With EcoChoice, customers can choose to be even greener.

Read More:
www.sdge.com

Climate change

Climate change affects our business and the communities we serve.

We minimize our impact, including our greenhouse gas emissions; we actively manage climate risks; and we identify climate-related opportunities for growth.

OUR IMPACT

We deliver cleaner energy to millions of customers:

- Through our electric distribution and transmission lines, we connect zero-emissions energy (generated by others) to the grid.
- Our natural gas distribution system helps our customers efficiently heat their homes and businesses, compared to all-electric heating.
- We build and operate low- and zero-carbon power plants.

We also encourage our customers to use energy efficiently by providing incentives and education. And we explore innovations that have the potential to transform the energy industry. See page 34 for an example of this.

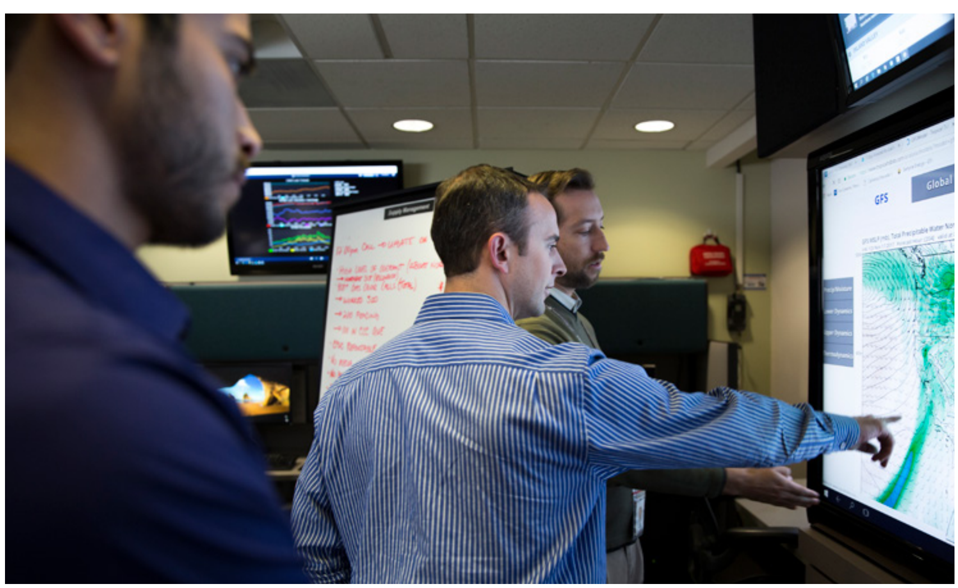
MANAGING RISKS

We identify and manage a range of climate-related risks. These include regulatory, operational and reputational risks.

Our **businesses are subject to rules and regulations** aimed at limiting greenhouse gas emissions.

We must obtain permits, licenses, certificates and other approvals to operate. And we must disclose our environmental impact. Failure to comply with these requirements could subject us to substantial penalties and fines.

We limit our exposure to regulatory risk by maintaining a lower-carbon business portfolio. We also advocate for consistent energy policies. A stable regulatory environment supports needed improvements in energy technology and infrastructure – advances that can only be achieved with significant research, lead times and financial commitments.



The operations of our businesses are impacted by changes to the climate.

As part of **climate-related planning**, our businesses strengthen their infrastructure.

The **operations of our businesses are impacted** by changes to the climate. These changes may include more frequent and more intense storms, winds, temperature extremes, droughts and floods, as well as sea-level rise.

Our businesses manage these risks by including climate projections in their planning processes. They ask questions such as, "How might extreme hot or cold temperatures affect our natural gas and electric infrastructure?"; "What impact could sea-level rise have on our facilities?"; and "How will severe drought conditions contribute to increased wildfire risk?"

As part of this climate-related planning, our businesses also strengthen their infrastructure and update operational protocols. This work includes:

- building some new infrastructure on platforms, to raise it farther above sea level;
- forecasting and monitoring the weather;
- keeping trees properly trimmed;
- proactively shutting off electric power to some parts of our service territory during high fire-risk conditions;
- encouraging natural gas customers to conserve, using "Dial it Down" alerts during times of high demand;
- encouraging electricity customers to "Reduce Your Use" during times of high demand;
- repositioning electric lines underground and converting power poles from wood to fire-resistant steel;
- preparing the public for emergencies or other climate-related contingencies; and
- training employees.

Sempra Energy's stakeholders are aware of the effects of climate change and seek ways to limit their impact. This atmosphere of heightened climate-related concern might **impact our reputation.**

We mitigate this risk in several ways. We strive to operate safely and efficiently. We set and achieve goals, including clean energy goals. And we develop new energy resources and technologies, including renewable natural gas and energy storage.

These activities aim to minimize our impact on the environment. Nevertheless, our reputation might suffer if we experience a significant environmental incident; if we miss environmental performance targets; or if innovative technologies do not perform as expected.

SDG&E's Bay Boulevard substation was built on a platform to raise it farther above sea level.

SPOTLIGHT:

Climate resilience: Modeling sea-level rise at our California utilities

To better understand climate-related risks, SDG&E and SoCalGas recently modeled different sea-level rise scenarios (0.0, 0.5 and 2 meters) and analyzed the potential impact. This analysis included:

- An exposure analysis to understand where sea-level rise impacts might intersect with company infrastructure;
- An assessment of potential direct impacts, such as how different types of infrastructure could be damaged and where impacts might be concentrated; and
- Quantitative modeling (the value of lost service) and qualitative assessment (the community-wide impact of lost service) of disruptions at potentially exposed substations.

For electric infrastructure, it was determined that a significant number of assets and services are exposed to coastal hazards related to sea-level rise. By midcentury (2050), direct impacts could occur from damage to substations near San Diego Bay and Mission Bay: If inundated, these substations could go out of service, potentially disrupting service to thousands of customers. Other direct impacts include increased maintenance or repair costs.

For natural gas infrastructure, potential impacts include increased maintenance or repair costs, or localized disruptions. Widespread natural gas disruptions are not expected due to limited projected exposure and low system-sensitivity when exposure does occur.

Armed with this information, our utilities can better plan for future capital projects and determine what work is necessary to improve infrastructure resilience to sea-level rise. Innovation is core to our efforts. SDG&E is already developing maps that will be integrated into the geographic information system framework to highlight at-risk infrastructure and inform new planning and construction.

CLIMATE-RELATED OPPORTUNITIES

The changing climate also creates the opportunity for growth.

Our utilities must meet customer and regulator demands for new energy conservation programs, improved energy systems and lower-carbon infrastructure. Our energy infrastructure businesses can help meet growing demand for lower-carbon energy in North America and around the world.

We support the use of natural gas as an important source of energy in a lower-carbon economy. We deliver natural gas through our nearly 122,000 miles of natural gas transmission, distribution and service lines. We operate natural gas-fired power plants, critical to the reliability of the electric grid. And we are building natural gas liquefaction facilities, in collaboration with partners, which will allow the export of this lower-carbon energy source worldwide.

We support the use of renewable energy. Approximately 45 percent of the energy SDG&E delivered to its customers came from renewable sources in 2018. Over 80 gigawatts of solar, wind and storage capacity are being reviewed for interconnection to the Texas power grid – much of this potential new generation is in Oncor's service territory. Our Mexican subsidiary IEnova, with partners, can generate more than 400 megawatts of wind energy and 110 megawatts of solar energy, and has an additional 374 megawatts of wind and solar energy under development.

We build and operate energy storage projects. In fact, SDG&E operates the largest battery storage system in California, capable of storing 120 megawatt hours of energy, with an additional 280 megawatt hours of capacity slated to come online by 2021.

We improve operational efficiency. SoCalGas is implementing a multi-billion-dollar Pipeline Safety Enhancement Plan (PSEP) to improve the safety and efficiency of its natural gas distribution system.

We build clean transportation infrastructure. SDG&E has installed more than 2,800 electric vehicle charging stations at nearly 250 locations in its service territory. And there are now more than 350 compressed natural gas (CNG) fueling stations in Southern California.

We integrate improved technologies into our operations. Smart-grid technologies give customers more information and control over their energy usage. PXiSE's patented control technology gives grid operators a way to add renewable energy to the grid while improving grid efficiency and reliability.

We work to identify new technologies that might be used in our operations: SoCalGas has introduced a solar-powered system that converts natural gas and water into hydrogen (a zero-emissions energy source), capturing the resulting carbon dioxide. The utility has also demonstrated a technology that can convert carbon dioxide into methane, which can reduce the emissions from biogas operations. SDG&E uses drones, when appropriate, to string fiber optic cable, lessening the environmental impact of this type of operation.

Additional detail on climate-related impacts, risks and opportunities may be found in our response to the CDP climate change survey, available at www.cdp.net.

SDG&E has installed more than 2,800 electric vehicle charging stations.

Our California utilities purchase **emissions allowances** to offset some of their emissions.

Greenhouse gas emissions

Our businesses work to minimize their emissions and those of their customers.

EMISSIONS DATA[1]

Sempra Energy's consolidated 2018 direct (scope 1) emissions were approximately 6 million[1] metric tons of CO_2e, an increase of about 15 percent, due in part to increased operations in Mexico and more generation from natural-gas-fired power plants. Scope 1 emissions are from sources that our businesses own or control, including power generation, fleet vehicles and natural gas pipelines.

Sempra Energy's consolidated 2018 indirect (scope 2) emissions were approximately 482,000 metric tons of CO_2e. Scope 2 emissions are from other companies' generation of electricity that our businesses purchased and used in their operations and from electricity lost during transmission and distribution.

Sempra Energy's consolidated 2018 indirect (scope 3) emissions were approximately 52 million metric tons of CO_2e, a decrease of 6 percent due, primarily, to a decrease in customer use of natural gas. These emissions are from other companies' generation of electricity that our businesses delivered to their customers; emissions from the combustion of natural gas that our businesses delivered to their customers; and emissions from employee air travel. We do not include emissions from other companies' production of natural gas which our businesses purchased and used[2] in their operations.

As required by state law, our California utilities purchase emissions allowances to offset some of their emissions from power plants, natural gas compressor stations, purchased power imported from out of state and customer combustion of natural gas.

EMISSIONS SOURCES[1]

Natural gas-fired power plants were the largest source of our consolidated direct (scope 1) greenhouse gas emissions. In 2018, the emissions rate from our businesses' power generation was 480 pounds of carbon dioxide per megawatt-hour generated (our businesses operated natural gas, hydroelectric, wind and solar generation facilities). This rate is approximately half the national average.

As we continue our company's strategic realignment, which has included the sale of our renewables business, we plan to set a new emissions target that is supported by climate science.

Our companies' natural gas transmission and distribution systems were our second largest source of direct (scope 1) greenhouse gas emissions. These emissions, also known as fugitive emissions, occurred as a result of leaks or other types of releases of natural gas. Data on additional sources of direct emissions may be found in the chart below. Information on how we are working to reduce fugitive emissions can be found in the subsection "Reducing our methane emissions," below.

The U.S. Energy Information Administration estimates that approximately 5 percent of the electricity that is distributed each year in the U.S. is lost as it passes through transmission and distribution lines. The largest source of our consolidated indirect (scope 2) emissions were emissions from the generation of this electricity.

[1] Does not include emissions from Oncor or scope 2 emissions from Cameron LNG. Data undergoing independent third-party verification.

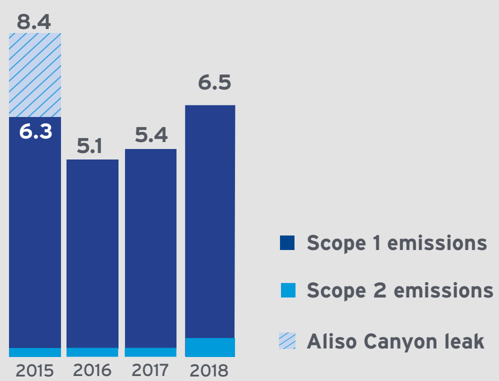
[2] According to GHG Protocol, the predominant international emissions-reporting standard, the end users of natural gas are responsible for the scope 3 upstream emissions associated with the production of the natural gas they use.

Reporting on indirect (scope 3) emissions is complex as these emissions come from a wide range of sources, some of which may be difficult to estimate or measure. In 2018, we calculated our indirect (scope 3) emissions from three sources:

- Emissions from our customers (46.5 million metric tons CO_2e). When they burn natural gas (in their HVAC systems, water heaters, stoves and other appliances), utility customers create greenhouse gas emissions.
- Emissions from other companies' generation of electricity that is delivered to our utilities' customers (5.3 million metric tons CO_2e).
- Emissions from our employees' air travel (0.01 million metric tons CO_2e).

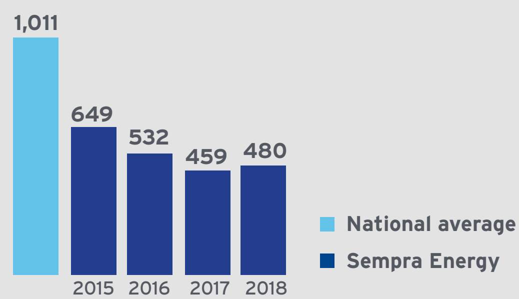
Scope 1 and 2 greenhouse gas emissions[1,2]

Million metric tons of CO_2 equivalent

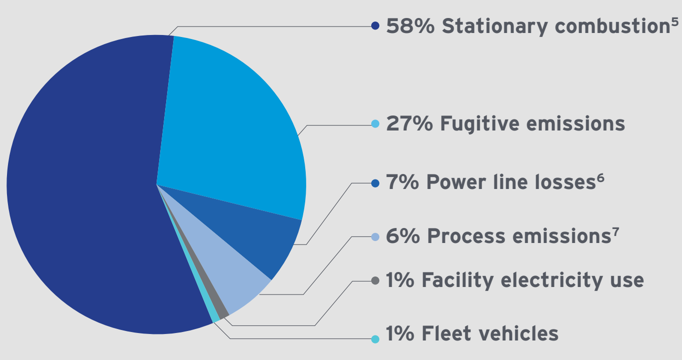


CO_2 emissions rate for power generation[1,3,4]

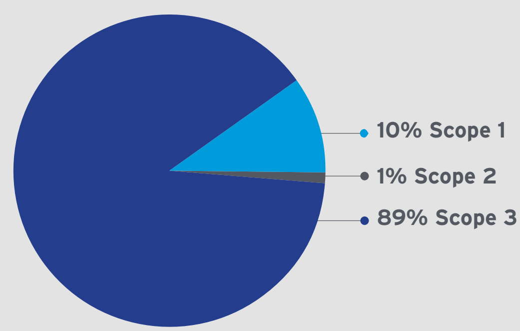
Pounds of CO_2 per megawatt-hour



Scope 1 and 2 greenhouse gas emissions by source[1]



Greenhouse gas emissions by scope [1,8]



[1] In 2017 and 2018, we are reporting additional sources from Chile and Peru that were not included in prior years. Data for Oncor and scope 2 emissions from Cameron LNG are not included. 2018 emissions data are unverified. Once verification is complete, emissions data are updated as needed and included in the following year's corporate sustainability report.

[2] All emissions from the 2015-2016 natural gas leak at the Aliso Canyon storage facility are included in 2015 data. SoCalGas reached a settlement agreement with several government agencies related to the leak. In May 2019, a third party directed by the CPUC and the California Department of Conservation's Division of Oil, Gas and Geothermal Resources released a report detailing its analysis of the root cause of the leak.

[3] National average source: U.S. Energy Information Administration Electric Power Annual 2017.

[4] Emissions rate of Sempra-owned or partially-owned generation on an equity share basis. Data from 8-megawatt Chilquinta Energía plant is not included.

[5] Emissions primarily from our natural gas power plants.

[6] Emissions from the generation of electricity that we lose during transmission and distribution.

[7] Emissions from physical or chemical processes related to combustion.

[8] Scope 3 emissions include emissions from other companies' generation of electricity that we delivered to our customers; emissions from our customers' combustion of natural gas that we deliver to them; and employee air travel.

REDUCING OUR METHANE EMISSIONS

Methane is the primary component in natural gas – it comprises about 87 percent of natural gas, by volume.

In 2018, our companies' methane emissions were 2.1 million metric tons of CO_2e[1]: 1.6 million metric tons from SoCalGas; 0.1 million metric tons from SDG&E; and 0.4 million metric tons from our other businesses. Together, SoCalGas and SDG&E are responsible for about three percent of California's total annual methane emissions.

