Welcome to your CDP Climate Change Questionnaire 2020

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Sempra Energy (which we refer to as “Sempra Energy,” “Sempra” or the “Company” in these responses) is an energy services holding company with 2019 revenues of $10.8 billion. We and our family of companies invest in, develop and operate energy infrastructure and provide electric and gas services to customers in what we believe are the most attractive markets in North America: California, Texas, and Mexico and we participate in the development and operation of LNG export facilities. Our businesses position us at the intersection of two broad trends: innovation in energy technology and infrastructure; and growing demand for lower-carbon energy. Sempra Energy is committed to driving responsible strategies to meet the evolving market need for sustainable, resilient and affordable energy. This is critical to our ability to deliver long-term, sustainable value to all our stakeholders. Our operating companies include:

- San Diego Gas & Electric Company (SDG&E), based in San Diego, California, is a regulated public utility that provides electric services to a population of approximately 3.7 million consumers and natural gas services to approximately 3.4 million of that population.
- Southern California Gas Company (SoCalGas), based in Los Angeles, California, is the largest natural gas distribution utility in the U.S. and delivers natural gas to approximately 22 million consumers.
- Oncor Electric Delivery Company LLC (Oncor)*, based in Dallas, Texas, operates the largest electric transmission and distribution infrastructure system in the state, and provides electric service to an estimated population of 10 million Texans.
- Infraestructura Energetica Nova, S.A.B. de C.V. (IEnova), based in Mexico City, Mexico, develops, owns and operates or holds interests in energy infrastructure in Mexico and is one of the largest private energy companies in the country.
- Sempra LNG, based in Houston, Texas, owns a 50.2% interest in the recently completed three-train LNG facility in Hackberry, Louisiana (Cameron LNG)* and is currently developing additional LNG export facilities in the Gulf coast and Pacific coast of North America.

*Oncor and Cameron LNG are not consolidated entities of Sempra Energy, and therefore, data for these operations are not included in this response. Additional information and data can be found in our sustainability report at www.sempra.com/sustainability. Data for our South American utilities, which were held for sale and considered discontinued operations in 2019 (and later sold in 2020), are also not included in this response.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2019	December 31, 2019	No

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

Mexico

United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain

Electricity generation
Transmission
Distribution

Other divisions

Gas storage, transmission and distribution
Smart grids / demand response
Battery storage
Micro grids

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	Sempra Energy's Board of Directors' Sustainability, Safety and Technology (SS&T) Committee is the highest-level committee responsible for the review of environmental, health, and safety laws, regulations - including climate-related risks and opportunities- and developments at the global, national, regional, and local levels. Many of these topics are closely related to climate change and the long-term sustainability of Sempra Energy. The committee also reviews technology developments that can advance the Company's business strategy, including as they relate to opportunities and risks resulting from climate change. Six non-employee board members serve on the committee, which is briefed by the Company's compliance, technology, environmental, health, safety, security and sustainability officers and senior personnel. As an example of decision-making related to sustainability, the SS&T Committee was engaged on the development of a sustainability goal framework for Sempra Energy that covers four areas: achieving world-class safety; championing people; driving resilient operations; and enabling the energy transition. Climate-related goals are included in this framework, which sets the stage for a broader energy transition goal currently under development.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies	Climate and related implications are woven into the fabric of corporate strategic planning. With significant environmental regulation and exposure to both climate related risks and opportunities, it is critical that these issues are monitored at the highest level. Risks include regulatory risk, transition risk, operational and physical risks (warmer weather, increasing drought, wildfire risk, and rising sea level over the longer term.)

	Reviewing and guiding business plans Monitoring and overseeing progress against goals and targets for addressing climate-related issues	Opportunities include low- and zero-carbon energy infrastructure, international demand for LNG, a lower-carbon alternative to traditional coal-fired generation, energy efficiency, cleaner transportation, energy storage, renewable natural gas and the integration of new technologies. The Board, through the SS&T Committee, reviews business strategies to mitigate the impact of Company operations on the environment, including climate change response and other sustainability matters. The Board's SS&T Committee also reviews and evaluates issues related to the Company's preparedness for extraordinary weather-related events. During 2019, the committee held four meetings, in addition to a specific briefing focused on the Company's corporate sustainability report and data contained therein, including ESG-related goals, environmental performance, greenhouse gas emissions, the Company's approach to climate change and related risks and opportunities, as well as sustainability reporting trends and investor interest in environmental, social and governance issues.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	Quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

The Chief Sustainability Officer (CSO) reports directly to Sempra Energy's CEO and serves also as Senior Vice President – Corporate Affairs. The VP of Sustainability reports to the CSO and has direct oversight of the CSR & Sustainability team. Oversight of climate-related issues has been assigned to the CSO as this position has influence over many areas of the company, including development and communication of the company's overall strategy, mission and vision. For example, the CSO is responsible for external affairs groups that coordinate and monitor the company's engagement on climate-related issues and work to develop the company's long-term strategy into the future. As an energy company with utilities operating in a highly regulated environment like California – and more broadly in areas prone to drought, wildfires, mudslides and hurricanes, climate-related considerations are integral to risk management and business planning processes. Climate change touches many areas of the company, and as such, gets addressed by regulatory affairs, state and federal government affairs, community relations, sustainability, corporate strategy and other external affairs functions, working directly with local public affairs and environmental, health, safety and security teams across the company to set goals, monitor performance and prepare our employees, infrastructure and customers for extraordinary climate-related events. In addition, the CSO is responsible for and has oversight of how the company monitors legislative and regulatory issues related to climate and the strategy we employ, ensuring that all operating companies are informed. The CSO has oversight of the annual sustainability reporting process, which includes goal-setting and environmental, social and governance performance, as well as the aggregation of data and reporting of emissions performance and efforts related to climate. The Sustainability, Safety and Technology Committee of Sempra Energy’s Board is briefed each year on the sustainability report contents and trends related to sustainability, including emissions and climate-related topics. (See C1.1b) Climate-related issues are also monitored closely at the operating company level, where we 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 energy infrastructure, employees and customers.

At SDG&E, SoCalGas and IEnova, we also have Chief Environmental Officers focused specifically on those businesses and their environmental and other sustainability impacts, including their approach to managing climate-related issues. A corporate-level sustainability steering committee, comprised of officers from across the company, was created in 2018. In addition to providing guidance on the sustainability reporting process, the committee discusses sustainability-related issues, including climate change, that affect the company. Our operating companies also have developed sustainability steering committees to drive their response to climate-related issues.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Corporate executive team	Monetary reward	Emissions reduction project	In the 2019 performance-based annual bonus plan there were performance measures related to pipeline and storage integrity efforts, which prevent emissions and increase public safety in addition to fire hardening efforts that mitigate and reduce the risk of catastrophic wildfires in our service territory
Other, please specify Management employees	Monetary reward	Emissions reduction project	In the 2019 performance-based annual bonus plan there were performance measures related to pipeline and storage integrity efforts, which prevent emissions and increase public safety in addition to fire hardening efforts that mitigate and reduce the risk of catastrophic wildfires in our service territory.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	
Medium-term	1	5	
Long-term	6	10	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

The substantive financial and strategic impact of each identified risk is assessed and evaluated at various levels within the organization, including by line managers, officers and senior management teams in each operating company. There are four dimensions that we consider when evaluating risk: health, safety and environmental; operations and reliability; regulatory, legal and compliance; and financial impact. What is considered substantive is evaluated from each of these perspectives (at the operating company level and rolled up into the overall enterprise risk management process), which will vary by risk type.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Risk management

Sempra Energy and its family of companies identify, assess and, where possible, mitigate a broad and complex set of risks commonly associated with the energy industry, as well as risks specific to each company. A changing climate has regulatory, operational and reputational impacts on our business. Management of climate-related risks is integrated into the company's overall approach to risk, is assessed throughout the year and covers our own operations, in addition to downstream and upstream impacts. At the parent company level, the Sempra Energy Board and the Compliance and Enterprise Risk Committee provide oversight on all identified risk areas. Risk management teams at each operating company and the parent company lead an established enterprise risk management program to assess risks using risk maps and other tools that help identify and monitor business risk exposure. To evaluate these risks, we look at different scenarios including the impact of regulatory frameworks and the introduction of technologies that could lead to market changes. We also consider different scenarios related to changes in the physical environment, including models of sea-level rise and extreme weather events.

Issues are identified by their ability to impact each of our company's core business through impacts on operational costs, costs to customers, or reputation. For example, to identify issues related to regulatory schemes, we conduct sensitivity analyses allowing us to estimate the level of risk associated with different scenarios. We also monitor climate-related risks, increasingly volatile weather, impacts on insurance markets, corporate and emergency preparedness, increasing legal and regulatory pressures for reform, as well as public and investor concerns. This serves to identify issues to be monitored on an ongoing basis. Internally developed scoring matrices are consistently used across the enterprise. The substantive impact of each identified risk is assessed and evaluated at various levels within the organization, including by line managers, officers and senior management teams in each business.

Some climate-related risks are shorter term, such as preparing for a wildfire season exacerbated by extreme drought. Others are medium-term, such as meeting a regulatory target to promote safety, increase operational efficiencies or avoid penalties or fines. Others, such as the potential impact of sea-level rise, are longer-term. We consider these and other risks as we plan capital expenditures. At SDG&E, we employ full-time

meteorologists, prepare for adverse weather and related impacts, and conduct and review studies to assess the degree to which climate change poses a threat to infrastructure, employees and customers We routinely plan for impacts to a variety of stakeholders; and review, monitor and adjust insurance coverage as necessary and to the extent the market permits, sharing and transferring risk when and where possible, in addition to other risk mitigation activities.

Risk example: Operational climate risk
Rising temperatures, drought conditions, increased frequency of extreme weather and sea-level rise can impact our operations. We have increased our resilience by incorporating climate projections into our planning process. This includes determining the impact of rising temperatures on the efficiency and durability of natural gas and electric infrastructure; understanding how sea level rise and floods might impact our facilities; and evaluating the potential for more severe drought conditions and increased wildfire frequency. We are mitigating these risks by strengthening our infrastructure. This includes repositioning some electric lines underground; converting certain power poles from wood to steel; keeping trees properly trimmed; shutting off power to some areas when certain high-risk conditions occur; and reducing our reliance on fresh water due to water scarcity in the Southwestern United States, among other actions.