SoCalGas and SDG&E work to operate their natural gas transmission and distribution systems efficiently, particularly in terms of minimizing their methane emissions. At SoCalGas in 2018, 99.75 percent of the natural gas in their system successfully reached its destination – just 0.25 percent was lost. At SDG&E, these numbers were 99.77 percent delivered and 0.23 percent lost.

Our California utilities achieve these results and reduce our methane emissions in a variety of ways: They:

- abide by the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations for infrastructure monitoring and testing;
- follow CPUC regulations which specify 26 best practices for leak prevention, detection and repair;
- implement best management practices through programs such as the U.S. Environmental Protection Agency's Natural Gas STAR program – SoCalGas has been a member of this program since 1993;
- actively monitor certain high-pressure pipelines using advanced sensors that measure methane levels every five minutes;
- capture natural gas that would otherwise be released into the atmosphere during some pipeline testing;
- use the latest advanced monitoring technologies including drones and dedicated sensors to conduct leakage surveys and monitor storage operations;
- prioritize the replacement of pipelines that do not have current corrosion prevention technologies – SoCalGas and SDG&E are nearly 70 percent of the way to completing their goal to replace 900 miles of pipeline by 2021; and
- are piloting a system that uses surplus renewable energy to create carbon-free hydrogen gas. When added to the natural gas system, hydrogen reduces the system's impact and emissions.

Our California utilities also capture methane emissions from other sources such as landfills, sewage treatment plants and dairies – and add them to the natural gas distribution system. This methane would otherwise be released into the atmosphere where it would have more than 20 times the greenhouse gas impact of carbon dioxide.

SoCalGas has committed that by 2030, renewable natural gas (natural gas from the decomposition of organic material) will constitute 20 percent of the gas it supplies to its core customers.

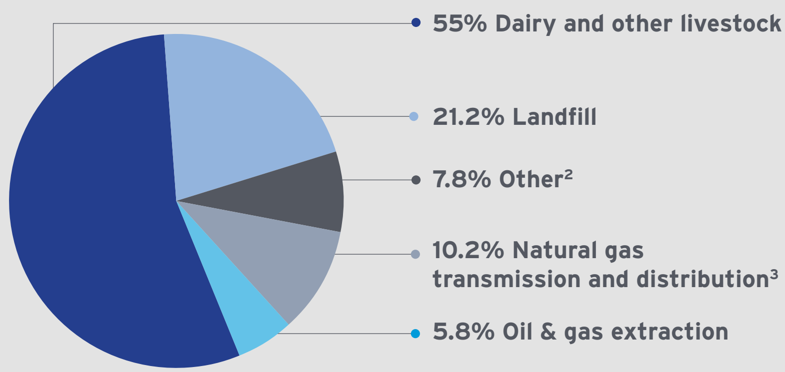
Additional information on methane may be found at:

https://www.socalgas.com/regulatory/R1501008.shtml

https://www.sdge.com/regulatory-filing/14356/natural-gas-leakage-abatement-rulemaking

https://www.socalgas.com/smart-energy/renewable-gas/biogas-and-renewable-natural-gas

Sources of methane in California[1]



[1] Data is from 2015. In order to represent a typical year, emissions resulting from the Aliso Canyon leak are not included.

[2] Emissions from rice cultivation, wastewater and other industrial sources.

[3] 3.6 percent is attributable to SoCalGas and SDG&E.

[1] *We calculate and report our methane emissions as CO_2- equivalent, assuming methane has 21 times the impact of an equivalent amount of CO_2. Some regulators use different multipliers or reporting methodologies.*

Oncor works to meet **energy efficiency goals** established by the Public Utility Commission of Texas.

Energy efficiency

As we shift our focus from the production of energy to the delivery of energy, the efficiency of everything we do becomes an increasingly important way we can minimize our environmental impact and the impact of our customers.

Our utilities encourage their customers to reduce their energy use, particularly during times of peak demand. This helps our utilities to make better use of available wind, solar and energy storage resources.

In California, our utilities operate under a state policy that decouples utility profits from the amount of energy sold. In short, California utilities do not earn more by selling more energy. Instead, by operating efficiently and by encouraging customers to do the same, utilities may earn incentives. SDG&E and SoCalGas offer their customers a wide range of energy efficiency rebates and incentives.

In Texas, energy efficiency programs are focused on reducing peak demand. Oncor works to meet energy efficiency goals established by the Public Utility Commission of Texas (PUCT) and may receive a performance incentive if it exceeds these goals. In 2018, Oncor was awarded a performance bonus of $6.8 million for exceeding its 2017 goals, as established by the PUCT. The utility offers energy users a wide range of efficiency rebates and incentives.

Our utilities encourage their customers to reduce their energy use, particularly during times of peak demand.

An interview with George Minter, regional vice president of external affairs and environmental strategy, SoCalGas

INTERVIEW:

The future of natural gas

To date, many regulators, elected officials and community groups have focused on renewable electricity as the path to reducing emissions. But renewable natural gas provides another option. George Minter describes how a renewable natural gas-based system could make the entire economy – not just the energy sector – cleaner.

Some elected officials in California have said they'd like to move to a system entirely fueled by wind and solar energy, enabled by energy storage.

Q: Could a carbon-free energy system work?

A: It could work, but it would be very expensive and would take decades. And I think most Californians would rather green our entire economy – not just the energy sector; they'd rather do it sooner; and they'd rather use what we already have in place, which would be much cheaper. Our customers have already invested billions of dollars in our existing natural gas system, for example. This system can be used today to facilitate a quicker, cleaner and more affordable transition to a carbon-free system.

Q: That seems counterintuitive – using a carbon-based system to make things cleaner.

A: It's absolutely possible. In fact, it makes no sense to disregard what we can do today with existing technologies. These aren't theoretical pilot projects. Today's technology makes a cleaner energy system possible. And there's more than one path.

Let's start with methane. Methane comes from deep underground. But it also comes from our landfills, our water treatment plants and our farms and dairies. If this methane is simply released into the atmosphere, it has an emission impact that is 25 times greater than an equal amount of carbon dioxide, over a 100-year time period. But if we can capture it and add it to the natural gas distribution system, we dramatically reduce its emissions impact.

In an all-electric system, we don't have that opportunity.

Q: How much would renewable natural gas reduce emissions?

A: It would have a very significant effect. Right now, over 80 percent of California's annual methane emissions come from farms, dairy or livestock operations, wastewater treatment plants and landfills. That's a significant potential resource. And the state has a plan to capture 40 percent of it for use as renewable energy.

SoCalGas is already moving forward. By 2030, our goal is that 20 percent of the natural gas we deliver to our core customers will be from renewable sources.

Q: You mentioned more than one path. What are some other options to a cleaner natural gas system?

A: I want to emphasize that it's not just a cleaner natural gas system – it's a cleaner California. Emissions in our state come from many sources including energy production, industry, agriculture and transportation. If we only focus on energy, we're missing a tremendous opportunity to reduce emissions across our entire economy.

Another path is to use natural gas infrastructure to store renewable energy. Right now, California has an oversupply of renewable energy, particularly solar energy generated in the middle of the day. That's because energy demand dips in the middle of the day when solar production is peaking. There is nowhere for that energy to go.

If we can capture methane and add it to the natural gas distribution system, we dramatically reduce its emissions impact.

INTERVIEW: THE FUTURE OF NATURAL GAS

Continued

Rather than wasting that energy, it would make more sense to use it to power a process called electrolysis which creates hydrogen and oxygen from water. That hydrogen – a renewable and zero-emissions energy source – can be blended into our natural gas distribution system. This makes the entire system cleaner. It also creates a viable use for renewable energy that is currently wasted.

Another way to think about this is that in effect, California's existing natural gas distribution system, which, again, has cost ratepayers billions of dollars to build and maintain, can be the world's largest renewable energy battery.

This is another massive benefit that would disappear in an all-electric system.

Q: How about transportation emissions. Can natural gas play a role there as well?

A: Yes – and the gamechanger is the use of renewable natural gas. Many heavy-duty transportation companies and transit agencies are now purchasing and using a near-zero emissions natural gas engine in their fleets. This engine reduces emissions by over 90 percent and gives natural gas-fueled vehicles an emissions profile similar to that of all-electric transportation. (Editor's note: Electric vehicles have emissions from the generation of the electricity they use.) In fact, by using renewable natural gas to fuel the vehicle, you get a net reduction in climate impact – a negative carbon intensity.

Q: Anything else you'd like to mention?

A: Fuel cells are another proven technology in use today. They use natural gas to generate both heat and power. And they have no emissions. They provide back-up power for hospitals, sensitive manufacturing and R&D operations and other critical functions. As the use of renewable natural gas increases, fuel cells will become another important source of 100 percent clean and renewable energy. They are another technology – an emissions-reducing technology – that could not exist without natural gas.

Supply chain impacts[1]

Our businesses purchase most of the energy they deliver from suppliers. This makes their energy supply chains particularly impactful. They work to minimize these impacts:

- They make sound energy procurement decisions, abiding by regulatory requirements. For example, in 2018 the state of California required that 33 percent of the electricity delivered to utility customers come from renewable sources. This requirement increases to 60 percent by 2030 and 100 percent by 2045.
- Through lobbying activities (see page 58) as well as participation in industry groups, our businesses support consistent natural gas production standards to protect consumers, the environment and the energy industry.
- They advocate with state and federal leaders for a balanced approach to energy policy. We believe U.S. energy policy should address both climate change and energy resource development, including the development of natural gas, renewable energy and new energy technologies such as storage. Our full position statement on U.S. energy policy is in the "Investors" section of Sempra.com.

ELECTRICITY SUPPLIERS

In 2018, our electric infrastructure companies[2] purchased power from electricity suppliers as follows:

- 23 percent from thermal[3] power plants;
- 17 percent from solar power facilities;
- 17 percent from wind power facilities;
- 15 percent from hydroelectric power plants;
- 4 percent from natural gas-fired power plants;
- 2 percent from biomass power facilities; and
- 23 percent from the energy market[4]

Emissions from our suppliers' generation of this power is reported in our consolidated scope 3 emissions, on page 31.

NATURAL GAS SUPPLIERS

Our businesses purchase, store, transport and deliver natural gas.

The natural gas supply chain is complex. Our businesses obtain natural gas through short- or long-term contracts that specify the source of the gas – as well as from supply aggregation points, exchanges and electronic bulletin boards that do not specify the source of the gas.

As a major purchaser of natural gas, our businesses work with industry groups as well as through the regulatory and legislative process to influence natural gas production practices. They are responsible[5] for the scope 3 emissions from the production of the natural gas that they use in their operations. We are exploring ways to begin reporting on these emissions in the future.

NON-ENERGY SUPPLIERS

Significant supply chain impacts also occur at the construction companies and manufacturers with whom we do business.

Thousands of suppliers provide goods and services (beyond electricity and natural gas) to Sempra Energy and its businesses. They provide pipelines and cable to deliver natural gas and electricity; steel and wood for electric towers and poles; meters to measure customer usage; and office supplies and equipment. They also provide tree trimmers, construction workers, security guards, accountants and other professionals.

At our California utilities, prospective suppliers bidding on requests for proposals (RFPs) over a specific dollar amount are encouraged to answer sustainability-related questions, and their responses are factored into the decision-making process. See the sidebar on page 38 for more.

[1] *Please see page 23 for information on supplier selection and monitoring and page 57 for information on supplier diversity.*

[2] *Does not include Oncor. Texas utility customers purchase electricity directly from their chosen provider. A transmission and distribution utility (such as Oncor) does not purchase or own the electricity.*

[3] *Contracts that include a combination of natural gas, coal and/or diesel.*

[4] *For power purchased from the energy market, the precise source is not identifiable.*

[5] *According to GHG Protocol, the predominant international emissions-reporting standard, the end users of natural gas are responsible for the scope 3 emissions associated with the production of the natural gas they use.*

Fresh water represented just **2 percent** of our total water withdrawal.

Water

Water is critical to our businesses, particularly in their LNG and power generation operations. They have made significant progress in minimizing their use of fresh water, particularly in water-stressed areas. This includes working with local water agencies to encourage consumers to reduce their use of this valuable resource and integrating climate-related water risks (including the potential impact of both droughts and floods) into their construction and business resumption plans.

Our water policy may be found on our company website.

In 2018, Sempra Energy and its businesses withdrew 28 billion gallons of water as follows: 25.4 billion gallons of salt/brackish or seawater, primarily used to support LNG operations; 2.1 billion gallons of reclaimed or recycled water, primarily used to support power generation operations; and 533 million gallons of fresh water, primarily used in employee-occupied facilities and to support our Midstream operations. Our water withdrawal decreased by 3 percent year-over-year. Fresh water represented just 2 percent of our total water withdrawal.

We returned 90 percent of the water we withdrew to the source.

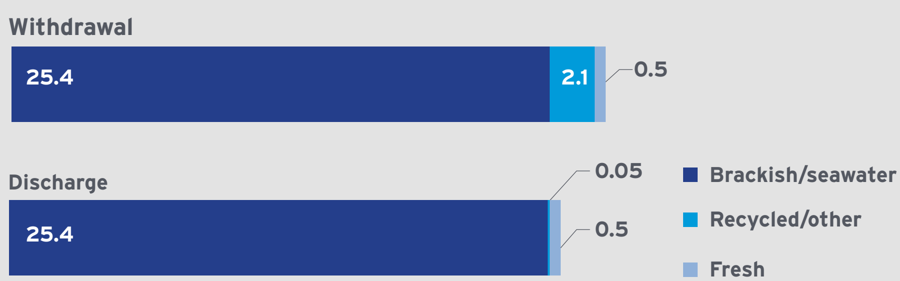
We have minimized our need for fresh water in our power generation operations by using dry-cooling technology and reclaimed or recycled water:

- SDG&E's 565-megawatt Palomar Energy Center in Escondido, Calif., uses reclaimed water (treated wastewater) in the electric generation process. This saved 489 million gallons of fresh water in 2018.
- SDG&E's 485-megawatt Desert Star power plant near Boulder City, Nev., uses dry-cooling, which requires only 10 percent of the water used by traditional wet-cooled power plants. The plant used 41 million gallons of water in 2018 – approximately 370 million gallons less than if it had used wet-cooling.
- IEnova's 625-megawatt Termoeléctrica de Mexicali power plant in Mexicali, Mexico, uses treated sewage, cleaned in our own water treatment facility, to cool the plant. This saved 1.4 billion gallons of fresh water in 2018.

More information on our approach to water can be found in our response to www.cdp.net

Water withdrawal and discharge[1]

Billions of gallons



[1] While we continue to improve data collection related to water use, these numbers do not yet account for all aspects of our operations, including natural gas pipeline testing at our California utilities and water used at Oncor.

Our waste and recycling programs diverted **32,000 tons** of material from landfills.

Waste and recycling

Sempra Energy and its businesses reduce waste, reuse materials, and find ways to safely extend the life of equipment. Employee-focused recycling and waste-reduction programs help accomplish these objectives.

In 2018, we generated and disposed of nearly 155,000 tons of waste. Waste and recycling programs diverted 32,000 tons of material from landfills, generating $8.4 million in revenue. Electric transformers, meters and other metals constituted nearly 72 percent of this total by weight.

In 2018, we generated 5,282 tons of hazardous waste. Hazardous materials teams manage hazardous material storage, recycling, transportation and/or disposal to ensure compliance with applicable laws. The amount of hazardous waste our businesses generate fluctuates from year to year as they complete the clean-up of historic manufactured gas sites and replace other energy infrastructure. Together with our businesses, we are committed to reducing hazardous waste and expect to see significant and consistent reductions over time.

SPOTLIGHT:

Asking suppliers about their environmental performance

Our California utilities are now asking their suppliers to provide detailed sustainability information when they respond to requests for proposals. The utilities request data on a supplier's greenhouse gas emissions, waste and recycling and water usage. They also ask about whether the supplier uses this data to improve its own performance. These questions align with the Electric Utility Industry Sustainable Supply Chain Alliance and will allow our utilities to measure their suppliers' sustainable business practices against industry benchmarks. The utilities anticipate that this data will play a significant role in the supplier selection process in the future.

Our California utilities request detailed sustainability information from their suppliers.

Environmental compliance programs include detailed plans.

Environmental compliance

Every Sempra Energy business is accountable for following all applicable environmental regulations and laws. Environmental compliance programs include detailed plans; extensive training and monitoring; and performance evaluation.