Identifying opportunities
Company leaders assess a wide range of risks and opportunities – including climate-related – as they review capital investments and growth prospects. Sempra Energy's full Board participates in an annual strategic planning process to discuss business opportunities. In 2018, we laid out a strategic plan known as "Vision 2022," centered on the mission of becoming North America's premier energy infrastructure company. The past two years have been transformational as we sharpened our focus on what we believe are the most attractive growth markets in North America, simplified our business model and strengthened our balance sheet. As part of this strategic plan, we are focused on the delivery of cleaner and more secure forms of energy to consumers in North America as well as abroad. Our corporate strategy group is integral in assessing opportunities for the Company and is focused on areas that align with our mission and facilitate the clean energy transition in all of the markets we serve. Our corporate sustainability steering committee and operating company sustainability committees also provide a mechanism for the discussion of opportunities related to sustainability and climate.

Opportunity example
Transition opportunity: As part of our ongoing process to assess risks and opportunities related to our business, we monitor regulatory and market trends, which include the transition to cleaner fuels around the world. Sempra Energy supports the use of natural gas as an important source of energy in a lower-carbon economy. We are partners in the operation and construction of natural gas liquefaction facilities, which will allow for the export of this lower-carbon energy source worldwide, helping consumers shift away from coal. We have a goal of developing

roughly 45 million tonnes per annum of export capacity to support U.S. producers' access to global markets. Production of LNG at the Cameron LNG facility in Hackberry, Louisiana commenced in May 2019 (Sempra LNG is a majority owner).

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	As part of Sempra Energy's Enterprise Risk Management (ERM) program we assess and address adverse environmental impacts including those related to climate. Our operating companies are subject to energy, climate and environmental laws and regulation that are evaluated as part of our ERM program. As an example, California's Renewable Portfolio Standard (RPS) requires 60% of electricity delivered to SDG&E customers to come from renewable or zero carbon sources of energy by 2030. If SDG&E does not meet RPS goals, it could face potential fines and penalties. SDG&E developed an action plan to comply with the regulation and mitigate the risk associated with noncompliance. SDG&E developed a procurement strategy designed to meet or exceed the RPS target and is currently on track to exceed the requirement: in 2019 about 45 percent of the electricity SDG&E delivered to customers came from renewable sources.
Emerging regulation	Relevant, always included	Sempra Energy's ERM program addresses emerging environmental regulations, including those related to climate in its risk universe. Emerging energy, climate and environmental regulations are assessed and evaluated. As another example, there are increasing regulatory requirements related to natural gas storage facilities over the past several years at both the federal and state levels. Given the ownership of 137 billion cubic feet (Bcf) of storage capacity at our SoCalGas gas distribution utility located in southern California, we are closely monitoring regulations to understand any potential impacts to our business.

Technology	Relevant, always included	Sempra Energy's ERM program also considers the impact of transition risk and new technologies. Given the importance of technology to our operating companies (smart meters, smart grid, time-of-use rates, solar net metering, energy storage and battery technology) and a future that could involve further digitalization, our risk assessments include energy, IT and cybersecurity technologies that are critical to our company in addition to technologies that could disrupt our current way of doing business and require adaptation. For example, SDG&E, when considering the advancement and increase of distributed solar throughout their service territory, considers what risks this may represent to the company and its customers. The current electric residential rate structure in California is primarily based on consumption volume, which places a higher rate burden on customers with high electric use, while subsidizing lower use customers. This situation results in non-solar customers paying to maintain and improve the electric grid for solar-owning customers who continue to use the grid. A regulatory strategy has been developed to work with stakeholders to develop a more equitable rate design that recognizes the services provided to distributed generation customers in a way that achieves fairness and promotes renewable resource installation at the customer level.
Legal	Relevant, always included	The Company's ERM program reviews adverse environmental impacts, including those related to climate in its risk universe. The impact of individual risks can range from health/safety/environmental and operational and/or reliability claims, to regulation and compliance claims. Legal risks evaluated include claims related to natural disasters that are magnified by climate change. For example, our infrastructure in California is vulnerable to wildfires because of increasing drought conditions and high temperatures. The 2007 wildfires in SDG&E's service territory resulted in over $2 billion in settled claims, of which approximately $350 million was not recovered from insurance, rates paid by customers or settlements with third parties.
Market	Relevant, always included	Climate-related concerns are leading to rapid market changes in the energy industry. As one example, in SDG&E's service territory there is a steady shift of customers installing distributed generation (solar) on their homes. These changes can impact our traditional way of doing business, in addition to impacting rates for non-solar customers. This must be considered during our risk assessment process.
Reputation	Relevant, always included	Reputational risk is evaluated in our risk assessment process. In particular, customers of SDG&E, SoCalGas and Oncor are price sensitive and may react negatively to utility bill increases as measures to reduce GHG emissions are fully implemented. In addition, there could be a possible perception by the community that we are not moving fast enough to transition to lower-carbon resources or to mitigate impact of natural disasters magnified by climate change. One way we work to mitigate these risks is by offering customers choice- for example through the EcoChoice program at SDG&E,

		customers can now choose to get up to 100% of their energy from renewable sources. Using an online calculator, an interested customer estimates their monthly costs and enrolls in the program (sdge.com/EcoChoice); SDG&E purchases renewable power specifically for EcoChoice customers; and the customer begins receiving power attributable to renewable sources.
Acute physical	Relevant, always included	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. The impact of individual risks is assessed in the following areas: Health/Safety/Environmental, Operational and Reliability, Regulation/Legal/Compliance, Financial. One of the primary acute physical risks is the potential for wildfires impacting our communities and infrastructure. Increasing drought conditions in California are increasing the risk of devastating wildfires. We have already experienced this in the San Diego region where SDG&E operates and it is a factor that is always considered in risk assessments.
Chronic physical	Relevant, always included	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. The impact of individual risks is assessed in the following areas: Health/Safety/Environmental, Operational and Reliability, Regulation/Legal/Compliance, Financial. A chronic physical risk that is considered in our risk assessment is the potential impact of sea level rise due to climate change. SDG&E and SoCalGas have infrastructure located in coastal areas and could be subject to infrastructure damage with coastal flooding and inundation. We are working to assess these risks. One way we are assessing these risks is through scenario planning. SDG&E and SoCalGas participated in a study recently conducted by the California Energy Commission analyzing the exposure of utility infrastructure to climate change-driven coastal wave flooding, tidal inundation, and coastal erosion.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Under California's Renewable Portfolio Standard (RPS), SDG&E is required to contract 33 percent of electricity purchased on behalf of its customers from renewable sources by 2020. California Senate Bill 100, passed in 2018, increases this requirement to 60 percent renewable energy delivered to customers by 2030 and 100 percent renewable or zero-carbon energy by 2045. SDG&E has gone from delivering less than 1 percent of power from renewable sources in 2002 to about 45 percent in 2019, overcoming challenges as the renewables market has developed over this period. While SDG&E is on track to meet mandated goals, if SDG&E does not meet RPS goals, it may face potential fines and penalties.

Time horizon

Short-term

Likelihood

Unlikely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Although SDG&E is on track to meet RPS goals, failure to comply could subject it to CPUC-imposed penalties. which could materially affect its business, cash flows, financial condition, results of operations and/or prospects. The limit on the total amount of penalties for failure to comply with the RPS requirements is $100 million for 2021-2024; $75 million for 2025-2027; and $75 million for 2028-2030.

Cost of response to risk

Description of response and explanation of cost calculation

SDG&E continues to procure renewable energy to meet targets. In 2019 about, 45% of SDG&E's power supply came from renewable sources. The market for renewable energy is dynamic and multiple factors can impact project development and SDG&E’s attainment of RPS goals. SDG&E’s procurement team works to address these factors so that the company stays in compliance. As an example, in SDG&E’s service territory, the timely approval, permitting and completion of interconnection facilities is crucial to the successful implementation of SDG&E’s renewable portfolio. SDG&E monitors these issues and also actively participates in the California Independent System Operator’s (CAISO) transmission planning process. As of the date of its announcement at our March 24, 2020 Investor Day, SDG&E’s 2020-2024 capital plan

includes $1.6 billion for modernizing electric transmission lines and substation infrastructure, in addition to efforts for fire hardening. The costs of monitoring compliance are built into already existing departments and do not represent a significant additional cost.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market

Changing customer behavior

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

SDG&E serves customers who are price-sensitive and react negatively to utility bill increases. Increases in costs are driven by state mandates related to renewable energy, dynamic and real-time pricing and also increasing bouts of hot weather, which drives up usage. These higher costs are driving more and more customers in SDG&E's service area to purchase rooftop solar and magnifying the issue of energy affordability for those without it.

Net energy metering (NEM) is an electric billing tariff mechanism designed to promote the installation of renewable on-site generation (primarily solar. Under NEM qualifying customer generators receive a full retail rate for the electricity they generate that is fed to the utility's power grid. This occurs when the customer's generation exceeds their own energy usage. Under this structure, NEM customers do not pay their proportionate share of the cost of maintaining and operating the electric transmission and distribution system, subject to certain limitations, while they still receive electricity from the system when their self-generation does not meet their electricity needs. The unpaid NEM costs are

subsidized by customers not participating in NEM. Accordingly, as higher use residential customers switch to NEM and self-generate energy, the burden on the remaining customers increases, which in turn encourages more self-generation, further increasing rate pressure on existing customers. The cost differential is rising, year over year, in a cost shift, which amounts to hundreds of millions of dollars in costs since 1999.

In July 2015, the CPUC adopted a decision that provided a framework for rates that we believe are more transparent, fair and sustainable, which will be fully implemented in 2020. We believe additional reform is needed to help ensure rates are fair for all customers. If the CPUC fails to continue to reform SDG&E's rate structure to maintain reasonable, cost-based electric rates that are competitive with alternative sources of power and adequate to maintain the reliability of the electric transmission and distribution system, such failure could lead to the disallowance of recovery for our costs, including power procurement costs, operating or capital costs, or the imposition of fines and penalties. Any of these developments could have a material adverse effect on SDG&E's and Sempra Energy's business, cash flows, financial condition, results of operations and/or prospects .

Time horizon

Short-term

Likelihood

Unlikely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Cost of response to risk

Description of response and explanation of cost calculation

SDG&E was the first public utility in California to seek authorization for a rate structure that incorporates a network use charge for those who install renewable energy. We are working with stakeholders on a sustainable rate design that recognizes the services provided to distributed generation customers in a way that achieves fairness and promotes renewable resource installation at the customer level. We believe that appropriate NEM reforms are necessary to help ensure that SDG&E is authorized to recover, from NEM customers, the costs incurred in providing grid and energy services, as well as mandated legislative and regulatory public policy programs.

SDG&E implemented a successor NEM tariff in July 2016, which requires NEM customers to pay some costs that would otherwise be borne by non-NEM customers and moves new NEM customers to time of use rates. These changes to the NEM program begin a process of reducing the cost burden on non-NEM customers, but SDG&E believes that further reforms are necessary and appropriate. The CPUC's framework for rates will be fully implemented in 2020 and should result in relief for higher-use customers and a rate structure that better aligns rates with actual costs to service customers. The decision also establishes a process for utilities to seek implementation of a fixed charge for residential customers in 2020, subject to certain conditions. We believe the establishment of a charge independent of consumption volume for residential customers may become more critical to help ensure rates are fair for all customers and we are therefore continuing to advocate for this with the CPUC. Costs to monitor regulation, develop new rate structures, and work with stakeholders are built into already-existing departments and do not represent significant additional costs to the company.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Current regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Sempra Energy's operating companies can face civil and criminal penalties, enforcement actions, financial fines and increases in operating costs if they fail to comply with federal and state air pollution limits. At the federal level, company facilities classified as federal major sources under the Clean Air Act's Federal Operating Permit (Title V) or Prevention of Significant Deterioration programs are required to address GHG emissions in their permits. New major sources emitting at least 100,000 tons of CO2e per year, or existing major sources making modifications that increase CO2e emissions by at least 75,000 tons per year, are required to obtain construction permits that address GHG emissions. In addition, SDG&E and SoCalGas operate in the most stringent air quality regions in the country with major source thresholds as low as 10 tons per year for nitrogen oxides. SDG&E and SoCalGas have triggered the major source thresholds for criteria pollutants at five and 11 facilities respectively, and SDG&E also has two facilities that are considered federal major sources of GHGs. Our IEnova business also has 1 facility that is considered a federal major source of GHG emissions. For these facilities, the U.S. Environmental Protection Agency (EPA) can pursue civil and criminal penalties as well as enforcement actions. SoCalGas is also impacted by the South Coast Air Quality Management District's energy policy which aims to reduce CO2, nitrogen oxides, and particulate emissions by focusing on electrification and near zero-emission technologies. In some instances, civil penalties can be costly.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Potential financial implications could include increased operating costs to bring facilities in compliance and fines for noncompliance. We believe our operating companies are in material compliance with federal regulations. Future regulations that apply to smaller emitters could increase operational costs to achieve compliance. Costs for power we purchase for our customers could also increase due to the generators' increased costs.

Cost of response to risk

Description of response and explanation of cost calculation

We believe we have a strong foundation from which to manage these risks: our approach includes natural gas (a lower-carbon alternative to higher-carbon intensive fossil fuels, such as traditional coal-fired generation), energy efficiency, renewable power, and innovation. The impact of any future regulations could be mitigated by existing reporting mechanisms. We believe that investments in energy efficiency and the smart grid help reduce our exposure, by reducing demand for electricity. We also employ traditional risk management techniques, including risk mapping, sensitivity analysis, and long-term contracting. We are also active in policy engagement as allowed by law. For example, in California, we support legislation that would allow gas corporations to rate-base the interconnection between biogas facilities and transmission/distribution pipelines. We also support using greenhouse gas reduction funds to capture biogenetic sources of methane with the intent of injecting conditioned biogas into our pipelines. Additionally, we support power-to-gas technologies and increasing the amount of synthetic gas that is

created and used by our customers. At the foundation of our approach is safety and a commitment to operational excellence. We employ leading practices for safety management systems and are executing integrity management programs for distribution, transmission and storage assets.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Sempra Energy may face increasing risks if temperatures increase and drought conditions worsen. Our operating companies' power generation facilities in the southwest, while built to tolerate drought conditions, remain vulnerable during incidents of heat and extraordinary weather. Affected facilities include: SDG&E's Palomar Energy, a 566-megawatt facility located in Escondido, CA; Miramar Energy, a 96-megawatt peaking facility in San Diego, CA; Desert Star Energy, a 480-megawatt plant located in Boulder City, NV; and IEnova's 625-megawatt Termoeléctrica de Mexicali power plant in Mexicali, Mexico. In addition, SDG&E and SoCalGas, are also located in the southwestern region of the U.S. This part of the country is prone to drought conditions and is sometimes low on water supplies. From time to time, this region is confronted with a weather pattern known as "Santa Ana" winds: strong, very dry offshore winds often associated with the hottest and driest weather of the year. The combination of dry brush and hurricane force winds may fan regional wildfires that can put infrastructure and customers at risk. In addition, if overhead power lines are implicated in wildfires, as was the case in 2007, it represents further financial risk.

Climate models predict increasing severity and frequency of wildfires in California. The aftermath of fires can also lead to flash flooding and mudslides, further damaging infrastructure, property and even lives as was the case in other parts of California in late 2017 and 2018.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

In July 2019, the Governor of California signed Assembly Bill 1054 and Assembly Bill 111 (collectively the Wildfire Legislation) into law, which addresses certain important issues related to catastrophic wildfires in California and their impact on electric investor owned utilities (IOUs). The Wildfire Legislation did not change the doctrine of inverse condemnation, which imposes strict liability on a utility (meaning that a utility may be found liable regardless of fault) whose equipment is determined to be a cause of a fire. The Wildfire Legislation established a revised legal standard for the recovery of wildfire costs (Revised Prudent Manager Standard) and established a fund (the Wildfire Fund) designed to provide liquidity to participating California electric IOUs to pay IOU wildfire-related claims in the event the governmental agency responsible for determining causation determines the applicable IOU's equipment caused the ignition of a wildfire, primary insurance coverage is exceeded and

certain other conditions are satisfied. An Electric IOU is not required to repay the Wildfire Fund if deemed prudent under the Revised Prudent Manager Standard. But if the IOU is deemed imprudent, it is required to repay the Wildfire Fund, subject to a cap on liability for an IOU with a valid Safety Certification. We are unable to predict whether the Wildfire Legislation will be effectively implemented and its impact on SDG&E's ability to recover certain costs and expenses in cases where SDG&E's equipment is determined to be a cause of a fire.

Cost of response to risk

2,000,000,000

Description of response and explanation of cost calculation

SDG&E has strong risk management practices in place to mitigate wildfire risk. This has been an effort developed over the last decade, including over $2.0 billion invested in wildfire mitigation since 2007. (which amount does not attempt to quantify future costs). As an example, in 2019, SDG&E issued its wildfire mitigation plan which outlines efforts to mitigate these risks. These efforts include:
- A cross functional wildfire risk mitigation governance structure; extensive workforce wildfire prevention training; fire potential communicated daily; stringent monitoring and inspection standards with robust internal controls;
- Aggressive infrastructure hardening + robust vegetation management program ▪ Leading practices in construction, maintenance and operations, including proactive de-energization for safety ▪ Dedicated firefighting resources and one of the largest heli-tankers in the world;
- Advanced situational awareness tools for modelling fire risk: Santa Ana Wildfire Threat Index | Wildfire Risk Reduction Modelling; Highest concentration of utility-owned weather network in the U.S. with 100+ cameras; Robust vegetation management program tracking 460K+ trees;
- Stakeholder collaboration with ~100 community partners ▪ Weather data shared with fire and weather agencies, academia and general public ▪ Community Resource Centers supporting most impacted customers.

Comment

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Rising sea levels

Primary potential financial impact

Increased capital expenditures

Company-specific description

Rising sea levels pose a threat to our energy infrastructure located in coastal areas. Through our California utilities SDG&E and SoCalGas and IEnova operations, we have a concentration of operations and infrastructure in coastal areas of California and Northern Baja California, Mexico. According to the San Diego Region Report issued by Scripps Institution of Oceanography in partnership with other regional partners as part of California's 4th climate change assessment, sea level may rise in the San Diego region significantly faster between now and 2050 than the roughly 0.6 feet of rise measured over the last century. In fact, the report says that by 2050, we could experience a rise of about 12 inches relative to sea level in 2000. Sea level rise will be compounded by other causes of flooding that we already experience- extreme high tides and storm surges- that are expected to cause the greatest impacts. Coastal flooding will lead to further beach and bluff erosion as well as runoff and drainage problems from intense storms. If these effects were to occur, extended service losses and operational challenges could result. The gas system could also experience some impacts from climate change, including in the form of increased repair/maintenance needs or localized disruptions. Widespread disruptions to natural gas infrastructure would not be expected due to limited project exposure to climate hazards, and low system sensitivity when hazards do occur. Other indirect impacts could be experienced by nearby communities if critical customers served by the substations, such as sewage pumping stations, hospitals, airports, and ports, are affected by outages. For other asset types, potential direct impacts are expected in the form of increased maintenance and repair costs.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Cost of response to risk

Description of response and explanation of cost calculation

To better understand this threat and be able to take the necessary actions, SDG&E and SoCalGas participated in a study with the California Energy Commission analyzing the exposure of utility assets to climate change-driven sea level rise. To develop action plans for the adaptation actions identified in the study, SDG&E and SoCalGas have focused on reporting the study results throughout the organization, utilizing workshops and one-on-one communication. Maps are being developed that will be integrated into the geographic information system highlighting at-risk infrastructure and locations that can be used to inform new construction standards. SDG&E is identifying monitoring procedures through a flexible adaptation pathways approach in which short- and long-term adaptation measures are identified and evaluated. For example, upon looking further into the results of the scenario analysis study, SDG&E determined that one substation faces the highest level of risk for impacts related to sea level rise. SDG&E has partnered with the Scripps Institution of Oceanography to install a sensor west of the substation that will monitor and generate wave models, which will allow for more detailed projections of coastal flooding and better understanding of potential sea level rise in the future. In addition, SDG&E is now engaged in a vulnerability assessment for its entire service territory and all its assets for a multitude of climate hazards on several different time scales going out at least 50 years from today. This will be

the most comprehensive assessment the utility has conducted to date and will serve as a guiding document for how the utility addresses climate change risks moving forward.