In 2018, our businesses made $101 million in capital expenditures to comply with environmental laws and regulations. This included costs to mitigate or prevent future environmental contamination or extend the life, increase the capacity, or improve the safety or efficiency of existing operations.

In 2018, 96 percent of all agency inspections resulted in no notice of violation (NOV). We received 16 NOVs and paid $12,250 in fines and penalties, not including settlements. Six of the NOVs were related to permitting and reporting; three were water-related; two were related to air quality and emissions; one was related to waste; and the remaining four were related to public nuisances, wildlife management or other issues. Compliance personnel at our businesses review, respond to, correct or challenge the NOVs they receive.

Environmental compliance	2015	2016	2017	2018
Agency inspections	563	638	604	425
Internal compliance assessments and audits[1]	422	325	386	543
Notices of violation (NOV)[2]	22	22	24	16
Percentage of agency inspections with no NOV issued	96%	97%	96%	96%
Fines and penalties[3]	$50,343	$9,012	$29,601	$12,250

[1] May vary from year-to-year due to adjustment of inspection cycles as determined by risk assessments.

[2] Does not include self-reported violations.

[3] Does not include settlements. The amount of fines and penalties paid varies from year-to-year depending on the nature of the violation and the timing of its resolution.

The population of Louisiana's native whooping cranes has increased to more than **400 cranes** in the wild.

Biodiversity

At Sempra Energy, we are committed to protecting and preserving biodiversity in the areas where we do business.

Our biodiversity policy describes how we integrate biodiversity considerations into the planning, construction and operation of energy facilities, balancing the protection of sensitive plant and animal life with project requirements. Our businesses meet or exceed legal requirements related to biodiversity. They also work with independent organizations to verify that they are following sustainable practices related to land use and biodiversity.

The work supporting the development of Cameron LNG on the U.S. Gulf Coast is a good example of our approach.

At Cameron LNG, team members work to comply with all regulatory permits and requirements. All employees receive regular training to ensure they have the knowledge and skills to operate in an environmentally sound manner.

The team monitors stormwater discharges and air emissions to ensure there are no impacts on the surrounding ecosystems.

In addition to these compliance-focused actions, Cameron LNG also takes proactive steps.

Southern Louisiana is a "sportsman's paradise" with a wide range of ecosystems that support hunting, fishing, birding and other outdoor activities.

To offset the impacts of construction, Cameron LNG consulted with residents, state officials, the U.S. Army Corps of Engineers and the Louisiana Department of Natural Resources to target areas for wetland creation. Using dredged material, Cameron LNG has created over 500 acres of tidal marsh and emergent wetlands – and will create an estimated 13,000 additional acres of wetlands during the life of the facility.

In addition, Cameron LNG collaborated with Ducks Unlimited to restore 900 acres of eroded marshland in a neighboring lake, adding terraces of vegetation to reduce wave action, create waterfowl habitats and improve water clarity.

Cameron LNG also provides support to the Cameron Parish Rockefeller Wildlife Refuge's efforts to restore Louisiana's native whooping crane population. The population of these majestic birds has increased from a low of 21 birds in the wild in 1941 to more than 400 cranes in the wild today.

Cameron LNG supports efforts to restore Louisiana's native whooping crane population.

Our stakeholders

INTERVIEWS/SPOTLIGHTS:

SoCalGas serves nearly 22 million consumers.

We deliver energy with purpose: We are inspired to improve the lives of those we serve. This focus makes our company effective and valuable.

By listening to our stakeholders and incorporating their ideas, we create a more stable and predictable business environment. This is crucial as we work to create North America's premier energy infrastructure company.

Our stakeholders include individuals from many groups and communities.

- Sempra Energy's companies are home to more than 20,000 **employees**, many of whom work on the front lines building, maintaining and repairing the pipes, wires and infrastructure that deliver energy to our customers.
- Thousands of **supplier companies** support Sempra Energy and its businesses, including designers, construction workers, management consultants, security personnel, tree trimmers, accountants and other professionals.
- Sempra Energy companies serve approximately 40 million **consumers** as follows: SoCalGas – 21.9 million; Oncor – 10 million; Sempra South American Utilities – 6.7 million; SDG&E – 3.7 million.
- **Regulators and legislators** from hundreds of jurisdictions across the U.S., Mexico, Peru and Chile make laws and regulations that govern how we do business.
- Sempra Energy attracts a broad range of **shareholders**, with our institutional investors representing 29 countries from around the world.

Economic impact

Sempra Energy's strong financial performance has a meaningful impact on many stakeholders. In 2018, we generated direct economic value* of more than $13 billion, of which $9.9 billion was distributed to stakeholders in the form of wages and benefits; payments for operating costs; dividends and interest; fees or taxes; and charitable contributions. For more details, see our GRI Index (standard 201-1) on page 73.

** Economic value figures determined according to Global Reporting Initiative guidelines.*

Employees

Sempra Energy's companies' more than 20,000 employees serve more than 40 million consumers worldwide. When our employees are trained, challenged and empowered to take initiative, our business thrives.

DIVERSITY AND INCLUSION

We embrace diversity at Sempra Energy: We value, respect and include people with different perspectives and diverse backgrounds.

Many factors influence our employees. These include race, color, national origin, ancestry, ethnicity, immigration status, education, age, marital status, veteran status, sexual identity and orientation, gender, gender identity or expression, religion, spiritual beliefs, mental and/or physical capabilities and life experiences. Our discrimination- and harassment-free workplace policy outlines our approach.

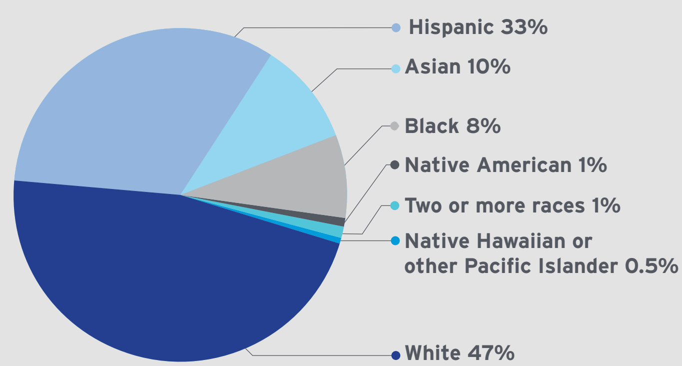
When we create a workplace culture in which diversity and inclusion are valued, employees can bring their whole selves to work and can share their unique perspectives and ideas. This helps our company achieve better business outcomes.

Building and maintaining this culture requires commitment and hard work.

It starts with our employees. Every day, they have the opportunity to listen to, empathize with and support each other. Nearly 450 employees serve on our 15 diversity and inclusion councils. These councils offer programs to educate and inspire employees, including our annual Diversity and Inclusion Summit. Our leaders also play a crucial role: Our Chairman and CEO, Jeffrey W. Martin, is a signatory to the "CEO Action for Diversity and Inclusion" pledge, and has committed that we will welcome different points of view, discuss tough issues and share successes and challenges in our workplace.

Our workforce demographics and employee compensation data are indicators of our commitment to diversity – and of the fact that we must continue to make progress. For compensation, on average, women in executive roles earned slightly less than their male counterparts; women in managerial roles earned about the same as their male counterparts; and women in non-managerial roles earned slightly less than their male counterparts. Our workforce demographic information is in the charts, below.

U.S. workforce diversity[1]



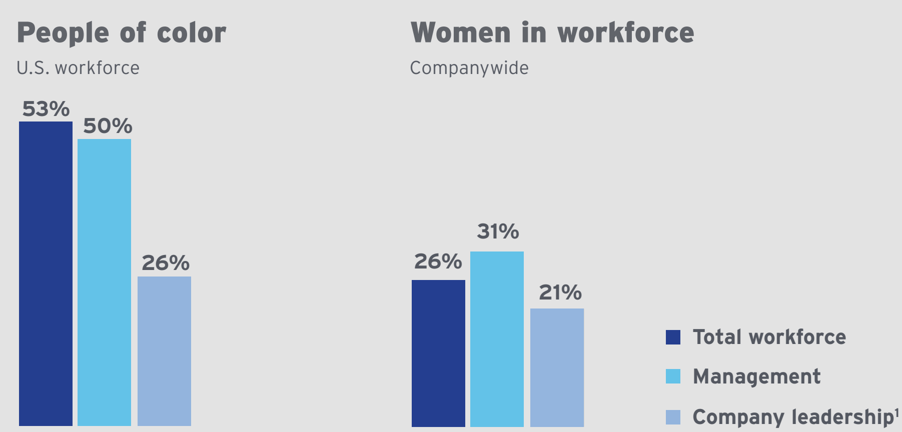
[1] Due to rounding, percentages do not add up to 100.

RECRUITMENT AND RETENTION

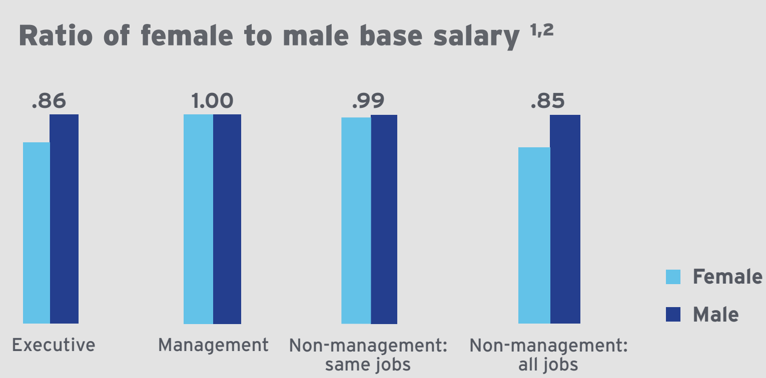
The energy industry is a dynamic space where some of the brightest, most innovative people are looking to undertake challenging, meaningful work. Sempra Energy's strong and consistent financial performance, commitment to diversity and inclusion, top-tier workforce and attractive locations (both in the U.S. and Mexico) make it a very desirable employer.

Our industry is in a state of continuous change. This includes changes in how energy is regulated, changes in how consumers interact with energy and changes in what consumers expect from their energy company. In many roles at Sempra Energy, no two days are the same. In fact, over the years, many of our high-performing employees have chosen to remain in the same position because the nature of their work evolves, even as their job title remains the same.

At Sempra Energy, our company's vision and mission provide a clear sense of purpose. And our company's values describe how we work and what matters to us. These foundational ideas are important to those who want to be a part of something larger than themselves – and who wish to work for a company with values that align with their own. (See page 55 for more.)



[1] Employees in positions that place them in the top 2 percent of the company.



[1] Non-represented employees on the U.S. payroll.

[2] Does not include compensation data for Oncor.

Managers are encouraged to provide **candid feedback**.

Our company also offers many ways for employees to give back to their community. Today's workforce places a high value on volunteering at or contributing to organizations they believe in. (See page 55 for more on Philanthropy and community involvement.)

Put simply, at Sempra Energy our employees have the opportunity to perform challenging work with high-performing teams in desirable locations – all with a broader purpose in mind.

Once we have attracted employees, we work to retain them.

We encourage employees to seek new challenges within the company or its subsidiaries. This builds cross-functional strength and improves employee understanding of how different parts of the company work. We offer entry-level financial, IT and engineering rotational programs for employees looking to learn how they might apply their skills in different areas of the company. We also encourage employees to find or offer mentoring guidance, either informally or through a company program. When feasible, we look to fill open positions with internal candidates.

At least annually, managers are encouraged to provide candid feedback to employees regarding their performance and potential – and to help each employee identify development opportunities to enhance their career.

The company also offers a leadership development framework with paths available for emerging, moderately experienced and seasoned leaders. The framework includes path-specific coursework, suggested readings, assessment and a situation interview-based competency exam.

We also encourage employees to play an active role in their career development. Opportunities include:

- Creating a career development plan that includes short- and long-term goals and discussing this plan with their manager. If desired, employees may meet with an organizational development coach to get additional guidance on their career path.
- Keeping their career accomplishments and interests up to date on the company intranet.

At Sempra Energy, our employees have the opportunity to perform challenging work with high-performing teams.

- Exploring online or in-person training opportunities to strengthen their skills in areas critical to the company's continued success, including leading change, inspiring trust, building talent, acting strategically and exercising good judgment.

We also encourage employees to pursue educational opportunities outside of work; our Professional Development Assistance Program provides up to $5,250 per year to cover the educational expenses of employees working toward a work-related degree or certificate. Nearly 550 employees participated in this program in 2018.

COMPENSATION AND BENEFITS

In addition to the attributes outlined above, we offer attractive compensation and benefits as a key part of attracting and retaining talented employees. These include:

- Compensation: competitive base pay and annual performance-based incentives;
- Health benefits: medical, dental and vision insurance;
- Life insurance: life insurance, long-term disability, long-term care and accidental death & dismemberment insurance;
- Retirement savings: cash balance plan and 401(k) savings with company match;
- Career development: education reimbursement and challenging positions with opportunities for growth;
- Time off: vacation, flex days, paid holidays and sick time;
- Wellness: yoga and fitness classes, fitness center and weight room, private wellness rooms;
- Work/life balance: health and education events, private mother's rooms, employee assistance programs, backup dependent care and mass transit subsidy; and
- Employee giving: matching gifts, volunteer incentives and an employee giving network.

We encourage employees to play an active role in their career development.

Results from our most recent survey indicated **high engagement**.

ENGAGEMENT

Employee engagement is a combination of satisfaction, loyalty and pride in being part of a purpose-driven company.

Every other year, our employees have the opportunity to express their level of engagement by completing a confidential survey, administered by a third party. Company leaders review aggregated results and take action. Over the years, this has included:

- Improving how we communicate the company's strategic goals and priorities with employees;
- Launching a leadership development program to provide interested employees with a clearer career development path;
- Expanding employee parking options; and
- Reducing cafeteria prices.

Results from our most recent survey, administered in 2017, indicated high employee engagement, with 82 percent of respondents stating they agree or strongly agree with the statement "Overall, I am extremely satisfied with this company as a place to work." This percentage increased to 88 percent, according to a limited survey administered in 2018.

Sempra Energy's management team listened to employee feedback, then implemented several changes.

SPOTLIGHT:

Listening to employees: People, priorities and culture

On his first day as Sempra Energy's CEO, Jeffrey W. Martin outlined his three focus areas for 2018: People, Priorities and Culture.

In a video message to employees, he noted, "In the next two months, the goal of our management team is to spend time listening and taking feedback on things we can improve on. We also want to hear about your hopes and aspirations for our company."

Martin and members of the leadership team crisscrossed the company, inviting employees to share their ideas, then implemented several changes. The company also:

- created a new vision and mission and refreshed values (for more, please see page 15);
- updated its intranet with a fresh look and enhanced features;
- enhanced employee benefits: eligible employees now accrue three weeks of vacation time after two years of service – and can request up to 40 hours of leave without pay under the company's revised vacation policy;
- gave more than 8,000 employees a new retirement savings option: a Roth 401(k) retirement plan; and
- announced an awards program to recognize employees who embrace Sempra Energy's values and exceed expectations in helping the company achieve its goals.

Across the board, management is committed to creating a vibrant, high-performing culture.

SAFETY

At Sempra Energy, our top priority is safety. We are not satisfied unless each employee and contractor returns home safely after every workday.

We encourage a safety-focused culture in which everyone feels responsible for their own safety as well as the safety of others. This culture goes beyond rules and regulations – it influences how others respond when someone says, "Wait a minute – let's stop and double-check that." "What happened?" or "How can we prevent this from happening again?"

We work to improve employee safety in many additional ways.

Training programs on body mechanics and ergonomics help reduce the risk of body sprains and strains, the most common employee injuries.

Work crews review safety plans and procedures during pre-work briefings before they head out to the field. They practice responding to a wide range of safety training scenarios. And they review safety lessons learned at safety stand-downs. Workers also use mobile apps and other technologies to identify and minimize safety risks. (See "Heat mapping" sidebar on page 21 for more.)

At the enterprise level, our board of directors receives a monthly operating report which includes safety performance by company. Management reviews safety data each month for trends: Is safety performance improving, declining or remaining steady? In which areas? In which groups? These statistics tell a story – and can help company leaders identify areas in need of greater focus. Additionally, our enterprise-wide employee safety committee meets every other month to share lessons learned from safety incidents across the business.

In 2018, our employee safety performance was strong. We had no employee fatalities and achieved decreases in both the rate of recordable injuries and the rate of injuries that resulted in time away from work. SoCalGas and SDG&E both achieved record-low recordable injury rates.

Regrettably, in 2018, one contractor was fatally injured in an incident related to operations at SoCalGas. After thorough investigation, we identified the cause of the incident and took action to prevent a reoccurrence.

In 2019, we continue our work to strengthen employee and contractor safety.

Employee safety incident rates[1]

[1] Per 100 full-time workers.

Safety is Oncor's top priority.

SPOTLIGHT

Safety: Oncor's foundation

The safety of Oncor's customers and employees is the company's top priority. In 2018, the company carried out many training programs and initiatives. These included:

- An annual Safety Kick-Off: a series of enterprise-wide employee engagement meetings and mandatory trainings;
- Midyear safety conferences focused on distribution operations & maintenance employees; crew foreman/supervisor; and lead tech employees;
- "Safety Monday": an employee and public safety awareness campaign with weekly public safety updates;
- Corporate office safety fairs in both Dallas and Fort Worth;
- "Oncor Super Safe Kids": a safety roadshow that traveled to 75 schools, educating nearly 40,000 kids, on the importance of safety around powerlines and equipment;
- "Super Safe Kids PSA Campaign": a public service announcement with animated safety characters created by Oncor that aired more than 550 times on PBS stations across the Oncor service territory; and
- Continuous Safety Improvement: utilizing Oncor's "Idea & Success Story" submission tool, the company's Center for Excellence and Innovation received and implemented a wide range of employee safety improvement ideas, including:
  - Live Line Safety Demonstration Safety Programming
  - Top Spirit of Innovation Award Winner: "Wire Down, Unit on Site, Process Improvement Tool" (WUPIT) Development Team.

LABOR RELATIONS

At Sempra Energy, we support our employees' freedom of association and right to collective bargaining. Approximately 37 percent of Sempra Energy's employees are represented by labor unions. Our businesses respect their partnerships with unions and work with them to achieve results that benefit our businesses, our employees and the communities they serve.

Contractors

Contractors contribute to Sempra Energy's success in many ways. They support vegetation management (tree trimming) and fire suppression. In some businesses, they serve as a key part of our frontline workforce, maintaining and improving energy infrastructure and restoring power when needed. Contractors also provide physical security for full-time employees at many of our sites – a vital and appreciated role.

Company policy limits the use of non-employees (including temporary workers, consultants and contractors) to a maximum of one year of service (2,080 hours) unless special approval is received. This encourages managers to consider the long-term needs of the company and to staff their departments appropriately. At times, temporary contract-based support may be needed. But if the need is longer-term, it may be more appropriate and beneficial – for both the company and the individual – to provide full-time employment and benefits.

Customers and communities

Sempra Energy's utilities in California, Texas, Mexico, Chile and Peru meet the energy needs of more than 40 million consumers, including residential, commercial and industrial customers. Through our LNG operations, we help meet the energy needs of consumers around the world.

Our success depends, in large part, on strong customer and community relationships.

By listening, we learn how we can adapt.

ENGAGEMENT AND HUMAN RIGHTS

Our success as a business depends, in large part, on strong customer and community relationships.

Our stakeholder engagement policy describes the role played by employees responsible for planning, project development, customer service, operations and external affairs. The policy states that we will proactively engage with stakeholders to seek and integrate their input. This improves relationships; minimizes risks and legal challenges; and meets the needs of our lenders and business partners.

At our utilities, we engage with customers through social media, websites, customer surveys, community forums, mail, email, door hangers, advertising and news media. Information on customer-assistance programs may be found on page 52.

In project development, we use many of the same methods. Beginning in the pre-planning stages, we make sure residents and business owners have an opportunity to ask questions and make suggestions. During construction, we keep them informed through face-to-face meetings, community open house events and project update newsletters. Upon completion, we continue to engage to ensure we are meeting community expectations.

Community Advisory Councils supplement everyday stakeholder engagement. The community leaders who participate in these councils provide additional input on topics relevant to a specific business or project.

Proactive stakeholder engagement is closely connected to our efforts to protect human rights. By listening to those affected by our business, we learn how we can adapt to minimize our impact.

Across all operations and across all stakeholder groups, Sempra Energy respects human rights. Our human rights policy describes our commitment to minimize any adverse effects our infrastructure or operations may have on people and communities. This policy was developed using the United Nations' Universal Declaration of Human Rights as a guide.

If an employee, business partner, supplier, customer or other stakeholder witnesses or learns of any incident that may involve a violation of our human rights policy, they can report it, anonymously if desired, via the company's Ethics & Compliance Helpline, available 24 hours a day, seven days a week. This helpline serves as our de facto grievance mechanism.

- SempraEthics.com
- From the United States: 800-793-7723
- From Mexico: 001-770-582-5249
- From Chile: 600-320-1700
- From Peru: 0800-7-0690

We conduct periodic reviews to assess our human rights impact. And we describe our human rights-related successes and challenges each year in this report. We are unaware of any significant human rights issues in 2018, across our operations.

AFFORDABILITY AND CUSTOMER ASSISTANCE

Regulators, such as the California Public Utilities Commission, set the rates utility customers pay for electricity and natural gas service. They work to balance customer needs, including the need for affordable energy, with a utility's responsibilities to its shareholders, including the responsibility to earn a reasonable rate of return. For information on how we engage with regulators, please see page 57.

To help customers reduce their energy usage and costs, our utilities offer programs such as energy-efficiency retrofits, on-bill financing of energy upgrades, "Reduce your Use" days and time-of-use rates.

To help low-income or medically qualified customers, our utilities offer ratepayer assistance programs such as California Alternate Rates for Energy (commonly known as CARE), level-payment plans (which can reduce month-to-month differences in energy bills) and a medical baseline allowance program.

Regulators establish goals for these programs. Information on our performance against these goals is in our "Goals & results" table on page 63.

Customers are encouraged to shift their discretionary electricity use to non-peak hours.

SPOTLIGHT:

Time-of-use pricing encourages customers to use energy wisely

Hundreds of thousands of SDG&E customers are now paying for electricity based on when they use it.

California's electricity demand typically peaks between the hours of 4:00 p.m. and 9:00 p.m. With time-of-use (TOU) pricing, utility customers can pay less by shifting their discretionary electricity use to non-peak hours. For example, a customer could run their clothes washer after 9:00 p.m.

TOU can reduce customer costs while also reducing strain on the electric grid. And with more consistent demand for electricity, electric operators can make better use of solar, wind and energy storage assets – preventing the need for additional natural gas-fired power plants.

In short, TOU gives customers more control of their energy costs, strengthens the grid and helps the environment.

Our **top priority** is safety. Nothing is more important.

PUBLIC SAFETY, RELIABILITY AND EMERGENCY PREPAREDNESS

The Sempra Energy companies deliver safe, reliable energy. And we work with customers and first responders to prepare for unforeseen disasters or emergencies.

Our top priority is safety. Nothing is more important to us than keeping our employees and customers safe.

Our businesses manage the safe operation of their assets, with oversight provided by their boards of directors as well as the Environmental, Health, Safety and Technology Committee of Sempra Energy's board of directors. Public safety-related areas of focus include:

- Customer education: public information campaigns such as "Dial 8-1-1 before you dig;"
- Pipeline testing: testing and replacing natural gas pipelines and upgrading valves to enable automatic or remote response;
- Electric upgrades: upgrading electrical cables, wires and other equipment;
- Outage mapping: installing smart-grid devices that can identify the location of an outage;
- Undergrounding: repositioning electric line underground;
- Wood-to-steel: converting power poles from wood to steel, improving fire resistance;
- Wildfire prevention and preparedness: see sidebar on page 14; and
- Physical and cybersecurity – assessing and mitigating vulnerabilities related to deliberate attacks on energy infrastructure.

In 2018, there were 139 injuries and 14 fatalities alleged to involve company pipes, poles and wires, construction areas, motor vehicles and other facilities. Protecting the public from dangerous contact with energy facilities is an important objective and an ongoing challenge.

Reliability is also crucial. Our utilities work to consistently deliver electricity and natural gas to their customers. When a service disruption occurs, they work to restore service quickly and safely. Vehicle crashes, equipment failure and construction activity are some common causes of power outages and natural gas service interruptions.

Our electric reliability performance is strong. SDG&E has been recognized for 13 consecutive years by PA Consulting, an independent consulting firm, with the "Best in the West" award for electric reliability. Our South American utilities, Chilquinta Energía and Luz del Sur, provide service reliability that far exceeds standards established by local regulators.

Electric reliability performance[1]

	SAIDI[2]: Average outage duration (in minutes)	SAIFI[3]: Average number of outages per customer, per year
SDG&E	71	0.62
Oncor	90	1.30
Chilquinta Energía	591	4.23
Luz del Sur	409	1.91

[1] Operating conditions and methodology for calculating performance vary by location.

[2] System Average Interruption Duration Index.

[3] System Average Interruption Frequency Index.

"Dial it down" asks customers to immediately **reduce their use** when cold-weather conditions are in the forecast.

Natural gas reliability is also important. Customers rely on natural gas as an efficient fuel source for their heating and cooking needs. Natural gas is also important because it supports electric generation: 43 percent of the electricity generated in California comes from natural gas. In the event of an undersupply of natural gas, power plants might need to curtail their operations, which would lead to widespread electricity outages.

To avoid this scenario and protect natural gas reliability, our utilities use advanced modeling to develop short- and long-term demand forecasts. They also work to reduce natural gas demand at crucial times using programs such as "Dial it down," which asks customers to immediately reduce their use when cold-weather conditions are in the forecast.

Although our utilities work to protect system reliability, uninterrupted access to energy is not guaranteed. In the event of a significant disaster or emergency, customers should be prepared to be without electricity and natural gas for weeks or even months. Our utilities provide resources that customers can use to develop emergency response plans. We also support community organizations that focus on safety and emergency preparedness. (See philanthropy and community involvement on page 55 for more information.)

Utility employees train for such events alongside government officials and first responders. They develop and update operational contingency plans – and then practice implementing them. The goal is for our utilities to be prepared to restore natural gas and electric service quickly and safely following a major disaster.

Our utilities work to protect system reliability.

We focus community giving in areas that align with our business priorities.

PHILANTHROPY AND COMMUNITY INVOLVEMENT

In 2018, Sempra Energy, the company's businesses and the Sempra Energy Foundation made contributions of $24.2 million to charities and other nonprofit civic and community groups.

We focus company giving in areas that align with our business priorities: the environment because of our impact; community development to support a higher quality of life for our customers; education because effective schools can develop skilled workers and wise leaders; and emergency preparedness to help prepare our communities for unforeseen events.

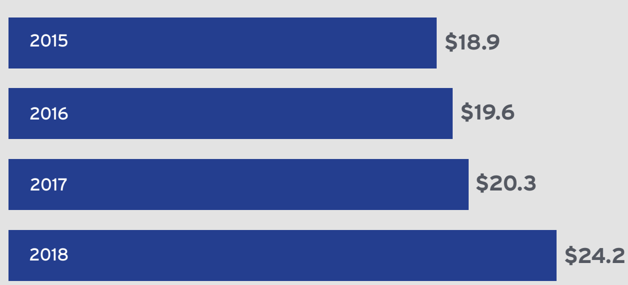
Our companies contributed to their communities in inspiring ways in 2018.

Working with the United Way of Greater Los Angeles, SoCalGas employees assembled welcome-home kits for people transitioning out of homelessness. Employees were able to get a glimpse of what it's like to be homeless through virtual reality and role-play activities at an "Everyone In" event. The event was the first of its kind to be held in a workplace location.

SDG&E, in partnership with DonorsChoose.org, matched funds raised by teachers for Science, Technology, Engineering and Math (STEM) education projects of $1,000 or less. Teachers at schools in disadvantaged communities received a two-to-one match. The program supported 208 teachers through 286 STEM projects.

Community giving[1]

Millions of dollars



[1] Sempra Energy and Sempra Energy Foundation community giving: includes charitable giving to fully charitable entities as well as nonprofit civic and community groups.

20/20/20 giving campaign to address homelessness

Many of our companies' employees work in urban areas, where homeless individuals and families come to get the support and services they need.

In 2018 for Sempra Energy's 20th anniversary, we launched the 20/20/20 program with a challenge: By logging 20,000 volunteer hours, employees could trigger company support to fight homelessness.

Employees responded and logged some 80,000 hours. As a result, Sempra Energy made $400,000 in contributions to address this important issue through 20 grants of $20,000 to organizations working to create solutions for homeless individuals and families.

Read More:
sempra.com/newsroom

Oncor launched "Super Safe Kids," a roadshow featuring professional actors, giveaways and an oversized video wall. This program visited 75 elementary schools across Oncor service territory, teaching nearly 40,000 students about electricity safety. The program was supported by daily safety messages, broadcast during PBS Kids programming.

To improve the quality of life for those most in need, IEnova "adopted" seven orphanages, pledging financial and volunteer support through 2021, as part of the company's Triannual Foster Home Adoption Program for Infrastructure Improvements in collaboration with Fundación para la Protección de la Niñez (Foundation for the Protection of Children).

Sempra LNG employees and their families teamed up with 30 students from Sabine Pass School to clean up a two-mile stretch of the beach at Sea Rim State Park as part of the Texas General Land Office's Annual Adopt-a-Beach Cleanup. Sea Rim State Park is located in the community of Sabine Pass, south of the property where Sempra LNG is developing the Port Arthur LNG liquefaction project.

In addition to company-driven programs, we also provide our employees with a wide range of opportunities to give back to the communities and causes they love. These include:

- Sempra Energy Giving Network: employees can set up direct payroll contributions to the charities of their choice through this 501(c)(3) nonprofit organization.
- Matching Gifts Program: the Sempra Energy Foundation matches donations to any eligible education, arts, or culture charitable organization.
- Volunteer Incentive Program: by volunteering with a charitable organization, employees can earn dollars for that charity. Employees reported 17,000 hours of volunteer time through this program.
- Challenge Grant Program: fundraising efforts aimed at health and human services organizations.
- Giving Tuesday: donations to end hunger receive an automatic two-for-one match on this worldwide day of giving.
- Season of Giving: employees who volunteer during the holidays earn a grant for their favorite charity.

We recorded $3.2 million in employee community giving in 2018.

Regulators determine how much energy infrastructure is needed.

Business partners and suppliers

Business partners and suppliers are critical to Sempra Energy's success. Our businesses often collaborate with partners to bid on major projects, as their expertise can complement our own. And they depend on suppliers for equipment, parts and services essential to project planning, construction, operations and system reliability. For information on supplier selection and monitoring, see page 23. For information on the environmental impacts of our supply chain, see page 36.

Our California utilities have a long history of partnering with Diverse Business Enterprises (DBEs) to supply them with goods and services they need to serve their customers. By building a diverse supply chain, they create an inclusive culture – and can often achieve better business outcomes. In 2018, 40 and 44 percent of total spending at SoCalGas and SDG&E, respectively, went to DBEs, far exceeding the guidelines established by the CPUC.

Regulators and elected officials

It is important for Sempra Energy to engage with regulators and elected officials. Their actions impact our business prospects and results.

Regulators make the rules that determine how utilities operate. They try to balance the needs of utilities and utility customers. Customers want safe, clean, reliable and affordable energy. Utilities want to provide this service, while earning a reasonable rate of return.

Regulators specify where the energy should come from (for example, what percentage of energy should come from renewable sources). They determine how much energy infrastructure is needed to safely and efficiently deliver the energy (for example, how much pipeline or wire a utility may replace in a given year). And they set energy rates, determining how much utility consumers will pay for service.

In 2018, we received a score of **97.1 percent** on the CPA-Zicklin index, indicating exemplary political disclosure and accountability.

To share the Sempra Energy perspective on potential or proposed regulations, we participate in public meetings, provide written and verbal testimony and interact with regulators via phone, email or in-person meetings. Strict rules of conduct govern how we engage with regulators and how these interactions are tracked and reported.

For more information on how our utilities are regulated, please see page 27 of our 2018 Annual Report on Form 10-K.

Elected officials make laws that can have broad consequences on our company, our industry and our stakeholders.

We interact with national, state/provincial and local elected officials, both within the United States as well as in other countries where we do business. We participate in meetings; testify before committees; write letters in support of, or in opposition to, proposed policies; and make political contributions as allowed by law. We also maintain memberships in various business and trade associations that advocate on public policy.