Comment

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market

Changing customer behavior

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

SDG&E provides bundled electric procurement service through various resources that are typically procured on a long-term basis. While SDG&E provides such procurement service for most of its customer load, customers do have the ability to receive procurement service from a load serving entity other than SDG&E, through programs such as direct access (DA) and community choice aggregation (CCA), a program that permits cities, counties, and other authorized entities to purchase and/or generate electricity for residents and businesses located within the boundaries of their jurisdiction. DA is currently limited by a cap based on gigawatt hours. Utility customers could also receive procurement through CCA, if the customer's local jurisdiction (city) offers such a program. Several local political jurisdictions, including the City and County of San Diego and other municipalities, are considering or implementing a CCA. When customers are served by another load serving entity, SDG&E no longer serves this departing load and the associated costs of the utility's procured resources could be borne by its remaining bundled procurement customers. State law requires that customers opting to have a CCA procure their electricity must absorb the cost of above-market electricity procurement commitments already made by SDG&E on their behalf. If adequate mechanisms are not implemented to

maintain compliance with state law, remaining bundled customers of SDG&E could potentially experience large increases in rates for commodity costs under commitments made on behalf of CCA customers prior to their departure, which may not be fully recoverable in rates by SDG&E.

Time horizon

Short-term

Likelihood

Very unlikely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Several local political jurisdictions, including the City and County of San Diego, are considering implementing or are implementing a CCA which could result in SDG&E providing procurement service for less than half of SDG&E's bundled load. If an effective cost allocation mechanism is not in place at the time of potentially significant reductions in SDG&E's served load, remaining bundled customers could bear a disproportionate share of above-market costs of long-term electricity procurement contracts entered into before the load departed, which may not be fully recoverable in rates by SDG&E.

Cost of response to risk

Description of response and explanation of cost calculation

In June 2017, the CPUC initiated a rulemaking proceeding to address the existing cost allocation mechanism and dismissed the joint application without prejudice, directing that the proposal be addressed in the rulemaking proceeding. In a 2018 decision, the CPUC modified the existing Power Charge Indifference Adjustment (PCIA) to address concerns that the existing cost allocation and recovery mechanism was not preventing cost shifts between different groups of customers. The PCIA Decision updated the methodology for establishing the PCIA which helped to alleviate cost shifts between different groups of customers and helped achieve the goal of ratepayer "indifference". The revised methodology went into effect in January 2019, with additional implementation issues to be addressed through workshops in 2019 and implemented in 2020. Costs to monitor regulation related to CCAs do not represent a significant additional cost above already established departments.

Comment

Identifier

Risk 7

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology

Substitution of existing products and services with lower emissions options

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Climate change policy and public sentiment has encouraged the development of low and zero carbon energy resources and related new technologies such as the push toward electrification and energy storage. Emerging technologies may not be directly compatible with some existing infrastructure; may require us to make expenditures; and/or could possibly result in the obsolescence of certain facilities or assets. Our future success will depend, in part, on our ability to anticipate and successfully adapt to political and technological change; to offer services that meet customer needs and industry standards; and be in a position to recover all, or a portion of our investments. For SDG&E and SoCalGas political headwinds and new technologies that could change the utilization of our natural gas and electric infrastructure include energy storage and distributed generation. Some California legislators and stakeholder, advocacy and activist groups have expressed a desire to further limit or eliminate reliance on natural gas as an energy source by advocating increased use of renewable energy and electrification in lieu of the use of natural gas. With utilities that deliver natural gas to customers, a substantial reduction or the elimination of natural gas as an energy source in California could have a material adverse effect on SDG&E's, SoCalGas' and Sempra Energy's cash flows, financial condition and results of operations. At Sempra LNG, technological advances in alternative fuels and other alternative energy sources could someday reduce worldwide demand for natural gas, impacting results for this business.

Time horizon

Long-term

Likelihood

About as likely as not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

An estimate of financial impact is difficult to determine with specificity, as it depends on the infrastructure in question.

Cost of response to risk

Description of response and explanation of cost calculation

In general, our operating companies' assets have long-term contracts in place which mitigates some of this risk. In addition, we continue to focus our strategy on assets that we believe will be critical to the transition to a lower-carbon future. Natural gas is one of the cleanest fossil fuels, is increasingly available and affordable and we believe will play a significant role in the transition to a lower-carbon future.

SoCalGas is investing in projects that utilize the natural gas system to facilitate a quicker, cleaner and more affordable transition to a carbon-free system. This includes renewable natural gas (RNG-natural gas from the decomposition of organic matter). In 2018, SoCalGas injected the first RNG into its pipelines and has a goal that by 2030 RNG will make up 20% of the natural gas delivered to its core customers. Capturing and utilizing RNG in the distribution system prevents the release of this methane into the atmosphere. SoCalGas is also collaborating on projects that use natural gas infrastructure to store renewable energy. Right now, California has an oversupply of renewable energy, particularly in the middle of the day. Rather than wasting that energy, it can be used to power electrolysis which creates hydrogen and oxygen from water. That hydrogen – a renewable and zero-emissions energy source – can be blended into the natural gas distribution system.

Comment

Identifier

Risk 8

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased likelihood and severity of wildfires

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

In July 2019, the Governor of California signed the Wildfire Legislation into law, which addresses certain important issues related to catastrophic wildfires in California and their impact on electric IOUs. The Wildfire Legislation did not change the doctrine of inverse condemnation, which imposes strict liability on a utility (meaning that the utility may be found liable regardless of fault) whose equipment is determined to be a cause of a fire. The Wildfire Legislation established a revised legal standard for the recovery of wildfire costs (Revised Prudent Manager Standard) and established the Wildfire Fund designed to provide liquidity to participating California electric IOUs to pay IOU wildfire-related claims in the event the governmental agency responsible for determining causation determines the applicable IOU's equipment caused the ignition of a wildfire, primary insurance coverage is exceeded and certain other conditions are satisfied. An Electric IOU is not required to repay the Wildfire Fund if deemed prudent under the Revised Prudent Manager Standard. But if the IOU is deemed imprudent, it is required to repay the Wildfire Fund, subject to a cap on liability for an IOU with a valid Safety Certification. We are unable to predict whether the Wildfire Legislation will be effectively implemented and its impact on SDG&E's ability to recover certain costs and expenses in cases where SDG&E's equipment is determined to be a cause of a fire.

We have experienced increased costs and difficulties in obtaining insurance coverage for wildfires that could arise. The insurance that has been obtained for wildfire liabilities may not be sufficient to cover all losses that we may incur, or may not be available in sufficient amounts to meet the primary insurance required by the Wildfire Legislation. Uninsured losses may not be recoverable in customer rates. Increases in the cost of insurance may be challenged when we seek cost recovery. As a result of the strict liability standard applied to wildfires, recent losses recorded by insurance companies, and the risk of an increase in the number and size of wildfires, insurance for wildfire liabilities may not be available or may be available only at rates that are prohibitively expensive. In addition, even if insurance for wildfire liabilities is available, it may not be available in such amounts as are necessary to cover potential losses.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial impact of increased insurance costs or difficulty of obtaining insurance is difficult to estimate.

Cost of response to risk

2,000,000,000

Description of response and explanation of cost calculation

In July 2019, the Governor of California signed the Wildfire Legislation into law, which addresses certain important issues related to catastrophic wildfires in the State of California and their impact on electric IOUs. The issues addressed include wildfire mitigation, cost recovery standards and requirements, the Wildfire Fund, a cap on liability, and the establishment of a wildfire safety board. The Wildfire Legislation did not change the doctrine of inverse condemnation, which imposes strict liability on a utility (meaning that the utility may be found liable regardless of fault) whose equipment is determined to be a cause of a fire. Rather, the Wildfire Legislation established a revised legal standard for the recovery of wildfire costs (Revised Prudent Manager Standard) and established the Wildfire Fund designed to provide liquidity to participating California electric IOUs to pay IOU wildfire-related claims. An Electric IOU is not required to repay the Wildfire Fund if deemed prudent under the Revised

Prudent Manager Standard. But if the IOU is deemed imprudent, it is required to repay the Wildfire Fund, subject to a cap on liability for an IOU with a valid Safety Certification. External affairs staff at Sempra Energy and SDG&E continue to work with regulators on these issues. SDG&E's wildfire mitigation plan outlines the ongoing practices and additional improvements the company will undertake beyond the more than $2.0 billion in investments in wildfire mitigation that it has made since 2007 (which amount does not attempt to quantify future costs.) . One specific example of an action SDG&E has taken to reduce the risk of wildfires, is public safety power shutoff (PSPS) events as a last resort measure. When forecasts indicate extreme weather, SDG&E begins extensive tracking based on a variety of sources, including SDG&E's own weather stations to determine whether a power shutoff is warranted to try to protect public safety. We proactively communicate with impacted customers about the potential for a shutoff, coordinate with public agencies and open community resource centers as needed to support customers without electricity. Power is restored only after conditions are safe as verified by field crews that inspect all de-energized lines. The 2.0 billion represents investments by SDG&E in wildfire mitigation since 2007 and does not attempt to quantify future costs.

Comment

Identifier

Risk 9

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased likelihood and severity of wildfires

Primary potential financial impact

Decreased access to capital

Company-specific description

Credit rating agencies routinely evaluate Sempra Energy and its California utilities on a number of factors, including the increased risk of wildfires in California, perceived supportiveness of the regulatory environment affecting utility operations, including delays and difficulties in

obtaining recovery, or the denial of recovery, for wildfire-related costs, ability to generate cash flows, level of indebtedness, overall financial strength, including credit metrics, diversification beyond the regulated utility business and the status of certain capital projects, as well as other factors beyond our control, such as the state of the economy and our industry. Downgrades and factors causing downgrades of one or both of our California utilities can have a material impact on Sempra Energy's credit ratings. Downgrades, as well as the factors causing such downgrades, of Sempra Energy's credit ratings could imply diminished credit support available to our subsidiaries. Accordingly, downgrades of Sempra Energy's credit ratings can also have a material impact on the credit ratings of our subsidiaries. While the current Moody's Investors Service, Inc., S&P Global Ratings and Fitch Ratings (collectively, the Rating Agencies) issuer credit ratings for Sempra Energy, SDG&E and SoCalGas are investment grade, there is no assurance that these credit ratings will not be downgraded. For SDG&E, the Rating Agencies have noted that, among other things, if the CPUC does not effectively implement the more supportive prudency standard associated with the Wildfire Legislation, this could lead to negative ratings actions. For Sempra Energy and SDG&E, the Rating Agencies have noted that, among other things, if there are catastrophic wildfires caused by SDG&E or catastrophic wildfires caused by any California electric IOUs that participate in the Wildfire Fund the Wildfire Fund could be exhausted considerably earlier than expected, leading to negative ratings actions. In September 2020, S&P revised its outlook on SDG&E from stable to negative, citing unprecedented wildfire activity through California at just the beginning of the 2020 wildfire season, which, in S&P's view, increases the likelihood that a California investor-owned electric utility could potentially be the cause of a catastrophic wildfire. Moody's has also taken ratings action this year, downgrading the ratings of Sempra Energy and SoCalGas, however, these ratings actions were unrelated to wildfires.