In 2018, Sempra Energy reported $1,405,318 in campaign contributions to state and local candidates and political committees and caucuses, as allowed by law; and lobbying expenditures of $4,078,138. Lobbying expenditures included time and expenses incurred in the course of lobbying; expenses related to the operation of our offices in Washington, D.C., and Sacramento, Calif.; fees paid to lobbying firms; and the lobbying portion of fees we paid for memberships in business or trade organizations.

Sempra Energy and its companies do not make political contributions to federal candidates within the United States – or to any candidates outside of the United States.

In 2018, the Sempra Energy Employees' Political Action Committee (SEEPAC) made $434,500 in political contributions, in compliance with the requirements governing political action committees.

We publicly disclose political contributions and membership fees on our company website. In 2018, Sempra Energy received a score of 97.1 percent on the Center for Political Accountability's CPA-Zicklin Index, indicating exemplary political disclosure and accountability policies and practices.

Investors and shareholders

Sempra Energy attracts a broad range of investors, with our institutional investors representing 29 countries from around the world.

For information on how we engage with our investors and shareholders, please see page 17.

About this report

Natural gas liquefaction facilities allow the export of this lower carbon energy resource around the world.

FRAMEWORK

This report has been prepared in accordance with the Global Reporting Initiative's (GRI) core standards – a detailed index is on page 68. This report meets the recommendations of the Task Force on Climate-Related Financial Disclosures – an overview is on page 66. A description of how Sempra Energy helps to meet targets aligned with the United Nations' Sustainable Development Goals is on page 12. Additional information on our environmental performance can be found at www.cdp.net.

REPORTING BOUNDARY

We include data from businesses and facilities that we own and operate; for joint ventures we include data based on our percent ownership.

Due to their significant impact on our financial performance, we include relevant and available data from two businesses that we do not operate:

- Cameron LNG: Although Sempra LNG is a majority owner, we do not control the operation of this joint venture. We include data based on our percent ownership.
- Oncor: Ring-fencing measures, governance mechanisms and commitments limit our ability to direct the management, policies and operations of Oncor. We include 100-percent data for the full year with some exceptions, including the consolidated financial data on pages 8, 42, 62, 73, 83 and 84

Other data exclusions or additions are noted throughout the report.

DATA VERIFICATION AND REPORT REVIEW

We collect and aggregate performance data and supporting documentation from our corporate headquarters and principal businesses. We conduct periodic internal audits to review data accuracy. We publicly report certain data to government agencies and obtain third-party verification of a subset of this publicly-reported data during the year following publication.

Greenhouse gas emissions for 2017 were verified as follows: SDG&E, by Lloyd's Register Quality Assurance, Inc.; SoCalGas, by Lloyd's Register Quality Assurance, Inc.; and Termoeléctrica de Mexicali, by Asociación Nacional de la Industria Química, A.C. Greenhouse gas emissions for 2018 are subject to verification.

Our sustainability steering committee comprises officers from across the enterprise. This committee provides guidance on the content of this report. The Environmental, Health, Safety and Technology committee of Sempra Energy's board of directors, per Section 3.A.11 of its charter, reviewed this report prior to its publication.

MATERIAL TOPICS

This report covers the issues that are most material to the company and its stakeholders as identified in our latest materiality assessment, which included a survey of media coverage of our company and industry; guidance from company leaders; and survey responses from approximately 400 stakeholders, equally divided among customers, employees and other stakeholders such as elected officials, regulators and industry analysts.

Material topic descriptions and page references are in the table below.

Following recent changes to our company's strategic direction, we plan to conduct a new materiality assessment in late 2019.

Please contact us with your feedback at sustainability@sempra.com.

Sempra Energy material topics

Key issue	Description	Page
Climate change and emissions	Mitigate or minimize climate-related risks; reduce environmental impacts; focus on climate-resilient infrastructure; adapt business strategy to climate constraints.	26-32
Compliance	Comply with rules and regulations in all areas of our business.	19, 39
Customers and communities	Prepare for and respond to disasters, emergencies and extraordinary weather conditions; safeguard customer and employee information; protect energy facilities and systems from cyber and physical security threats; protect the public from potentially dangerous contact with energy infrastructure; listen, understand and respond to stakeholders' input; provide financial and volunteer support to charities and nonprofit organizations.	53-56
Employee engagement and safety	Develop and retain a skilled, engaged and motivated workforce; maintain a safe and healthy work environment for both employees and contractors.	47-49
Environmental impact	Control and reduce greenhouse gas emissions and other air emissions; protect natural habitats and species near and around energy infrastructure.	30-32, 40
Ethics and governance	Act in an ethical manner; provide strong corporate governance and oversight of company operations.	15
Rates and reliability	Advocate for fair and affordable energy rates while complying with government mandates; provide reliable and consistent service to customers.	52,53
Supply chain	Work to have reliable, affordable, diverse suppliers that operate efficiently and reduce environmental impacts.	23, 36, 57
The future	Adapt to and anticipate changes related to new technologies and regulatory/legislative mandates; think creatively, identify and employ innovative solutions to prepare for the future; develop the infrastructure to support clean transportation.	3, 10, 21, 34-35,
Water	Minimize water use; meet water discharge requirements.	37

Performance data[1]

Performance data[1]	2015	2016	2017	2018
Business and governance				
Revenues (millions of dollars)	10,231	10,183	11,207	11,687
Earnings attributable to common shares (millions of dollars)	1,349	1,370	256	924
Earnings per diluted common share (dollars)	5.37	5.46	1.01	3.42
Total assets (millions of dollars)	41,150	47,786	50,454	60,638
Number of board directors	12	11	13	14
Number of independent board directors	11	10	12	13
Percentage of independent board directors who are women and/or people of color	45	50	67	62
Ethics and compliance helpline calls	260	232	287	354[2]
Environment				
Renewable energy deliveries (% of previous year total sales)[3]	35.2	43	45	45
Agency inspections	563	638[4]	604	425
Notices of violation (NOV)[5]	22	22	24	16
Inspections with no NOV issued (% of total inspections)	96	97	96	96
Fines and penalties (dollars)[6]	50,343	9,012	29,601	12,250
Internal compliance assessments and audits[7]	422	325	386	543
Scope 1 greenhouse gas emissions (million metric tons CO_2e)	8.1[8]	4.9	5.2[9]	6[10]
Scope 2 greenhouse gas emissions (million metric tons CO_2e)	0.25	0.216	0.233[9]	0.482[10]
Scope 3 greenhouse gas emissions (million metric tons CO_2e)[11]	54.5	52.8	55.1	51.7
CO_2 emissions rate for power generation (lbs CO_2/megawatt-hour)[12]	649	532	459[9]	480[10]
NO_x emissions from power generation (tons)	355	235	154	277
NO_x emissions rate from power generation (lbs/megawatt-hour)[12]	0.05	0.05	0.02	0.04
SO_2 emissions from power generation (tons)	16	8	8	7
SO_2 emissions rate from power generation (lbs/megawatt-hour)[12]	0.002	0.002	0.001	0.001
Total water withdrawal (billions of gallons)[13]	27.9	21.9	28.9	28
Returned water (billions of gallons)[13]	25	19.7	26.5	25.4
Hazardous waste (tons)[14]	5,073	5,575	2,456	5,282
Our stakeholders				
Number of employees	17,400	16,600	16,000	20,838
Employee work-related fatalities	1	0	0	0
Employee recordable injury case rate (per 100 full-time workers)	2.35	2.31	2.24	1.66
Employee lost work-time case rate (per 100 full-time workers)	0.77	0.73	0.66	0.49
Contractor work-related fatalities[15]	1	0	0	1
Contractor recordable injury case rate (per 100 full-time workers)[15]	n/a	0.8	0.83	0.71
Women in workforce (% of total workforce)	28	29	30	26
Women in management (% of management employees)	33	33	34	31
People of color in workforce (% of U.S. employees)	57	58	59	53
People of color in management (% of U.S. management)	50	51	52	50
Community giving (millions of dollars)[16]	18.9	19.6	20.3	24.2

1 Data is per calendar year. Relevant and available data for Oncor are included in 2018, exceptions are noted.
2 Data for 2018 also includes calls to the helplines in Mexico and Peru. Data for Oncor are not included.
3 Power delivered to SDG&E customers only. These results are subject to review and audit by the CPUC and other regulatory agencies.
4 Agency inspections increased after the leak at SoCalGas' Aliso Canyon natural gas storage field.
5 Self-reported violations are not included.
6 Does not include settlements. The amount of fines and penalties paid varies from year to year depending on the nature of the violation and the timing of its resolution.
7 The number of internal compliance assessments and audits may vary from year to year due to adjustment of inspection cycles as determined by risk assessments.
8 Includes 2.1 million metric tons CO_2 equivalent from the Aliso Canyon leak.
9 Greenhouse gas emissions data for 2017 have been updated following an independent verification of the data.
10 Greenhouse gas emissions data for 2018 are undergoing third-party verification and may be updated upon completion of the analysis. Data for Oncor and scope 2 emissions from Cameron LNG are not included.
11 Data includes emissions from power purchased and delivered to electric utility customers and emissions from our customers' combustion of natural gas. The 2016-2018 numbers also include employee air travel. Data for Oncor are not included.
12 Emissions rate for power generation on an equity-share basis. Data from Chilquinta Energía's peaker plant are not included.
13 While we continue to improve data collection related to water use, these numbers do not yet account for all aspects of our operations, including water used at Oncor and natural gas pipeline testing at our California utilities.
14 Hazardous waste generated increased in 2016 due to an asphalt replacement project. The increase in 2018 was due to SoCalGas pipeline relocation and decontamination projects and the inclusion of Oncor amounts.
15 Data for Oncor are not included.
16 Community giving includes charitable giving to fully charitable entities as well as nonprofit civic and community groups.

Goals & results[1]

● Met ◑ Partly/in Progress ○ Below target

2018 Goals		2018 Results	2019 Goals
Emissions reduction			
Decrease our CO_2 emissions rate for power generation by at least **35 percent** by 2021 compared to a 2010 baseline	◑	Decreased rate by **34 percent**	Given the sale of our U.S. renewables business, this goal will no longer be tracked.
Renewable energy and innovation			
Provide **60 percent** of customers' electricity from renewable sources by 2030 and 100 percent by 2045 (SDG&E)	◑	Provided approximately **45 percent**[2] from renewable sources of energy	Provide **60 percent** of customers' electricity from renewable sources by 2030 and 100 percent by 2045 (SDG&E)
Develop or interconnect at least **165 megawatts** of energy storage on the system by 2021 (SDG&E)[3]	◑	Filed an application and received approval from the CPUC for five new local battery storage facilities for **83.5 megawatts**	Develop or interconnect at least **165 megawatts** of energy storage on the system by 2021 (SDG&E)
Facilitate electric vehicle growth to meet the Governor's goal of **500,000** zero emissions vehicles in its service territory by 2030. (SDG&E)	◑	SDG&E continued to promote campaigns to inspire drivers to switch to electric vehicles and by the end of 2018 installed **2,818** electric vehicle charging units at 249 locations in its service territory	Facilitate electric vehicle growth to meet the Governor's goal of **500,000** zero emissions vehicles in its service territory by 2030. (SDG&E)
By 2020, **51 percent** of fleet will run on alternative fuels (SoCalGas)	◑	**26 percent** of fleet comprised of alternative fuel vehicles	By 2020, **51 percent** of fleet will run on alternative fuels (SoCalGas)
By 2020, **22 percent** of fleet will run on alternative fuels (SDG&E)	◑	**13 percent** of fleet comprised of alternative fuel vehicles	By 2020, **22 percent** of fleet will run on alternative fuels (SDG&E)
Decrease carbon in SoCalGas' pipelines by introducing renewable natural gas to the Core natural gas procurement portfolio by 2025	◑	In 2018, SoCalGas injected the first California-produced renewable natural gas into its pipeline system.	Decrease carbon in SoCalGas' pipelines by introducing renewable natural gas to the Core natural gas procurement portfolio by 2025. By 2030, renewable natural gas will make up 20 percent of the natural gas SoCalGas delivers to Core customers.
Energy efficiency			
Aim for the following, through customer energy efficiency programs (SDG&E):	Saved:		Aim for additional savings through customer energy efficiency programs (SDG&E):
201 gigawatt-hours in energy savings[3]	●	**441 gigawatt-hours**	**220 gigawatt-hours** in energy savings
44 megawatts of demand reduction	●	**131 megawatts**	**47 megawatts** of demand reduction
3.3 million therms of natural gas saved	○	**1.38 million therms**	**3.6 million therms** of natural gas saved
Aim for the following, through customer energy efficiency programs (SoCalGas):	Saved:		Aim for additional savings through customer energy efficiency programs (SoCalGas):
46 million therms of natural gas saved	●	**51.8 million therms**	**48 million therms** of natural gas saved
Reduce facility electricity consumption per square foot compared to 2017 usage, while adding infrastructure to charge 300 employee electric vehicles (SDG&E)	○	Although consumption increased **.03 percent** in 2018, usage was still 28.7 percent lower than the 2003 baseline	**Reduce facility electricity consumption** per square foot compared to 2018 usage, while adding infrastructure to charge 500 employee electric vehicles (SDG&E)
Reduce facility electricity consumption **3 percent** in 2018 compared to 2017[3] (SoCalGas)	●	Reduced consumption **5 percent**	Reduce facility electricity consumption **3 percent** in 2019 compared to 2018 (SoCalGas)

Goals & results[1] (continued)

● Met ◑ Partly/in Progress ○ Below target

2018 Goals		2018 Results	2019 Goals
Water			
Reduce facility water consumption compared to 2017 levels and use **20 percent** less than baseline year of 2010 (SDG&E)	◑	Decreased consumption by nearly **1 percent** as compared to 2017 and **18 percent** as compared to 2010	Reduce consumption compared to 2018 and use **20 percent less** than consumed in the baseline year of 2010 (SDG&E)
Reduce facility water consumption **3 percent** compared to a 2007 baseline (SoCalGas)	●	Decreased employee-occupied facility water usage by more than **12 percent**	Maintain at least a **3 percent** reduction in facility water consumption compared to a 2007 baseline (SoCalGas)
Safety and public safety			
Maintain a culture of safety, striving for **zero incidents**[4]	◑	In 2018, the employee recordable injury rate and lost time injury rate continued to decrease. We are saddened to report one contractor fatality.	Maintain a culture of safety, striving for **zero incidents**[4]
Decrease overall pipeline damage rate (per 1,000 service tickets) by **15 percent** by 2022, compared to a 2016 baseline (SoCalGas & SDG&E)	◑	As of the end of 2018, SoCalGas and SDG&E achieved an **11 percent** reduction in the overall pipeline damage rate.	Decrease overall pipeline damage rate (per 1,000 service tickets) by **15 percent** by 2022, compared to a 2016 baseline (SoCalGas & SDG&E)
Complete enhanced well integrity inspections on **100 percent** of underground storage wells by the end of 2019 (SoCalGas)	◑	As of the end of 2018, SoCalGas permanently isolated the storage zone or completed enhanced well integrity inspections on **79 percent** of underground storage wells.	Complete enhanced well integrity inspections on **100 percent** of underground storage wells by the end of 2019 (SoCalGas)
Replace approximately **800 miles** of distribution pipeline at SoCalGas and **100 miles** at SDG&E by 2021	◑	As of the end of 2018, SoCalGas abandoned/replaced approximately **545 miles** and SDG&E approximately **66 miles** of pipe to enhance the integrity of their distribution systems.	Replace approximately **800 miles** of distribution pipeline at SoCalGas and **100 miles** at SDG&E by 2021
Complete high pressure pipeline inspections on **1,700 miles** of pipeline at SoCalGas and **120 miles** at SDG&E by 2021	◑	As of the end of 2018, SoCalGas assessed approximately **948 miles** and SDG&E assessed approximately **51 miles** of high pressure transmission pipelines.	Complete high pressure pipeline inspections on **1,700 miles** of pipeline at SoCalGas and **120 miles** at SDG&E by 2021
Install and retrofit more than **200 automated control valves** and test/replace more than **400 miles** of high pressure pipeline by 2021 as part of the Pipeline Safety Enhancement Plan (PSEP) (SoCalGas & SDG&E)	◑	As of the end of 2018, SoCalGas and SDG&E installed and/or retrofitted **165 automated control valves** and tested/replaced **190 miles** of high pressure pipeline as part of PSEP.	Install and retrofit more than **200 automated control valves** and test/replace more than **400 miles** of high pressure pipeline by 2021 as part of the PSEP (SoCalGas & SDG&E)
Reliability			
Limit average duration of electricity outages (SAIDI) to:			Limit average duration of electricity outages (SAIDI) to:
62 minutes (SDG&E)[3]	○	**71 minutes**	**61 minutes** (SDG&E)
553 minutes (Chilquinta Energía)	○	**591.46 minutes**	**553 minutes** (Chilquinta Energía)
390 minutes (Luz del Sur)	○	**408.88 minutes**	**390 minutes** (Luz del Sur)
Limit average number of electricity outages (SAIFI) to:			Limit average number of electricity outages (SAIFI) to:
0.53 outages (SDG&E)[3]	○	**0.62 outages**	**0.52 outages** (SDG&E)
5.11 outages (Chilquinta Energía)	●	**4.23 outages**	**5.11 outages** (Chilquinta Energía)
3 outages (Luz del Sur)	●	**1.91 outages**	**3 outages** (Luz del Sur)