Time horizon

Short-term

Likelihood

Unlikely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

A downgrade of Sempra Energy's or either of its California utilities' credit ratings may materially and adversely affect the market prices of Sempra Energy's equity and debt securities, the interest rates at which borrowings are made and debt securities and commercial paper are issued, and the various fees on credit facilities. This could make it significantly more costly for Sempra Energy, SDG&E, SoCalGas and Sempra Energy's other subsidiaries to borrow money, to issue debt securities and to raise certain other types of capital and/or complete additional financings. Such negative credit ratings actions, as well as the reasons for such actions could materially and adversely affect our cash flows, results of operations and financial condition and the market price of, and our ability to pay the principal of and interest on, our debt securities.

Cost of response to risk

Description of response and explanation of cost calculation

The cost of the response to this risk cannot be estimated due to the various factors considered by the Rating Agencies in making credit rating decisions.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

Worldwide, there continues to be increasing demand for cleaner energy. And a number of countries are turning to natural gas to reduce the harmful emissions associated with coal. Natural gas is one of the cleanest fossil fuels, is increasingly available and affordable and we believe will play a significant role in the transition to a lower-carbon future. Natural gas is projected to grow the most of any energy type through 2040 as a result of environmental considerations; shifting generation resources with coal and nuclear retirements; and supply security issues (Europe's reliance on imports of natural gas continues to rise). With these trends, the demand for LNG is also expected to grow. Sempra LNG also has a substantial track record of developing North American LNG infrastructure, with more than $12 billion developed in the last 15 years. This includes the development and operation of two regasification sites in Mexico and Louisiana. In addition, Sempra LNG has developed more than 12 million tonnes per annum (mtpa) of LNG export capacity at its fully operational natural gas liquefaction facility Cameron LNG. We

believe this expertise and experience in the industry position Sempra Energy to take advantage of this opportunity to help meet demand for natural gas worldwide.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

400,000,000

Potential financial impact figure – maximum (currency)

450,000,000

Explanation of financial impact figure

The Cameron LNG liquefaction project alone, which has been developed to help meet worldwide demand for natural gas, is expected to generate $400-$450 million of annual earnings to Sempra in its first 10 years.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

To take advantage of these market opportunities, Sempra Energy continues to execute on projects to expand access to natural gas and other enabling infrastructure. Sempra Energy's goal is to develop 45 mtpa of LNG export capacity and deliver it to the largest world markets through five strategically located projects in Louisiana, Texas and Mexico, which offer flexibility and scalability to meet current and future global LNG demand. One example of this effort is Sempra Energy's joint venture, Cameron LNG Holdings, LLC (Cameron LNG). In 2009, Sempra LNG completed the Cameron LNG regasification terminal. With changing market trends and an abundance of supply of natural gas in the U.S. Sempra LNG worked towards conversion of the facility to focus on liquefaction, eventually forming a joint venture to lead this effort. During 2018, Cameron LNG initiated the commissioning process for the support facilities and the 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 LNG. Production of LNG commenced in May 2019 and the third and final train of the facility commenced commercial operations under Cameron LNG's tolling agreements in August 2020.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Other, please specify

Financial incentives awarded by the public utility commission related to energy efficiency program performance

Company-specific description

Energy efficiency continues to be the most cost-effective way to reduce greenhouse gases and other forms of air pollution. SDG&E and SoCalGas have been promoting energy efficiency to our customers for over 30 years. As a result, per capita electricity usage has remained close to flat over this time period, while in the rest of the U.S. it has increased by about 50 percent. Our electric and gas utilities in California continue to deliver energy efficiency programs to customers, designed to help reduce energy use. The CPUC requires SDG&E and SoCalGas to achieve energy efficiency targets. Programs offered by SDG&E and SoCalGas include rebates for energy-efficient appliances, a summer saver demand response program for air conditioners, and energy audits. Since 1990, energy efficiency efforts at SDG&E and SoCalGas have saved more than 7.4 million megawatt hours of energy, and approximately 755 million therms of natural gas. The CPUC provides regulatory and financial incentives to investor-owned utilities, such as SDG&E and SoCalGas based on the effectiveness of energy efficiency programs.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

12,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

SDG&E and SoCalGas received $12 million in energy efficiency awards from 2016-2018. In March 2017, the CPUC approved the settlement agreements reached with the Cal PA and TURN regarding the incentive awards to the utilities for program years 2006 through 2008, wherein the parties agreed that SDG&E and SoCalGas would offset up to a total of approximately $4 million each against future incentive awards over a three-year period beginning in 2017. If the total incentive awards ultimately authorized for 2017 through 2019 are less than approximately $4 million for either utility, the applicable utility is released from paying any remaining unapplied amount.

Cost to realize opportunity

222,500,000

Strategy to realize opportunity and explanation of cost calculation

SDG&E and SoCalGas continue to focus their efforts on delivering energy efficiency benefits for customers through a wide variety of programs, including easy access to their accounts and energy management tools; SDG&E's Energy Marketplace, which offers customers an easy way to review and purchase energy efficiency-related products; and demand side management programs with residential and commercial customers. As an example, SDG&E business customers can earn rebates on improvements with Energy Efficiency Business Rebates. Small to mid-size business customers may be able to receive a no-cost audit and installation of many energy-efficient products at reduced or no-cost through the Business Energy Solutions Program. With Energy Efficiency Business Incentives, customers benefit from cash incentives for retrofitting or installing new equipment. Eligible customers can get 0% financing for qualifying energy-efficient improvements to their business with On-Bill Financing.

In 2019, SDG&E realized electricity savings of approximately 218,000 MWh and reduced peak demand by 45 MW, enough to power 45,435 homes for a year. Through SDG&E and SoCalGas, energy efficiency efforts saved 55.6 million therms of natural gas, enough to serve more than 105,250 homes for a year. The cost to realize the opportunity is based on the CPUC-approved 2019 energy efficiency program budget for SDG&E and SoCalGas of about $222.5 million, $118 million for gas-related programs and $104 million for electric-related programs. These costs are recovered through a public purpose charge in utility rates.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Due to the focus on emissions reductions from the transportation sector, we project steady growth in low-emission and zero-emission vehicles, providing our utilities, in particular SDG&E, with the opportunity to build the charging infrastructure and fueling stations that will be needed for electric vehicles and earn a rate of return on these projects. In the State of California, the Governor's goal is to put 5 million electric vehicles on the road by 2030, including 500,000 in SDG&E's service territory. SDG&E as the electricity provider has the opportunity to provide charging infrastructure for these vehicles, in addition to providing customers with new rate options for charging their electric vehicles during off peak hours. San Diego has a high market share in the U.S. for electric vehicles and one electric vehicle is equivalent demand of one household. San Diego's share of the Governor's goal is more than a 15-fold increase from current levels and would be equivalent to about 40 percent of SDG&E's system peak. These targets drive significant investment opportunity in SDG&E's service territory.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

7.55

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

When determining the revenue requirements for our CA utilities, the CPUC allows for the recovery of reasonable operating and capital costs in addition to a fair rate of return on infrastructure investments. The 7.55% represents the current CPUC-authorized rate of return for SDG&E (the actual rate of return may vary).

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

Over the past several years, SDG&E has been working to implement projects that will increase the number of electric vehicles in its service territory. One example is the Power Your Drive program. After receiving approval in 2016, SDG&E has installed more than 3,000 electric vehicle charging stations at over 250 locations to support the 50,000 electric vehicles in its service territory. The program, features a special rate that encourages EV drivers to charge their cars when electricity supply, including renewable energy, is plentiful and energy prices are low, reducing the impact on SDG&E's grid. Other projects that are planned include:

- Port and airport electrification: 30–40 installations will support electric medium-duty/heavy-duty vehicles and forklifts for the Port of San Diego.
- Fleet delivery trucks: Charging stations will be installed for approximately 90 fleet delivery vehicles at multiple locations.
- Highways (Park-n-Ride lots): Various charging stations, including DC fast chargers — one of the fastest chargers available — will be installed at four public Caltrans Park-and-Ride lots located along highways.
- Green shuttles: SDG&E is installing charging stations at five locations to support shuttles running on fixed routes.

- Dealerships: SDG&E provides car dealerships with educational programs and financial incentives to help advance and grow the sales of EVs in the region.

Comment

Identifier

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development of new products or services through R&D and innovation

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

With requirements for increasing amounts of renewable energy delivered to customers (in California currently 60% is required by 2030 and 100 percent by 2045), SDG&E has worked to modernize its system and create a smart grid designed to improve the reliability, capacity and capability of the electricity network; provide a safe, cost-effective and environmentally-sustainable energy supply; enable faster response and resolution to outages; and create a resilient, open and dynamic information network. In addition, SDG&E has been focused on energy storage projects, which are also a key component of a cleaner, more reliable power grid in the San Diego region.

When determining the revenue requirements for SDG&E and SoCalGas, the CPUC allows for the recovery of reasonable operating and capital

costs in addition to a fair rate of return on infrastructure investments. Therefore, these infrastructure projects could be financially beneficial for SDG&E.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

7.55

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

When determining the revenue requirements for SDG&E and SoCalGas, the CPUC allows for the recovery of reasonable operating and capital costs in addition to a fair rate of return on infrastructure investments. The 7.55% represents the current CPUC-authorized rate of return for SDG&E (the actual rate of return may vary).

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

The foundation of the smart grid is the digital smart meter, which allows two-way communication between the utility and customer. SDG&E has completed installation of smart meters in its service territory and with the input of more than 25 stakeholder groups, filed its smart grid deployment plan, outlining how San Diego's smart grid will develop over the next decade. It has also developed programs and services customers will be able to take advantage of as the move to real-time pricing occurs. SoCalGas has also completed its plan to upgrade nearly 6 million natural gas meters in its service territory. SDG&E owns and operates the largest battery storage system in California, capable of storing 120 megawatt hours of energy – another 260-megawatt-hour system is slated to come online by 2021.

Comment

Identifier

Opp5

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

Worldwide, there continues to be increasing demand for cleaner energy. In areas where Sempra Energy companies operate, including Mexico, governments and consumers are pushing for additional amounts of renewable energy as part of the power generation portfolio and delivered energy. In Mexico, where our IEnova subsidiary operates, the general climate change law (LGCC) details the commitment to reduce GHG emissions 30% by 2020 and 50% by 2050. Therefore, Sempra Energy, through IEnova, may have the opportunity to expand revenues through

projects that enable delivery of renewable energy to customers in Mexico. With existing wind and solar facilities, IEnova may be able to leverage this experience to continue to deliver renewable energy projects to meet demand.

Time horizon

Short-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

As an example of our work in Mexico, IEnova has focused on development of wind and solar facilities. During 2019 the 110-megawatt Pima Solar, 41-megawatt Rumorosa Solar and 100-megawatt Tepezala solar began operations. The 125-megawatt Don Diego facility is currently

under construction. In parallel, IEnova has continued to work on a 108-megawatt expansion of the Energía Sierra Juárez wind farm. With these facilities IEnova could supply cleaner energy at competitive prices to large customers in Mexico. In total 658 megawatts of wind and solar power are operational and an additional 383 megawatts of wind and solar power are under development (figures include joint ventures with partners).

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

C3.1b

(C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
RCP 4.5 RCP 8.5	The following references scenario analysis completed for SDG&E and SoCalGas as part of California's 4th Climate Change Assessment, available at www.climateassessment.ca.gov. While several scenarios were modelled, the analysis focused on mid-century exposure, in line with energy infrastructure planning horizons and because energy systems are likely to change significantly

	by 2100. The methodology for this project included: A literature review to understand coastal hazards in the region; sector vulnerabilities and concurrent efforts in the region; an exposure analysis, which utilized the latest sea level rise (SLR) information, to understand where SLR impacts might intersect with SDG&E and SoCalGas infrastructure; an assessment of potential direct impacts, such as how types of infrastructure could be damaged and locations of impacts; quantitative modelling and qualitative assessment of indirect impacts, specifically due to disruptions at potentially exposed substations, including estimating the value of the lost service to customers, and community-wide impacts from service disruptions; and development of potential "flexible adaptation pathways" and priority adaptation measures. The RCP 8.5 50th, 95th, and 99.9th percentile projections were used for planning horizons before 2060, and RCP 4.5 and 8.5 (50th, 95th, and 99.9th percentile) beyond 2060. In absence of coastal hazard models which directly align, the research team evaluated several models and recommended specific scenarios and recurrence intervals of wave and water levels to match the guidance as closely as possible. • 0.0 meter SLR (annual tidal flooding and 100-year coastal wave flooding) – baseline • 0.5 meter SLR (annual tidal flooding and 100-year coastal wave flooding) – selected to represent mid-century based on Franco et al. 2016 guidance • 2.0 meter SLR (annual tidal flooding and 100-year coastal wave flooding) – selected to represent end-of-century based on Franco et al. 2016 guidance. On the electric side, it was determined that a significant number of assets and services are exposed to coastal hazards related to climate change. Areas of concern for the utility by mid-century are in low-lying areas around bays and estuaries and on the coastline adjacent to erodible cliffs and dunes. The most significant direct impacts could occur from damage to substations near two bays in San Diego. If inundated with sufficient water to damage equipment, these substations could go out of service until flooding recedes and repairs can be made, potentially disrupting service to thousands of customers. Other direct impacts include increased maintenance or repair costs. Natural gas infrastructure is likely to experience increased repair/maintenance needs or localized disruptions. The cumulative impacts of increased costs could not be quantified in this study but could be significant given the number of assets potentially exposed. Widespread disruptions to natural gas infrastructure are not expected due to limited projected exposure to climate hazards, and low system-sensitivity when exposure occurs. The results were initially reported to key engineers and project managers at both SDG&E and SoCalGas through workshops and 1-1 communication. Analysis like this allows for our companies to plan for future capital projects and determine work necessary to improve our infrastructure's ability to withstand SLR that occurs. For example, there are plans for maps that will be integrated into the SDG&E geographic information system to highlight at-risk infrastructure and inform new construction. We expect this analysis to influence our strategy as we build new infrastructure and maintain existing facilities. Further research indicates that one substation faces the

	most risk. SDG&E has partnered with the Scripps Institution of Oceanography to install a censor west of the substation that will monitor and generate wave models, allowing for more detailed projections of coastal flooding.

C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	While the core products and services (transmission and distribution of gas and electricity) that Sempra Energy businesses offer have not changed, climate-related risks and opportunities have had a high impact on our business strategy and investment decisions in types of electric generating facilities and natural gas infrastructure. For example, increasing global interest in natural gas as a lower carbon emitting fuel has led Sempra Energy to make investments in natural gas infrastructure. This includes the decision to pursue opportunities in LNG liquefaction facilities such as the Cameron LNG liquefaction facility and other natural gas pipelines and infrastructure in our IEnova business. We have also made decisions to pursue renewable electricity generation in Mexico in response to the desire for cleaner sources of energy. As another example, at SoCalGas we have a set a goal that by 2030 20 percent of the natural gas that we deliver to core customers will be from renewable natural gas that is released from the decomposition of organic matter. The utility is working to facilitate the development of RNG capture in California, which could result in a significant reduction in California's greenhouse gas emissions.
Supply chain and/or value chain	Yes	Climate risks and opportunities have influenced our strategy related to supply chain in several different ways. First, with increasing renewable portfolio standards related to electricity, particularly in the State of California, we have adjusted our procurement strategy at SDG&E to focus on renewable sources of energy in an effort to meet state requirements. On the natural gas side, we have set a goal that by 2030 20 percent of the natural gas that we deliver to SoCalGas core customers will be from renewable natural gas that is released from the decomposition of organic matter. This is therefore altering the

		supply chain and we are engaging in the RNG capture market. In addition, we are also looking at other areas of our supply chain, and have instituted sustainability scoring for RFPs at SDG&E and SoCalGas so that sustainability-related metrics are considered in the selection of suppliers and that we monitor sustainability performance of existing suppliers.
Investment in R&D	Yes	A shift towards cleaner sources of energy, renewable portfolio standards, increasing amounts of distributed energy and international climate goals present both opportunities and risks for our businesses and have a high impact on R&D expenditures. The clean energy transition and reaching net zero emissions as an industry will require significant innovation and new technologies to be achievable. Our businesses are investing in R&D opportunities designed to facilitate this transition and allow for upgrades to our current infrastructure to provide reliable delivery of energy, in addition to the development of new technologies designed to reduce the emissions impacts of the electricity and natural gas that we deliver. We have created subsidiaries, invested in companies and technologies, are engaged in R&D collaborations with external partners and licensed technology, all in an effort to take advantage of climate-driven opportunities and address risks. For example, SoCalGas leverages the U.S. Department of Energy's match-funded collaborative research and development agreement program to advance high-impact technologies being pursued at the national level that have strong synergy with California priorities. Two examples are: a technology to catalytically convert methane into hydrogen; and, high-value carbon being developed to produce CO2-free hydrogen.
Operations	Yes	With operations that can be impacted by the physical risks of climate change, our utilities have worked to update infrastructure and operations to mitigate these risks. Climate-related scenario analysis studies, as described in our response to 3.1b provide a pathway and framework to address areas of operations particularly at risk. One of the most significant decisions made related to operations is at SDG&E, where the decision was made to invest in a wildfire mitigation program that resulted in more than $2.0 billion since 2007 in wildfire mitigation investments (which does not attempt to quantify future

		costs). SDG&E has been highly impacted in terms of the risk related to increasing drought conditions and the potential for wildfires. Wildfires can put our infrastructure and customers at risk, and if overhead power lines are implicated in wildfires, as was the case in 2007, it represents further financial risk. This risk has influenced the way that SDG&E operates, to mitigate this risk to the extent possible. This includes advanced situational awareness tools; aggressive infrastructure hardening and vegetation management; the most extensive utility-owned weather network in the nation; dedicated firefighting resources; and leading practices in construction, maintenance and operations, including proactive de-energization for safety.

C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Capital expenditures Capital allocation Acquisitions and divestments	Capital expenditures have been significantly impacted by climate-related risks and opportunities. Sempra Energy has been focused on a low-carbon approach, developing low-carbon infrastructure and reducing emissions across our portfolio for more than a decade. This has involved capital expenditures in infrastructure that enables the clean energy transition. For example, our utility SDG&E is embarking on its largest 5-year capital expenditure plan in the company's history, with California's aggressive GHG and RPS targets driving future investments, including grid modernization required to manage increasingly complex power flows, integrate renewables and energy storage. As of our March 24, 2020 Investor Day, over eighty percent of SDG&E's current 5-year capital plan (2020-2024) is allocated to efforts that improve safety and reliability. Part of this is to help mitigate the risk of wildfires driven by a changing climate. Some examples include capital expenditures to harden the electric distribution system and improve weather monitoring systems.

C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 2

Year target was set

2019

Target coverage

Business activity

Scope(s) (or Scope 3 category)

Scope 1

Base year

2015

Covered emissions in base year (metric tons CO2e)

1,395,683

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

23.2

Target year

2030

Targeted reduction from base year (%)

40

Covered emissions in target year (metric tons CO2e) [auto-calculated]

837,409.8

Covered emissions in reporting year (metric tons CO2e)

1,137,277

% of target achieved [auto-calculated]

46.2866567838

Target status in reporting year

New

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

Please explain (including target coverage)

Sempra Energy has set a goal to reduce fugitive methane emissions from natural gas transmission and distribution systems 40% from a 2015 baseline* by 2030. The target includes the following businesses : SoCalGas and SDG&E and IEnova (Ecogas utility and other IEnova-owned

natural gas pipelines).

The goal is expected to be achieved primarily through improving the efficiency of the transmission system which results in the reduction of fugitive methane emissions; and by improving fugitive emission review, detection, and repairing activities as part of the asset maintenance plan. A reduction of 40% by 2030 would be the equivalent of an annualized reduction of 50,750 metric tons of CO2e. In 2019, we were able to reduce our fugitive emissions by 258,406 metric tons of CO2e, or an 18% reduction over our baseline.
*The baseline year used by SDG&E and SoCalGas is 2015, while IEnova selected 2019 as the baseline year (2019 emissions are higher).

Sempra Energy's Corporate Sustainability team along with the operating companies Sustainability Steering committees, are engaged in an effort to establish a climate and energy transition goal and are exploring the feasibility of setting a science- based target.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to reduce methane emissions
Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2018

Target coverage

Business activity

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Low-carbon vehicles

Other, please specify

Number of zero-emissions vehicles in SDG&E service territory: Facilitate electric vehicle growth to meet the Governor’s goal of 500,000 zero emissions vehicles in its service territory by 2030.