Goals & results[1] (continued) ● Met ◑ Partly/in Progress ○ Below target

2018 Goals		2018 Results	2019 Goals
Customer assistance programs			
Enroll **90 percent** of eligible customers in California Alternate Rates for Energy program (SDG&E)	●	Enrolled **92 percent**	Enroll **90 percent** of eligible customers in the California Alternate Rates for Energy program (SDG&E)
Enroll **90 percent** of eligible customers in California Alternate Rates for Energy program (SoCalGas)	○	Enrolled **85.97 percent**	Enroll **90 percent** of eligible customers in California Alternate Rates for Energy program (SoCalGas)
Serve **21,332** homes through the Energy Savings Assistance Program (SDG&E)[3]	●	Served **21,387 homes**	Serve **22,641 homes** through the Energy Savings Assistance Program (SDG&E)
Serve **169,910 homes** through the Energy Savings Assistance Program (SoCalGas)[3]	○	Served **99,457 homes**	Serve **182,265 homes** through the Energy Savings Assistance Program (SoCalGas)
Diverse business enterprises			
Aim for **40 percent** in spending with diverse business enterprises (SDG&E)	●	Achieved **43.9 percent**	Aim for **40 percent** in spending with diverse business enterprises (SDG&E)
Aim for at least **38 percent** in spending with diverse business enterprises (SoCalGas)	●	Achieved **40.12 percent**	Aim for at least **38 percent** in spending with diverse business enterprises (SoCalGas)
Community giving			
Contribute **1 percent** of annual pretax income to charities	●	Contributed **1.3 percent**	Contribute **1 percent** of annual pretax income to charities

[1] If goal is not at the Sempra Energy level, the relevant business unit is indicated in parentheses in the Goals columns. Goals for Oncor are not included.

[2] These results subject to review and audit by the CPUC and other regulatory agencies.

[3] Goal updated per regulatory approval or operational considerations.

[4] Year-to-year safety performance can be found in the Performance data table on page 62.

Task Force on Climate-related Financial Disclosures

The Task Force on Climate-related Financial Disclosures (TCFD) develops voluntary, consistent climate-related financial risk disclosures for use by companies in providing information to stakeholders. Sempra Energy is committed to providing our stakeholders with information on our approach to – and performance on – climate-related issues. A summary of our response to the TCFD-recommended disclosures is below, with references to where this information can be found in the report. Additional information, including greater detail on climate-related risks and opportunities and their impacts can also be found in our response to CDP's annual climate change survey.

Governance	Page
Board oversight Sempra Energy's board of directors discusses a range of issues related to climate change throughout the year, including climate-related risks and opportunities as well as evaluation of ways to address these matters as part of the company's business strategy and operations. The Environmental, Health, Safety & Technology committee of our board oversees environmental, health, safety and technology-related risks, controls, processes, programs and performance. Many of these topics are closely related to climate change and the long-term sustainability of Sempra Energy. The committee is briefed by the company's compliance, technology, environmental, health, safety, security and sustainability officers and directors. It met four times in 2018.	18
Management role To support the Board's governance of climate-related issues, in 2018 we formed a sustainability steering committee that provides guidance on our approach to corporate sustainability, including the content of our corporate sustainability report, which describes how we are responding to climate change.	61

Strategy and risk management	Page
Climate risk is an area of special focus. These risks include short, medium and long-term risks: we prepare for the next wildfire season; we work to meet two-to-three-year regulatory targets; and we plan for the potential impact of sea-level rise, which may be decades away. As part of Sempra Energy's enterprise risk management program, we include an environmental category in our risk universe to address adverse environmental impacts, including those related to climate. Sempra Energy's full board participates in an annual strategic planning process. Company leaders assess a wide range of risks and opportunities – including climate-related risks and opportunities – as they review capital investments and growth prospects. Our operating companies also monitor climate-related risks. They employ full-time meteorologists, prepare for adverse weather and related impacts, and conduct studies to assess the degree to which climate change poses a threat to California's infrastructure, including its energy infrastructure, and/or major infrastructure projects we are building in southeastern Texas and Louisiana. **Climate-related risks** We identify and manage a range of climate-related risks. • **Regulatory risk:** Our businesses are subject to rules and regulations aimed at limiting greenhouse gas emissions. Failure to comply with these requirements could subject us to substantial penalties and fines. We limit our exposure to regulatory risk by maintaining a lower-carbon portfolio of businesses and advocating for consistent energy policies. • **Operational risk:** Our operations are impacted by changes to the climate, which may include more frequent and more intense storms, winds, temperature extremes, droughts and floods as well as sea-level rise. We manage these risks by including climate projections in our planning process and evaluating different scenarios and their impacts. We also strengthen our infrastructure and update our operational protocols. • **Reputational risk:** Sempra Energy's stakeholders are aware of the effects of climate change and seek ways to limit their impact. This atmosphere of heightened climate-related concern might impact our reputation. We mitigate this risk by operating safely and efficiently; we set and achieve goals, including clean energy goals; and we develop new energy resources and technologies, including renewable natural gas, hydrogen and energy storage.	13-14; 25-28; 32

Strategy and risk management (continued)	**Page**
Climate-related opportunities	
• We support the use of **natural gas** as an important source of energy in a lower-carbon economy through the delivery of natural gas to customers; operation of natural gas-fired power plants, critical to the reliability of the electric grid; and construction of natural gas liquefaction facilities, which will allow the export of this lower-carbon energy source worldwide. • We support the use of renewable energy through the delivery of renewable energy to customers in California; grid interconnections to support renewables in Texas; and construction and operation of solar and wind projects in Mexico. • We build and operate energy storage projects. • We improve operational efficiency. SoCalGas is implementing a multi-billion-dollar Pipeline Safety Enhancement Plan (PSEP) to improve the safety and efficiency of its natural gas distribution system. • We build clean transportation infrastructure. • We integrate improved technologies into our operations. Smart-grid technologies give customers more information and control over their energy usage and costs. • We also work to identify new technologies that might be used in our operations.	29

Metrics and targets	**Page**
Sempra Energy's annual corporate sustainability report includes year-over-year performance in many areas related to climate change such as greenhouse gas emissions, environmental compliance and water use. Where possible, we include industry averages to provide context for our performance. **Key metrics** • In 2018, our power-generation emissions rate (pounds of CO_2 per megawatt hour of energy generated) was less than half the U.S. national average. • Approximately 45 percent of the electricity SDG&E delivered to its customers in 2018 was from renewable energy sources. • Only 2 percent of our water was withdrawn from freshwater sources; 7 percent was withdrawn from recycled/reclaimed sources; and 91 percent was withdrawn from seawater sources. • In 2018, SDG&E and SoCalGas customers achieved 441 gigawatt-hours and 53 million therms of energy savings through energy efficiency programs. • SDG&E operates the largest battery storage system in California, capable of storing 120 megawatt hours of energy. • By the end of 2018 SDG&E had installed more than 2,800 electric vehicle charging stations at nearly 300 locations in its service territory.	63-65
Targets • In 2017 we set a target to decrease our CO_2 emissions rate for power generation by at least 35 percent by 2021 compared to a 2010 baseline. In 2018, we achieved a reduction of 34 percent as compared to 2010. • As we continue our company's strategic realignment, which has included the sale of our renewables business in the U.S., we plan to set a new emissions target that is supported by climate science.	30; 63-65

Global Reporting Initiative (GRI) index

Sempra Energy follows the GRI standards, an internationally-recognized standardized framework for disclosing economic, environmental and social performance. The 2018 report qualifies at the in accordance-core level. We also provide information on additional standard disclosures where data is available.

General standard disclosures

Standard number	Description	Response	Omissions
102-1	Name of the organization	Sempra Energy	
102-2	Primary brands, products, and services	Strategy and assets 2018 Annual Report	
102-3	Location of organization's headquarters	San Diego, CA	
102-4	Number and name of countries where the organization has significant operations	We have operations in the United States, Mexico, Chile and Peru (4).	
102-5	Nature of ownership and legal form	Sempra Energy is an investor-owned corporation. Common shares trade on the New York Stock Exchange under the symbol "SRE".	
102-6	Nature of markets served (including geographic breakdown, sectors served, and types of beneficiaries)	Strategy and assets 2018 Annual Report 2018 Statistical Report	
102-7	Scale of the reporting organization (employees, operations, net sales, capitalization, quantity of products/services)	Strategy and assets Performance data 2018 Statistical Report	
102-8	Workforce	Employees Contractors perform a variety of services for our companies. This includes office support services, such as physical security, and field support including vegetation management, construction, trenching and fire suppression. Data related to our workforce is compiled through the annual corporate sustainability data collection process. In general human resources information is available in a system called MyInfo which houses a variety of data and information. Male employees 20-29 years old: 2,482 Male employees 30-39 years old: 4,601 Male employees 40-49 years old: 3,401 Male employees 50-59 years old: 3,171 Male employees more than 60 years old: 1,671 Female employees 20-29 years old: 728 Female employees 30-39 years old: 1,594 Female employees 40-49 years old: 1,422 Female employees 50-59 years old: 1,186 Female employees more than 60 years old: 543 *Due to timing of data collection totals vary slightly from end of year employee headcount.	Employees by employment type and by gender
102-9	Describe supply chain	Business partners and suppliers Supply chain impacts	Data for diverse supplier spend is currently only available for our California utilities.

Standard number	Description	Response	Omissions
102-10	Significant changes from previous report regarding size, structure, and ownership	Year in review 2018 Annual Report On March 9, 2018, we completed our $9.45 billion acquisition of an approximate 80-percent indirect ownership interest in Oncor Electric Delivery Company LLC, a regulated electric transmission and distribution company and the largest utility in Texas. In 2018, the company also outlined a five-year plan for growth, including its intention to sell U.S. wind, solar and midstream facilities: solar assets were sold in December 2018; midstream assets were sold in February 2019; and wind assets were sold in April 2019. This report contains information and data related to these facilities. For more information on our reporting boundary, see About this report.	
102-11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	Governance and risk management	
102-12	External charters, principles, initiatives	These are referenced throughout the 2018 Corporate Sustainability Report.	
102-13	Memberships in associations	On sempra.com we publish a list of trade organizations and business memberships which received annual dues and payments of $20,000 or more.	
102-14	Statement from senior decision-maker	Letter from our Chairman and CEO	
102-15	Key impacts, risks and opportunities	Governance and risk management The environment Performance data Goals and results 2018 Annual Report	
102-16	Values, principles, standards and norms of behavior such as code of conduct and code of ethics	Codes of conduct: - Board of directors and senior officers - Employees - Suppliers Vision, mission and values	
102-17	Mechanisms for advice and concerns about ethics	Vision, mission and values	
102-18	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	Governance and risk management 2019 Proxy Statement Board Committee Charters The board's Environmental, Health, Safety and Technology Committee assists the board in overseeing the company's programs and performance related to these matters. The committee also reviews the annual corporate sustainability report prior to its publication and is briefed on related data and content. This committee's focus is consistent with the board's general oversight role of corporate sustainability and stewardship.	
102-20	Identify executive-level position with responsibility for economic, environmental and social topics and reporting to highest governance body.	Dennis Arriola, Chief Strategy Officer, Executive Vice President and Group President, also serves as Sempra Energy's Chief Sustainability Officer. Arriola reports directly to Jeffrey Martin, Chairman and CEO of Sempra Energy.	
102-21	Mechanisms for consultation between stakeholders and highest governance body on economic, environmental and social topics	2019 Proxy Statement Governance and risk management	
102-22	Composition of the highest governance body and its committees	2019 Proxy Statement	

Standard number	Description	Response	Omissions
102-23	Indicate whether the chair of the highest governance body is also an executive officer, and if so, reason for this arrangement.	Sempra Energy shareholder proposals have included the request that the company adopt a policy that our chairman of the board be independent and not a current or former executive of the company. Our board of directors believes we are best served by retaining the board's flexibility to determine on a case-by-case basis whether the chief executive officer or an independent director should serve as chairman of the board. During those periods in which our chairman is not independent, an independent lead director is appointed by the independent members of our board. William D. Jones is the lead independent director, effective May 9, 2019. Sempra Energy has established a strong lead director role, consistent with input from shareholders.	
102-24	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics	Corporate Governance Guidelines 2019 Proxy Statement Governance and risk management	
102-25	Processes in place for the highest governance body to ensure conflicts of interest are avoided	Corporate Governance Guidelines 2019 Proxy Statement	
102-26	Role of highest governance body in setting purpose, values and strategy	Governance and risk management	
102-27	Collective knowledge of highest governance body	Governance and risk management	
102-28	Process for evaluating the board's own performance	Corporate Governance Committee Charter	
102-32	Highest governance body's role in sustainability reporting	Governance and risk management	
102-35	Remuneration policies for highest governance body and senior executives; Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance	2019 Proxy Statement	
102-36	Process for determining remuneration	2019 Proxy Statement	
102-37	How stakeholders' views are sought and taken into account regarding remuneration and whether they are independent of management	Governance and risk management 2019 Proxy Statement	
102-40	List of stakeholder groups engaged by the organization	Engaging, building trust and fostering relationships with our stakeholders leads to a more stable and predictable business environment. These stakeholders include: our employees; the consumers we serve; the hundreds of communities where we do business; regulators, policymakers and concerned leaders in the jurisdictions where we operate; and our shareholders. Governance and risk management Employees Customers and communities About this report	
102-41	Percentage of employees covered by collective bargaining agreements	Labor relations Field employees and some technical, administrative and clerical employees are represented by labor unions in their respective countries. Approximately 37 percent of Sempra Energy's employees are represented by labor unions. 2018 Annual Report	
102-42	Basis for identification and selection of stakeholders with whom to engage	Governance and risk management Customers and communities About this report	

Standard number	Description	Response	Omissions
102-43	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Governance and risk management Customers and communities About this report Stakeholder Engagement Policy	
102-44	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns	Governance and risk management Customers and communities About this report Stakeholder Engagement Policy	
102-45	Entities included in financial statements, and specify which are included/excluded from this report.	Sempra Energy's principal operating units are: **Sempra Utilities** - SDG&E and SoCalGas, which are separate, reportable segments - South American Utilities which includes Chilquinta Energía in Chile and Luz del Sur in Peru - Oncor Electric Delivery Company LLC (as of March 9, 2018) **Sempra Infrastructure** - Sempra Mexico includes IEnova, one of the largest private energy companies in Mexico. - Sempra LNG develops, builds and invests in natural gas liquefaction facilities. Information and data on all operating units is included in this report. Limitations are noted per metric within the Content Index omissions column or as footnotes throughout the report.	
102-46	Process for defining report content and topic boundaries	About this report	Partial response.
102-47	List all material topics identified in the process for defining report content	About this report	
102-48	Explanation of the effect of any re-statements of information provided in earlier reports	2017 greenhouse gas emissions data was updated following an independent review.	
102-49	Significant changes from previous reporting periods in the scope, boundary or measurement methods applied in the report	About this report	
102-50	Reporting Period	Calendar year 2018	
102-51	Date of most recent previous report	June 2018, covering calendar year 2017	
102-52	Reporting cycle	Annual	
102-53	Contact information	Ian Stewart, Director, Corporate Sustainability sustainability@sempra.com	
102-54	"In accordance" option	About this report	
102-55	Location of GRI Index	GRI Index	
102-56	Assurance	Greenhouse gas emissions for 2017 were verified as follows: SDG&E and SoCalGas, by Lloyd's Register Quality Assurance, Inc.; and Termoeléctrica de Mexicali, by Cameron-Cole, LLC. The verification process for 2018 greenhouse gas emissions will be completed later in 2019. We are working towards assurance for other data in our corporate sustainability report in future years.	
EU1	Installed capacity, broken down by primary energy source and by regulatory regime	Installed capacity (MW) U.S.* / Mexico / Chile / Peru Thermal: Chile 26.8 Natural Gas: U.S. 1,193; Mexico 625 Wind: U.S. 758; Mexico 329.5 Solar: U.S. 832 Hydro: Peru 100 *As of April 2019, all U.S. renewables assets have been sold.	