Target denominator (intensity targets only)

Base year

2018

Figure or percentage in base year

Target year

2030

Figure or percentage in target year

500,000

Figure or percentage in reporting year

53,687

% of target achieved [auto-calculated]

Target status in reporting year

Underway

Is this target part of an emissions target?

In January of 2018, the state of California signed Executive Order B-48-18 in an effort to reduce the state's overall greenhouse gas emissions in the transportation sector. The purpose of the Executive Order is to increase the supply of zero-emission vehicles and charging and refueling stations in California. The Executive Order established a series of milestones toward a long-term target of 1.5 million zero-emissions vehicles on California's roadways by 2025 and 5 million by 2030. In SDG&E's service territory, this target represents 500,000 zero emissions vehicles by 2030. Transportation accounts for 55% of all the greenhouse gas emissions (GHGs) in the City of San Diego, so this effort will reduce a significant portion of the emissions in SDG&E's service territory. In September of 2020 California's governor increased this ambition and signed an Executive Order banning the sale of new gas cars and trucks by 2035.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Part of California governor's goal of 500,000 electric vehicles in San Diego region by 2030. As of December 2019, SDG&E has helped increase the number of light duty zero emissions vehicles in it's service territory to approximately 53,687 and has installed over 3,000 electric vehicle charging stations.

Target reference number

Oth 2

Year target was set

2016

Target coverage

Business division

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Other, please specify

Other, please specify

Energy storage capacity

Target denominator (intensity targets only)

Base year

2016

Figure or percentage in base year

0

Target year

2021

Figure or percentage in target year

165

Figure or percentage in reporting year

151

% of target achieved [auto-calculated]

91.5151515152

Target status in reporting year

Underway

Is this target part of an emissions target?

The target to develop or interconnect at least 165 MW of energy storage on the system by 2021 (SDG&E) is part of California's overall efforts to reduce greenhouse gas emissions in the state and achieve 100% renewable or zero-carbon electricity by 2045.

Is this target part of an overarching initiative?

Other, please specify

This is part of California's overall efforts to reduce greenhouse gas emissions in the state and achieve 100% renewable or zero-carbon electricity by 2045.

Please explain (including target coverage)

This target covers SDG&E's operations as it works to achieve the state's mandate of 100% renewable or zero-carbon electricity delivered by 2045. Grid modernization is required to manage increasingly complex power flows to integrate renewable energy, and energy storage is essential for this decarbonization strategy. The development and interconnection of at least 165 megawatts of energy storage on SDG&E system by 2021 is one of the efforts that will help reduce greenhouse gas emissions in the state of California.

Target reference number

Oth 3

Year target was set

Target coverage

Business division

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Low-carbon vehicles

Percentage of low-carbon vehicles in company fleet

Target denominator (intensity targets only)

Base year

Figure or percentage in base year

0

Target year

2020

Figure or percentage in target year

51

Figure or percentage in reporting year

28

% of target achieved [auto-calculated]

54.9019607843

Target status in reporting year

Underway

Is this target part of an emissions target?

This target is not part of an emissions target, it is an internal goal to have a majority alternative fuel fleet by 2020. As of 2019, our fleet consisted of 1,153 alternative fuel vehicles (NGV), of a total of 4,113 vehicles. By 2020, 51 percent of fleet will run on alternative fuels (SoCalGas). As of the end of 2019, 28 percent of fleet vehicles were alternative fuel vehicles.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

The target coverage is specifically for SoCalGas. This is an internal goal to have a majority alternative fuel fleet by 2020. As of 2019, SoCalGas' fleet consisted of 1,153 alternative fuel vehicles (NGV), of a total of 4,113 vehicles.

Target reference number

Oth 4

Year target was set

Target coverage

Business division

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Low-carbon vehicles

Percentage of low-carbon vehicles in company fleet

Target denominator (intensity targets only)

Base year

2016

Figure or percentage in base year

0

Target year

2021

Figure or percentage in target year

22

Figure or percentage in reporting year

15.7

% of target achieved [auto-calculated]

71.3636363636

Target status in reporting year

Revised

Is this target part of an emissions target?

This target is not part of an emissions target, it is an internal goal to have 22% alternative fuel fleet by 2021.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

The target coverage is specifically for SDG&E. By 2021*, 22 percent of SDG&E's fleet is expected to run on alternative fuels. As of 2019, SDG&E's fleet consisted of 248 alternative fuel vehicles, of a total of 1,613 vehicles.

*The 22% AFV goal target year was originally 2020, but the target year has been revised has been revised to 2021.

Target reference number

Oth 5

Year target was set

2019

Target coverage

Business division

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Fossil fuel reduction target

Percentage of fossil fuels in the fuel mix

Target denominator (intensity targets only)

Base year

2020

Figure or percentage in base year

Target year

2030

Figure or percentage in target year

20

Figure or percentage in reporting year

3,000,000

% of target achieved [auto-calculated]

Target status in reporting year

Underway

Is this target part of an emissions target?

SoCalGas has set a voluntary goal of 20% of core deliveries to include RNG by 2030 and continues to advance Green Hydrogen, supporting California's ambitious environmental goals. SoCalGas has released a broad, inclusive and integrated plan, including a commitment to replace

five percent of its natural gas supply with RNG by 2022. More details can be read here: https://www.socalgas.com/sites/default/files/1443742359071/scg-executive-summary-white-paper.pdf.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

The target coverage is specifically for SoCalGas. The figure or percentage in reporting year of 3 million represents the total therms of RNG purchased and delivered by SoCalGas in 2019*. SoCalGas is the largest gas distribution utility in the United States. SoCalGas delivers affordable, reliable, clean and increasingly renewable gas service to 21.8 million customers across 24,000 square miles of Central and Southern California, where more than 90 percent of residents use natural gas for heating, hot water, cooking, drying clothes or other uses. Gas delivered through the company's pipelines also plays a key role in providing electricity to Californians— about 45 percent of electric power generated in the state comes from gas-fired power plants.

SoCalGas' vision is to be the cleanest gas utility in North America, delivering affordable and increasingly renewable energy to its customers. In support of that vision, SoCalGas is committed to replacing 20 percent of its traditional natural gas supply with RNG by 2030. By developing renewable gas from our state's abundant organic waste streams, we can help to meet our climate goals sooner, while diversifying our carbon-free energy sources, improving energy resilience and reliability, while also creating additional renewable fuel and jobs for our communities. SoCalGas is also committed to investing in its gas delivery infrastructure while keeping bills affordable for our customers.

*We plan to report this as a percentage of RNG delivered in our 2020 sustainability report.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	1	
Implemented*	27	4,222,261
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Fugitive emissions reductions

Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)

258,406

Scope(s)

Scope 1

Voluntary/Mandatory

Mandatory

Annual monetary savings (unit currency – as specified in C0.4)

408,726

Investment required (unit currency – as specified in C0.4)

59,500,000

Payback period

11-15 years

Estimated lifetime of the initiative

6-10 years

Comment

This initiative is mandatory for our California utilities and for our Mexico gas distribution and transmission operations. SDG&E and SoCalGas have 25+ emissions reductions activities underway to reduce fugitive emissions from natural gas infrastructure. This includes actively monitoring high-pressure pipelines using advanced sensors; capturing natural gas that would otherwise be released into the atmosphere during some pipeline testing; and using the latest technologies including drones and dedicated sensors to conduct leakage surveys. The aggregated emissions reductions from these efforts in 2019 were 258,406 metric tons CO2e. The estimated annual monetary savings were calculated using the emissions reduction multiplied by the cost per MCF of natural gas. The investment required represents the 2019 actual capital and O&M spend.

Initiative category & Initiative type

Other, please specify

Other, please specify

Energy efficiency programs for customers

Estimated annual CO2e savings (metric tonnes CO2e)

434,000

Scope(s)

Scope 3

Voluntary/Mandatory

Mandatory

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

222,500,000

Payback period

1-3 years

Estimated lifetime of the initiative

Ongoing

Comment

Sempra Energy's California utilities help customers reduce their energy use and the resulting impact on the environment through energy efficiency and energy conservation programs. Scope: This represents a reduction in our scope 3 emissions from use of electricity and natural gas sold to customers, and ultimately scope 1 emissions due to a reduction in demand from our utility customers. Since 1990, these programs have helped customers save approximately 753 million therms of natural gas and 7.4 million MWh of electricity. In 2019 alone, this plan resulted in cumulative electricity savings of 218,000 MWh, and reduced peak demand by 45 MW. Natural gas savings for both utilities were more than 53 million therms. The energy-saving programs reduced CO2 by an estimated 434,000 metric tons. In California, utilities are typically rewarded through financial incentives for meeting energy efficiency goals. The budget for energy efficiency programs at SoCalGas and SDG&E in 2019 was approximately $223 million. The payback period and estimated lifetime of the initiative will vary depending on the specific program.

Initiative category & Initiative type

Low-carbon energy generation

Other, please specify

Solar PV and Wind

Estimated annual CO2e savings (metric tonnes CO2e)

852,701

Scope(s)

Scope 1
Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

233,000,000

Investment required (unit currency – as specified in C0.4)

149,000,000

Payback period

1-3 years

Estimated lifetime of the initiative

>30 years

Comment

IEnova has focused on expanding revenues through projects that deliver renewable energy by developing wind and solar facilities. During 2019, three solar facilities, Pima, Tepezalá and Rumorosa, began operations (in addition to the two wind facilities, Energia Sierra Juarez and Ventika, already in operation). In 2019, these facilities produced 1.45 million MWh of emissions-free electricity. Compared to natural gas-fired generation, this avoided 852,701 metric tons of CO2e. Estimated annual positive implications of this opportunity are the expected revenues from these projects, while the costs associated with developing this opportunity result from the average annual expenses needed to build and operate them.

Two additional solar facilities, Don Diego and Border, are currently under construction. In total, 407 MW of wind power and 251 MW of solar power are operational and an additional 275 MW of solar power are under development.

Initiative category & Initiative type

Other, please specify

Other, please specify

Low-carbon energy purchase

Estimated annual CO2e savings (metric tonnes CO2e)

1,842,148

Scope(s)

Scope 3

Voluntary/Mandatory

Mandatory

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

Payback period

No payback

Estimated lifetime of the initiative

21-30 years

Comment

Under California law, investor owned utilities are required to provide 60 percent of customers' electricity from renewable or zero carbon sources by 2030 and 100 percent by 2045. In 2019, about 45 percent of SDG&E's power supply came from eligible renewable sources. The 1.8 million metric tons represents avoided emissions for SDG&E purchases of renewable energy in 2019 as compared to electricity generated from SDG&E's natural gas-fired power plants.