EU1 installed capacity (MW):

	U.S.*	Mexico	Chile	Peru
Thermal:			26.8	
Natural Gas:	1,193	625		
Wind:	758	329.5		
Solar:	832			
Hydro:				100

*As of April 2019, all U.S. renewables assets have been sold.

Standard number	Description	Response	Omissions
EU2	Net energy output broken down by primary energy source and by regulatory regime	Energy output (MWh) U.S. / Mexico / Chile / Peru Thermal: Chile 3,891 Natural Gas: U.S. 3,683,929; Mexico 3,700,837 Wind: U.S. 2,361,543; Mexico 1,157,241 Solar: U.S. 2,487,586 Hydro: Peru 684,426	
EU3	Number of residential, industrial, institutional, and commercial customer accounts	2018 Statistical Report 2018 Annual Report	
EU4	Length of above and underground transmission and distribution lines by regulatory regime	U.S. / Chile / Peru Above ground (miles): 120,958 / 10,663 / 6,106 Underground (miles): 41,722 / 245 / 8,449	
EU5	Allocation of CO_2e emissions allowances or equivalent, broken down by carbon trading framework	Greenhouse gas emissions As part of the effort to meet California's legal requirement that GHG emissions be reduced to 1990 levels by 2020, a cap and trade program was adopted. We participate in the program, which is now linked with Québec's cap and trade system. The first auction of vintage 2013 and 2016 allowances took place in November 2012 and quarterly auctions began in February 2013. Cap and trade compliance began in 2013, with the first compliance period covering electric generators, electricity importers and industrial sources that emit more than 25,000 metric tons of CO_2e per year. Phase 2 began in January 2016 and expanded to include distributors of fuels. See https://www.arb.ca.gov/cc/capandtrade/capandtrade.htm for more information.	
103-1	Topic boundaries within the organization	See Appendix	
103-2	Management approach	Strategy and assets Governance and risk management Performance data Goals and results Also see references under each material topic.	

Specific standard disclosures

Standard number	Description	Response	Omissions
Category: Economic			
Economic performance			
103-2	Management approach	Sempra Energy combines deep industry expertise with rigorous risk management to deliver superior shareholder returns. A company's financial performance matters, not just to its employees and shareholders, but also to its suppliers and contractors; to the customers it serves; and to the communities and governmental jurisdictions where it does business. Year in review 2018 Annual Report	
201-1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	Customers and communities Economic value (For year ended December 31, 2018, unaudited, dollars in millions) Economic value generated: Revenues $11,687 Interest and dividend receipts $114 Proceeds from sale of assets and investments $1,593 **Direct economic value generated $13,394** Economic value distributed: Operating costs, including wages and benefits $7,344 Shareholders and providers of capital $1,910 Payments to government $575 Community investments $47 **Economic value distributed $9,876** Economic value retained (generated - distributed) $3,518 *Figures were determined according to the Global Reporting Initiative guidelines	
201-2	Financial implications and other risks and opportunities for the organization's activities due to climate change	Governance and risk management Climate change Task Force on Climate-related Financial Disclosure Sempra's response to the CDP's climate change survey also covers this in detail. Please see www.cdp.net. 2018 Annual Report	
201-3	Coverage of the organization's defined benefit plan obligations	2018 Annual Report	
201-4	Significant financial assistance received from government	No significant financial assistance was received from any of the governments in countries where we have operations.	
Market presence: *This topic did not meet our threshold for materiality*			
Indirect economic impacts			
103-2	Management approach	Energy is vital to the communities we serve. We engage with customers and community leaders to identify and discuss potential infrastructure needs and impacts and learn about ways to mitigate them.	
203-1	Development and impact of infrastructure investments and services supported	Customers and communities	
203-2	Significant indirect economic impacts, including the extent of impacts	Customers and communities http://www.ienova.com.mx/social.php?v=2.0.0.0 http://sempralng.com/community/	

Standard number	Description	Response	Omissions
Procurement practices			
103-2	Management approach	Supply chain impacts Business partners and suppliers	
204-1	Proportion of spending at significant locations of operation	Approximately 60 percent of total supplier spend in 2018 was with local suppliers. The definition for local may vary by business. For example, for our utilities in California, local is defined as suppliers headquartered in California.	Partially reported
EU Sector Topic: availability and reliability			
EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	2018 Annual Report SDG&E Long-Term Procurement Plan	Partially reported-only data from California utilities is included.
EU Sector Topic: system efficiency			
EU11	Average generation efficiency of thermal plants by energy source and by regulatory regime	U.S. / Mexico Natural gas: 7,747 / 7,215	Partially reported, data from Chile is not included.
EU12	Transmission and distribution losses as a percentage of total energy	SDG&E / Chile / Peru / Oncor Transmission losses: 2.09% / 2% / 1.71% / 1.95% Distribution losses: 3.14% / 8% / 4.55% / 6.02%	
Anti-corruption			
103-2	Management approach	Code of Business Conduct Values and codes of conduct	
205-1	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	All business units are analyzed for risks associated with corruption.	
205-2	Communication and training on anti-corruption policies and procedures	To emphasize the importance of ethics and compliance, we require all employees to complete a training curriculum each year, customized according to their position and responsibilities. The courses address topics such as insider trading; Sarbanes-Oxley regulations; anti-corruption, including local laws and the Foreign Corrupt Practices Act; Federal Energy Regulatory Commission Standards of Conduct; California Public Utilities Commission affiliate-compliance rules; safety; harassment-free workplace; and workplace violence. Governance and risk management Code of Business Conduct	
205-3	Confirmed incidents of corruption and actions taken	No incidents of corruption identified.	
Anti-competitive behavior: *This topic did not meet our threshold for materiality, but we are providing some information because of its importance to some stakeholders*			
103-2	Management approach	Federal and state antitrust laws were enacted to promote competition, preserve our private enterprise system and protect the public, including companies like Sempra Energy and its subsidiaries, from predatory conduct and unfair competition. It is the long established policy of Sempra Energy and its subsidiaries (the "Companies") to comply with all laws applicable to their conduct and, specifically, with the antitrust laws. Compliance with the antitrust laws can only further the Companies' goals since those laws are intended to protect and preserve a competitive economy in which private enterprise can flourish. Code of Business Conduct	
206-1	Total number of legal actions for anti-competitive behavior, antitrust, and monopoly practices and their outcomes	There were no legal actions taken for anti-competitive behavior in 2018.	

Standard number	Description	Response	Omissions
Category: Environmental			
Materials: *This topic did not meet our threshold for materiality*			
Energy			
103-2	Management approach	At Sempra Energy, our business strategy is directly linked to our forecast that demand for lower-carbon sources of energy will continue to rise. Our commitment to respecting the environment is aligned with our commitment to delivering shareholder value. We promote energy efficiency; deliver lower-carbon energy; and embrace innovation because these activities help the environment and position us to succeed in a low-carbon world. Strategy and assets Climate change	
302-1	Energy consumption within the organization	See our response to the CDP climate change survey at www.cdp.net	
302-2	Energy consumption outside of the organization	As an energy utility we work to safely and reliably deliver electricity and natural gas. Kilowatt-hour sales (millions of hours): 41,198 Total natural gas throughput (billion cubic feet): 925	
302-3	Energy intensity	Greenhouse gas emissions	
302-4	Reductions in energy consumption	Goals and results	Only data for electricity reduction at SDG&E and SoCalGas employee-occupied facilities is included.
Water			
103-2	Management approach	Water Water Policy	
303-1	Total water withdrawal by source	Sempra's response to the CDP's water survey also covers this in detail. Please see www.cdp.net. All numbers in billions of gallons: Surface water: 25.4 Ground water: 0.53 Rainwater: 0 Waste water: 1.92 Municipal water: 0.19 *Does not include Oncor	We continue to improve data collection around our water use, but these numbers do not yet account for all of our operations.
303-3	Percentage and total volume of water recycled and reused	Several of our facilities utilize recycled water in their operations. For example, SDG&E's 565-megawatt Palomar Energy Center uses reclaimed water (treated wastewater) to generate electricity and IEnova's 625-megawatt Termoeléctrica de Mexicali power plant uses treated sewage, cleaned in our own water treatment facility, to cool the plant. Water	Partially reported.
Biodiversity			
103-2	Management approach	Biodiversity Biodiversity Policy	
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Biodiversity	Partially reported, not all data available.
304-2	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Biodiversity	Partially reported, not all data available.
304-3	Habitats protected or restored	2018 Annual Report SDG&E preservation properties IEnova Sustainability Report	Partially reported, not all data available.

Standard number	Description	Response	Omissions
304-4	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	- *Coastal California gnatcatcher*: Federal – Threatened; California Department of Fish and Wildlife (CDFW) - Species of Special Concern - *Quino checkerspot butterfly*: Federal - Endangered - *Arroyo toad*: Federal – Endangered; CDFW - Species of Special Concern - *Least Bell's vireo*: Federal and State - Endangered - *Southwestern willow flycatcher*: Federal and State - Endangered - *Barefoot banded gecko:* State – Threatened - *Peninsular bighorn sheep*: Federal and State – Threatened; CDFW - Fully Protected - Hawaiian hoary bat: Federal and State - Endangered	Partially reported.
Emissions			
103-2	Management approach	Climate change Greenhouse gas emissions	
305-1	Direct greenhouse gas emissions (Scope 1)	Greenhouse gas emissions Sempra's response to the CDP's climate change survey also covers this in detail. Please see www.cdp.net.	
305-2	Indirect greenhouse gas emissions (Scope 2)	Greenhouse gas emissions Sempra's response to the CDP's climate change survey also covers this in detail. Please see www.cdp.net.	
305-3	Indirect greenhouse gas emissions (Scope 3)	Greenhouse gas emissions Sempra's response to the CDP's climate change survey also covers this in detail. Please see www.cdp.net.	
305-4	GHG emissions intensity	Greenhouse gas emissions	
305-5	Reduction of greenhouse gas emissions	Greenhouse gas emissions	
305-7	NOx, SOx, and other significant air emissions by type	Performance data table	
Effluents and waste			
103-2	Management approach	Waste and recycling Environmental Policy	
306-1	Total water discharge by quality and destination	Water Sempra's response to the CDP's water survey also covers this in detail. Please see www.cdp.net.	Partially reported, not all data available, including thermal discharges.
306-2	Total weight of waste by type and disposal method	2018 waste disposal (in short tons) Non-hazardous waste recycled: 33,211 Non-hazardous waste incinerated: 137 Non-hazardous waste disposed of through deep well injection: 3,128 Non-hazardous waste disposed of in a landfill: 35,954 Non-hazardous waste disposed of by other methods: 82,213 Hazardous waste recycled: 545 Hazardous waste recovered: 2,024 Hazardous waste incinerated: 252 Hazardous waste disposed of in a landfill: 1,878 Hazardous waste disposed of by other methods: 40	
306-3	Total number and volume of significant spills	Sempra Energy did not experience any significant spills in 2018.	
Environmental compliance			
103-2	Management approach	Governance and risk management Environmental compliance	
307-1	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Environmental compliance	

Standard number	Description	Response	Omissions
Transport: *This topic did not meet our threshold for materiality*			
Supplier environmental assessment			
103-2	Management approach	Supply chain impacts Business partners and suppliers Supplier Code of Conduct	
308-1	Percentage of new suppliers that were screened using environmental criteria	At our California utilities, SDG&E and SoCalGas, all new suppliers are screened using environmental criteria.	Partially reported. Other U.S. and international operations are not included in this response, we are working to expand our reporting in this area in future years.
308-2	Significant actual and potential negative environmental impacts in the supply chain and actions taken	We are unaware of any actual or potential negative environmental impacts in our supply chain.	
Environmental grievance mechanisms: *This topic did not meet our threshold for materiality*			
Category: Social			
Employment			
103-2	Management approach	Employees	
401-1	Total number and rates of new employee hires and employee turnover by age group, gender and region	Employee turnover: 11% Voluntary turnover: 7%	Partially reported.
EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and region	Eligible to retire in 5 years: 14% Eligible to retire in 10 years: 23%	
EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	Sempra Energy is committed to the health and safety of its employees, customers, suppliers and the communities in which we operate. Our suppliers are expected to provide a safe working environment that supports accident prevention and minimizes exposure to health risks. It is the supplier's responsibility to know and understand the health and safety laws and regulations impacting the goods and services they provide.	
Labor/Management relations			
103-2	Management approach	Thirty-seven percent of Sempra Energy employees are represented by a labor union. We value our association with the unions that represent our employees and work collaboratively with them to achieve results that are beneficial to employees, customers and the Sempra Energy family of companies. At Sempra Energy, we are not satisfied unless every employee and contractor returns home safely after every workday. Our culture of personal responsibility is a critical part of safety performance. Our goal is for each employee and contractor to feel personally responsible and empowered to take care of their safety as well as the safety of those around them. Compliance and management systems Employees Customers and communities	
402-1	Minimum notice regarding operational changes, including whether it is specified in collective agreements	2018 Annual Report	

Standard number	Description	Response	Omissions
Occupational health and safety			
403-1	Workers representation in formal joint management-worker health and safety committees	Safety Labor relations	Percentage of workers represented by committees
403-2	Type of injury and rates of injury, occupational diseases, lost days and absenteeism, and total number of work-related fatalities by region and gender	Employees	
403-4	Health and safety topics in formal agreements	2018 Annual Report	
Training and education			
103-2	Management approach	Delivering safe, clean, reliable, affordable energy requires significant human capital, creativity and care. When our people are trained, challenged and empowered to take initiative, our business thrives. Employees	
404-1	Average hours of training per year per employee by gender and employee category	Average hours of training and development per FTE in 2018 was 30.	Partially reported.
404-2	Programs for skills management and lifelong learning	Employees	
404-3	Percentage of employees receiving regular performance reviews by gender and employee category	All employees receive regular performance reviews from their manager.	
Diversity and equal opportunity			
103-2	Management approach	Employees	
405-1	Composition of governance bodies and breakdown of employees per employee category according to gender, age, minority group member (other diversity)	Governance and risk management Employees	Partially reported.
Sub-category: Human rights			
Non-discrimination: *This topic did not meet our threshold for materiality.*			
Freedom of association and collective bargaining			
103-2	Management approach	Supplier Code of Conduct	
407-1	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	No operations or suppliers identified. 2018 Annual Report Supplier Code of Conduct	
Child labor: *Although this topic did not meet our threshold for materiality, we are providing some information because of its importance to some stakeholders.*			
103-2	Throughout all of our operations, and across all stakeholder groups, Sempra Energy respects human rights. We recently completed a human rights assessment,which included peer benchmarking as well as an analysis of our worldwide operations for areas of potential risk and opportunity.	Customers and communities Human Rights Policy	
Forced or compulsory labor: *This topic did not meet our threshold for materiality.*			
Security practices: *This topic did not meet our threshold for materiality*			
Rights of indigenous peoples			
103-2	Management approach	Customers and communities Human Rights Policy	
411-1	Violations of indigenous peoples rights and response and actions taken	No violations have been identified. Human Rights Policy	

Standard number	Description	Response	Omissions
Human rights assessment			
103-2	Management approach	Code of Business Conduct Human Rights Policy	
412-1	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments	Engagement and human rights Human Rights Policy	
Subcategory: Society			
Local communities			
103-2	Management approach	Energy is vital to the communities we serve. The infrastructure that delivers this energy includes power poles, substations, service trucks, transformers, valves, meters, pipes and wires. We engage with customers and community leaders to identify and discuss potential infrastructure impacts and learn about ways to mitigate them. Sempra's businesses connect with their customers through mail, email, door hangers, advertising, social media and news media. They host community forums, arrange face-to-face meetings and convene community advisory councils — representative groups of regional leaders who provide input on locally relevant topics. Customer satisfaction surveys provide data that indicate how well Sempra's businesses are serving their customers. With this information, our utilities are able to identify areas where improvement is needed and implement changes to their customer approach, policies and programs. Customers and communities Stakeholder Engagement Policy	
413-1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	Customers and communities Given the nature of our business, our subsidiaries are deeply engaged and connected with all of the communities we serve. Stakeholder Engagement Policy	Partially reported, not all data available.
Supplier social assessment			
103-2	Management approach	Supplier Code of Conduct Supply chain impacts Business partners and suppliers	
414-1	Total and percent of new suppliers and contractors that have undergone human rights screening	All suppliers are expected to comply with Sempra's Supplier Code of Conduct and all applicable employment laws and regulations, including, but not limited to state, federal and applicable in-country laws and regulations regarding: equal employment opportunity; compensation and benefits; child labor; freedom of association; forced or compulsory labor; workplace harassment and discrimination; working hours; payment of wages; verification of employment eligibility; health and safety; and whistleblower protections.	
414-2	Significant actual and potential negative social impacts in the supply chain and actions taken	We are unaware of any actual or potential negative social impacts in our supply chain.	
Public policy			
103-2	Management approach	Regulators and elected officials	
415-1	Total value of political contributions by country and recipient/boundary	Regulators and elected officials	

Standard number	Description	Response	Omissions
Sub-category: Product responsibility			
Customer health and safety			
103-2	Management approach	Customers and communities	
416-1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	Sempra Energy's subsidiaries provide gas and electric services to customers. Impacts of both of these products are assessed.	
416-2	Total number of incidents of non-compliance with regulations and/or voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	No incidents identified.	
EU25	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	Customers and communities	
Marketing and labeling: *This topic did not meet our threshold for materiality*			
Customer privacy			
103-2	Management approach	Cybersecurity includes the protection of our own operations and activities and the protection of sensitive customer data. The utility industry faces new cybersecurity risks associated with automated metering and smart grid infrastructure. Virtually all SDG&E and SoCalGas customers have smart or advanced meters. While these new technologies will provide many benefits to customers, including access to their own energy-usage data, both utilities actively monitor, assess and update their systems to avoid cyber breaches. 2018 Annual Report	
418-1	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	No substantiated complaints identified.	
Socioeconomic compliance			
103-2	Management approach	Governance and risk management Environmental compliance Code of Business Conduct	
419-1	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and/or regulations	Environmental compliance	
EU sector topic Access			
EU26	Percentage of population unserved in licensed distribution or service areas	Access to electricity is also an issue in some areas served by our South American utilities, where not everyone is connected to the grid. Peruvian utility Luz del Sur has brought electricity to thousands of Peruvians who live in underprivileged areas through participation in a government program intended to improve economic development and productivity by connecting those communities to electric service.	Partially reported, not all data available.
EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	Number of residential disconnections for non-payment is provided for Sempra's electric and/or natural gas utilities. Chilquinta Energía: 134,365 Ecogas: 4,107 Luz del Sur: 639,705 SDG&E: 51,352 SoCalGas: 106,654	Partially reported, duration of disconnection is not included.
EU28	Power outage frequency	Goals and results	
EU29	Average power outage duration	Goals and results	
EU30	Average plant availability factor by energy source and by regulatory regime	United States / Mexico Natural gas: 89% / 98%	

Appendix: 103-1

Material issue for Sempra	Corresponding GRI Standards topic	Boundary within Sempra	Boundary outside Sempra
Climate change and emissions	Emissions; Energy; Products and services	All	Customers; Elected officials, community leaders, investors and regulators
Compliance	Environmental compliance; Overall; Biodiversity; Effluents and waste; Public policy; Socioeconomic compliance	All	Customers; Elected officials, community leaders, investors and regulators
Customers and communities	Customer health and safety; Customer privacy; Economic performance; Indirect economic impacts; Rights of indigenous peoples; Human rights assessment; Local communities; Access (EU)	All	Customers; Elected officials, community leaders, investors and regulators
Employee engagement & safety	Occupational health and safety; Labor-management relations; Training and education; Diversity and equal opportunity; Freedom of association and collective bargaining	All	Customers; Elected officials, community leaders, investors and regulators
Environmental impact	Emissions; Energy; Products and services; Water; Biodiversity; Effluents and waste	All	Customers; Elected officials, community leaders, investors and regulators
Ethics and governance	Local communities; Anti-corruption; Customer privacy; Labor/management relations; Diversity and equal opportunity; Non-discrimination; Freedom of association; Indigenous rights; Assessment; Access (EU)	All	Customers; Elected officials, community leaders, investors and regulators
Rates and reliability	Local communities; Access (EU) Availability and reliability (EU); System efficiency (EU)	All utilities	Customers; Elected officials, community leaders, investors and regulators
Supply chain	Procurement practices; Supplier environmental assessment; Supplier social assessment	All	Select external stakeholders
The future	Training and education; Employment	All	Select external stakeholders
Water	Water; Effluents and waste	All	Select external stakeholders

FORWARD-LOOKING STATEMENTS

We make statements in this report that are not historical fact and constitute forward-looking statements within the meaning of the Private

Securities Litigation Reform Act of 1995. These statements can be identified by words such as "believes," "expects," "anticipates," "plans," "estimates," "projects," "forecasts," "contemplates," "assumes," "depends," "should," "could," "would," "will," "confident," "may," "can," "potential," "possible," "proposed," "target," "pursue," "outlook," "maintain," or similar expressions, or when we discuss our guidance, strategy, plans, goals, vision, mission, opportunities, projections, initiatives, objectives or intentions. Forward-looking statements are not guarantees of performance. They involve risks, uncertainties and assumptions. Future results may differ materially from those expressed in the forward-looking statements.

Factors, among others, that could cause our actual results and future actions to differ materially from those described in any forward-looking statements include risks and uncertainties relating to the greater degree and prevalence of wildfires in California in recent years and the risk that we may be found liable for damages regardless of fault, such as where inverse condemnation applies, and risk that we may not be able to recover any such costs in rates from customers in California; actions and the timing of actions, including decisions, new regulations and issuances of authorizations by the California Public Utilities Commission, U.S. Department of Energy, California Department of Conservation's Division of Oil, Gas, and Geothermal Resources, Los Angeles County Department of Public Health, U.S. Environmental Protection Agency, Federal Energy Regulatory Commission, Pipeline and Hazardous Materials Safety Administration, Public Utility Commission of Texas, states, cities and counties, and other regulatory and governmental bodies in the U.S. and other countries in which we operate; the success of business development efforts, construction projects, major acquisitions, divestitures and internal structural changes, including risks in (i) obtaining or maintaining authorizations; (ii) completing construction projects on schedule and budget; (iii) obtaining the consent of partners; (iv) counterparties' ability to fulfill contractual commitments; (v) winning competitively bid infrastructure projects; (vi) disruption caused by the announcement of contemplated acquisitions and/or divestitures or internal structural changes; (vii) the ability to complete contemplated acquisitions and/ or divestitures; and (viii) the ability to realize anticipated benefits from any of these efforts once completed; the resolution of civil and criminal litigation and regulatory investigations and proceedings; actions by credit rating agencies to downgrade our credit ratings or those of our subsidiaries or to place those ratings on negative outlook and our ability to borrow at favorable interest rates; deviations from regulatory precedent or practice that result in a reallocation of benefits or burdens among shareholders and ratepayers; denial of approvals of proposed settlements; delays in, or denial of, regulatory agency authorizations to recover costs in rates from customers or regulatory agency approval for projects required to enhance safety and reliability; and moves to reduce or eliminate reliance on natural gas; the availability of electric power and natural gas and natural gas storage capacity, including disruptions caused by failures in the transmission grid, limitations on the withdrawal or injection of natural gas from or into storage facilities, and equipment failures; risks posed by actions of third parties who control the operations of our investments; weather conditions, natural disasters, accidents, equipment failures, computer system outages, explosions, terrorist attacks and other events that disrupt our operations, damage our facilities and systems, cause the release of harmful materials, cause fires and subject us to third-party liability for property damage or personal injuries, fines and penalties, some of which may not be covered by insurance (including costs in excess of applicable policy limits), may be disputed by insurers or may otherwise not be recoverable through regulatory mechanisms or may impact our ability to obtain satisfactory levels of affordable insurance; cybersecurity threats to the energy grid, storage and pipeline infrastructure, the information and systems used to operate our businesses and the confidentiality of our proprietary information and the personal information of our customers and employees; actions of activist shareholders, which could impact the market price of our securities and disrupt our operations as a result of, among other things, requiring significant time by management and our board of directors; changes in capital markets, energy markets and economic conditions, including the availability of credit; and volatility in currency exchange, interest and inflation rates and commodity prices and our ability to effectively hedge the risk of such volatility; the impact of federal or state tax reform and our ability to mitigate adverse impacts; changes in foreign and domestic trade policies and laws, including border tariffs and revisions to or replacement of international trade agreements, such as the North American Free Trade Agreement or the United States-Mexico-Canada Agreement (subject to congressional approval), that may increase our costs or impair our ability to resolve trade disputes; expropriation of assets by foreign governments and title and other property disputes; the impact at San Diego Gas & Electric Company on competitive customer rates and reliability of electric transmission and distribution systems due to the growth in distributed and local power generation and from possible departing retail load resulting from customers transferring to Direct Access and Community Choice Aggregation or other forms of distributed and local power generation and the potential risk of nonrecovery for stranded assets and contractual obligations; Oncor Electric Delivery Company LLC's (Oncor) ability to eliminate or reduce its quarterly dividends due to regulatory capital requirements and other regulatory and governance commitments, including the determination by a majority of Oncor's independent directors or a minority member director to retain such amounts to meet future requirements; and other uncertainties, some of which may be difficult to predict and are beyond our control.

These risks and uncertainties are further discussed in the reports that Sempra Energy has filed with the U.S. Securities and Exchange

Commission (SEC). These reports are available through the EDGAR system free-of-charge on the SEC's website, www.sec.gov. Investors should not rely unduly on any forward-looking statements. These forward-looking statements speak only as of the date hereof, and the company undertakes no obligation to update or revise these forecasts or projections or other forward-looking statements, whether as a result of new information, future events or otherwise.

RECONCILIATION OF NON-GAAP FINANCIAL MEASURES (UNAUDITED)

Reconciliation of Sempra Energy GAAP earnings and diluted earnings per common share (EPS) to Sempra Energy adjusted earnings and adjusted diluted EPS (unaudited)

Sempra Energy Adjusted Earnings and Adjusted EPS exclude items (after the effects of income taxes and, if applicable, noncontrolling interests) in 2018, 2017 and 2016 as follows:

In 2018:

- $367 million gain on the sale of certain Sempra Renewables assets
- $(65) million impairment of RBS Sempra Commodities LLP (RBS Sempra Commodities) equity method investment at Parent and Other
- $(629) million impairment of certain non-utility natural gas storage assets at Sempra LNG & Midstream
- $(145) million other-than-temporary impairment of certain U.S. wind equity method investments at Sempra Renewables
- $(22) million impacts associated with Aliso Canyon natural gas storage facility litigation at SoCalGas
- $(85) million income tax expense in 2018 to adjust the Tax Cuts and Jobs Act of 2017 (TCJA) provisional amounts recorded in 2017

In 2017:

- $(870) million income tax expense from the impact of the TCJA
- $(208) million write-off of wildfire regulatory asset at SDG&E
- $(47) million impairment of Termoeléctrica de Mexicali (TdM) assets held for sale until June 2018 at Sempra Mexico
- $(20) million associated with Aliso Canyon litigation reserves at SoCalGas
- $5 million deferred income tax benefit on the TdM assets held for sale
- $28 million of recoveries related to 2016 permanent releases of pipeline capacity at Sempra LNG & Midstream

In 2016:

- $350 million noncash gain from the remeasurement of our equity method investment in IEnova Pipelines (formerly Gasoductos de Chihuahua or GdC), a 50-50 joint venture between our Mexican subsidiary, IEnova, and Petróleos Mexicanos (PEMEX), in connection with IEnova's September 2016 acquisition of PEMEX's 50-percent interest in GdC
- $78 million gain at Sempra LNG & Midstream on the September 2016 sale of EnergySouth, Inc., the parent company of Mobile Gas Service Corporation and Willmut Gas Company
- $(123) million losses from the permanent release of pipeline capacity at Sempra LNG & Midstream
- $(80) million adjustments related to tax repairs deductions reallocated to ratepayers as a result of the 2016 General Rate Case Final Decision (2016 GRC FD) at SDG&E and SoCalGas
- $(27) million impairment charge related to Sempra LNG & Midstream's investment in Rockies Express Pipeline LLC (Rockies Express)
- $(90) million impairment of TdM assets held for sale
- $(5) million deferred income tax expense related to our decision to hold TdM for sale

Sempra Energy Adjusted Earnings and Adjusted EPS are non-GAAP financial measures (GAAP represents accounting principles generally accepted in the United States of America). Because of the significance and/or nature of the excluded items, management believes that these non-GAAP financial measures provide a meaningful comparison of the performance of Sempra Energy's business operations to prior and future periods. Non-GAAP financial measures are supplementary information that should be considered in addition to, but not as a substitute for, the information prepared in accordance with GAAP. The following table reconciles, for historical periods, these non-GAAP financial measures to Sempra Energy GAAP Earnings and GAAP Diluted EPS, which we consider to be the most directly comparable financial measures calculated in accordance with GAAP.

(Dollars in millions, except per-share amounts)	Pretax amount	Income tax expense (benefit)[1]	Non-controlling interests	Earnings	Diluted EPS
			Year ended December 31, 2018		
Sempra Energy GAAP Earnings				$ 924	$ 3.42
Excluded items:					
Gain on sale of certain Sempra Renewables assets	$ (513)	$ 146	$ –	(367)	(1.36)
Impairment of investment in RBS Sempra Commodities	65	–	–	65	0.24
Impairment of non-utility natural gas storage assets	1,117	(452)	(36)	629	2.33
Impairment of U.S. wind equity method investments	200	(55)	–	145	0.54
Impacts associated with Aliso Canyon litigation	1	21	–	22	0.08
Impacts from the TCJA	–	85	–	85	0.32
Sempra Energy Adjusted Earnings				$ 1,503	$ 5.57
Weighted-average shares outstanding, diluted (thousands)					269,852
			Year ended December 31, 2017		
Sempra Energy GAAP Earnings				$ 256	$ 1.01
Excluded items:					
Impact from the TCJA	$ –	$ 870	$ –	870	3.45
Write-off of wildfire regulatory asset	351	(143)	–	208	0.82
Impairment of TdM assets held for sale	71	–	(24)	47	0.19
Aliso Canyon litigation reserves	20	–	–	20	0.08
Deferred income tax benefit associated with TdM	–	(8)	3	(5)	(0.02)
Recoveries related to 2016 permanent release of pipeline capacity	(47)	19	–	(28)	(0.11)
Sempra Energy Adjusted Earnings				$ 1,368	$ 5.42
Weighted-average shares outstanding, diluted (thousands)					252,300
			Year ended December 31, 2016		
Sempra Energy GAAP Earnings				$ 1,370	$ 5.46
Excluded items:					
Remeasurement gain in connection with GdC acquisition	$ (617)	$ 185	$ 82	(350)	(1.39)
Gain on sale of EnergySouth	(130)	52	–	(78)	(0.31)
Permanent release of pipeline capacity	206	(83)	–	123	0.49
SDG&E tax repairs adjustments related to 2016 GRC FD	52	(21)	–	31	0.12
SoCalGas tax repairs adjustments related to 2016 GRC FD	83	(34)	–	49	0.19
Impairment of investment in Rockies Express	44	(17)	–	27	0.11
Impairment of TdM assets held for sale	131	(20)	(21)	90	0.36
Deferred income tax expense associated with TdM	–	8	(3)	5	0.02
Sempra Energy Adjusted Earnings				$ 1,267	$ 5.05
Weighted-average shares outstanding, diluted (thousands)					251,155

[1] Except for adjustments that are solely income tax and tax related to outside basis differences, income taxes were primarily calculated based on applicable statutory tax rates. Income taxes associated with TdM were calculated based on the applicable statutory tax rate, including translation from historic to current exchange rates. An income tax benefit of $12 million associated with the 2017 TdM impairment has been fully reserved.

Content index

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488 8th Avenue | San Diego, California 92101-7123 | sempra.com