Initiative category & Initiative type

Transportation

Other, please specify

Clean transportation - electric and natural gas vehicles

Estimated annual CO2e savings (metric tonnes CO2e)

173,284

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

200,000,000

Payback period

Estimated lifetime of the initiative

Comment

In 2019, SoCalGas and SDG&E delivered 178 million therms to customers operating NGVs and NGV refueling stations, equivalent to 142 million gallons of gasoline, which reduced CO2e emissions by approximately 632,247 tons per year. Through the Power your Drive program, SDG&E is installing more than 3,000 electric vehicle charging stations in support of the California governor's goal of 500,000 zero emissions vehicles in its service territory by 2030, achieving emissions savings of 173,284 metric tons in 2019. As one example for investment required, SDG&E has filed with the CPUC for a potential incremental investment of $200-250 million for EV charging infrastructure for ~3,000 medium and heavy-duty vehicles.

Initiative category & Initiative type

Other, please specify

Other, please specify

Vented emissions reductions; natural gas capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)

37,189

Scope(s)

Scope 1

Voluntary/Mandatory

Mandatory

Annual monetary savings (unit currency – as specified in C0.4)

629,608

Investment required (unit currency – as specified in C0.4)

124,033,573

Payback period

>25 years

Estimated lifetime of the initiative

>30 years

Comment

Also includes reductions of vented emissions. Our utility SoCalGas has been a member of the US EPA Natural Gas STAR program since 1994. Each year since that time, SoCalGas has networked with other program members to identify partner-reported opportunities which have become best management practices. SoCalGas annually has reported a reduction in fugitive emissions (scope 1) by such practices as reclaiming rather than blowing to atmosphere the natural gas remaining in a pipeline preceding pipeline maintenance operations. In 2019, SoCalGas reported a reduction of 29,475 metric tons CO2e in potential vented emissions through activities including pressure adjustments, and altered emergency shutdown practices. SDG&E and SoCalGas have also signed on to the U.S. EPA's methane challenge program. In addition to these efforts, SoCalGas has also been implementing other technology that is reducing fugitive emissions. This includes a system that captures natural gas associated with pipeline testing and replacement (instead of venting it to the atmosphere); sensors that read methane levels every five minutes near high pressure pipelines to improve early leak detection; and infrared thermal-imaging cameras that can detect even the tiniest leak. Payback period and estimated lifetime of the initiative vary, depending on the specific type of work completed.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	Most states have a renewable energy requirement or goal and these requirements, renewables are a critical part of the domestic energy resource mix. Compliance with renewable portfolio standards in California and Mexico has driven purchases and development of renewable power.
Dedicated budget for energy efficiency	At SDG&E and SoCalGas there is a dedicated budget for energy efficiency programs. Approximately $223 million was allocated to implement energy efficiency programs for customers in 2019.
Dedicated budget for low-carbon product R&D	At SDG&E and SoCalGas there is a dedicated budget for work on developing innovative technology: smart grid, electric vehicles, solar technology demonstration projects, and biogas research and development projects. At SDG&E this includes a projected $100-$300 million in expenditures related to smart grid and electric vehicles from 2016-2020. At

	SoCalGas this includes $30-$40 million for pilot projects to demonstrate dairy biomethane interconnection to pipeline system, in addition to other R&D projects.
Employee engagement	We work to educate and support employees as they strive to reduce energy use in facilities and fuel use while driving. We also have employee-driven green teams at several locations that engage employees on reducing their impacts at home and at work.
Internal incentives/recognition programs	Our operating companies offer recognition to employees, as well as performance incentives, where applicable and our California utilities offer rebates and incentives to customers.
Partnering with governments on technology development	SDG&E and SoCalGas partner with all levels of government to increase awareness of energy efficiency programs and work towards achieving state-wide goals related to the Green Building Initiative and federal energy cost savings initiatives. We also often partner with governments on R&D projects.
Dedicated budget for other emissions reduction activities	Funds are allocated specifically for emissions reduction initiatives, including building energy efficiency, fugitive emissions reductions, pipeline upgrades, and the purchase of alternative-fuel fleet vehicles. In addition, given our focus on low carbon sources of energy, our capital expenditure budget includes funds for projects that will lead to emissions reductions: the construction of renewable energy facilities; alternative fuel vehicle infrastructure; battery storage; and electric and gas distribution system upgrades to accommodate increasing amounts of renewable electricity and gas.
Internal price on carbon	An internal price of carbon is particularly relevant for our utilities in California, where a cap and trade program has been adopted. SDG&E and SoCalGas were asked by the California Public Utilities Commission to calculate cap and trade compliance costs and thus, a proxy price was developed to forecast the price of allowances to protect confidential information related to GHG allowance prices and bid strategies in accordance with regulations. SoCalGas and SDG&E's methodology is based on the forward Intercontinental Exchange (ICE) settlement price of a California Carbon Allowance (CCA) with December delivery in the forecast year. The proxy for the 2019 GHG emissions price was $16.41/MT. The Proxy GHG Allowance price is the 5-day average of forward prices for October 1-5 on the Intercontinental Exchange

	(ICE) for a California Carbon Allowance with December delivery in 2019. We are now looking into other potential uses of this price, such as evaluating benefits of energy efficiency and other internal emissions reduction initiatives.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation

Group of products

Description of product/Group of products

Energy efficiency is a key component of Sempra Energy's low carbon business model. In California, profits are not tied to the amount of energy sold. This policy ("de-coupling") has helped align energy and environmental interests and has facilitated an exceptional record of energy efficiency performance. Programs include rebates for energy-efficient appliances, demand-response programs, energy-efficient lighting programs, and on-bill financing for retrofits in commercial and government buildings. These programs result in reductions of scope 1 and scope 2 emissions of our customers and scope 3 emissions reported by us. In 2019 alone energy efficiency programs at SDG&E resulted in electricity savings of 218,000 MWh and reduced demand by 45 MW, reducing CO2 emissions by an estimated 154,000 metric tons. SoCalGas and SDG&E saved more than 53 million therms of natural gas, reducing CO2 emissions by about 280,000 metric tons over the year.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

% revenue from low carbon product(s) in the reporting year

0

Comment

The California Public Utilities Commission typically provides regulatory and financial incentives to investor-owned utilities based on the effectiveness of energy efficiency programs. Energy efficiency awards for SDG&E and SoCalGas totaled $12 million from 2016-2018. In March 2017, the CPUC approved the settlement agreements reached with the Cal PA and TURN regarding the incentive awards for program years 2006 through 2008, wherein the parties agreed that SDG&E and SoCalGas would offset up to a total of approximately $4 million each against future incentive awards over a three-year period beginning in 2017. If the total incentive awards ultimately authorized for 2017 through 2019 are less than approximately $4 million for either utility, the applicable utility is released from paying any remaining unapplied amount.

Level of aggregation

Group of products

Description of product/Group of products

Sempra Energy's subsidiary in Mexico, IEnova, develops and operates renewable generation facilities. In addition, SDG&E procures renewable generation for their customers. This displaces the need for fossil fuel generation and reduces scope 2 emissions for customers and third parties. In 2019 IEnova's wind and solar generation facilities produced more than 1.5 million MWh of electricity. SDG&E procured approximately 4.5 million MWh of renewable electricity for its customers.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

% revenue from low carbon product(s) in the reporting year

1

Comment

The revenue figures represent the percentage of total revenues that came from IEnova renewables projects in 2019.

Level of aggregation

Group of products

Description of product/Group of products

Given that about 40% of GHG emissions in the U.S. come from transportation, vehicles that run on natural gas and electricity can be instrumental in improving the environment. Through SDG&E, we work with customers on how to integrate electric vehicles and charging infrastructure into homes and work environments. In addition, the natural gas vehicle (NGV) program provides information, education and training to operators of NGVs and nearly 370 NGV refueling stations located throughout Southern California. Alternative fuel vehicles reduce scope 1 emissions for third parties. In 2019, SoCalGas and SDG&E delivered 178 million therms to customers operating NGVs and NGV refueling stations, equivalent to 142 million gallons of gasoline, which reduced CO2e emissions by approximately 632,000 metric tons. Through the Power your Drive program, SDG&E is installing more than 3,000 electric vehicle charging stations in support of the California governor's goal of 500,000 zero emissions vehicles in its service territory by 2030. As of the end of 2019, 3,000 charging units had been installed in SDG&E's service territory, leading to avoided emissions from gasoline-powered vehicles.

Are these low-carbon product(s) or do they enable avoided emissions?

Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

% revenue from low carbon product(s) in the reporting year

0

Comment

C-EU4.6

(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.

Our California utilities have a long-standing commitment to reduce their methane emissions. SoCalGas operates the largest natural gas distribution system in the United States -- it is also one of the most efficient as it has one of the lowest methane emissions rates in the country. Together, the SoCalGas and SDG&E natural gas distribution systems are responsible for approximately 3 percent of California's total methane emissions.

Many new and ongoing activities support the reduction of methane emissions, we:

• Operate efficiently. SoCalGas and SDG&E operate their natural gas transmission and distribution systems with extraordinary efficiency. At SoCalGas and SDG&E, 99.17% and 98.03%, respectively, of the natural gas in their systems reached its destination in 2019; • Work towards ensuring our U.S. operations comply with the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations for infrastructure monitoring and testing. And we implement certain best management practices through programs such as the U.S. Environmental Protection Agency's Natural Gas STAR program;

• Abide by California state law, which specifies 26 best practices for leak prevention, detection and repair. We use some of the latest advanced monitoring

technologies, including drones, fiber optic cable and point sensors to conduct leakage surveys and monitor storage operations. During pipeline testing, we often capture natural gas that would otherwise be released into the atmosphere;

• Prioritize the replacement of pipelines to enhance the integrity of our distribution system. At SoCalGas and SDG&E, we are more than 80% of the way to completing our goal to replace 900 miles of distribution pipeline by 2021;

• Explore new innovations, including a system that uses surplus renewable energy to create carbon-free hydrogen gas. When added to our natural gas system, hydrogen (a zero-emissions gas) reduces the system's impact and emissions; and

• Capture methane emissions from landfills, sewage treatment plants and dairies – and add them to our natural gas distribution system. In fact, SoCalGas has committed that, by 2030, this type of methane, also known as renewable natural gas, will constitute 20% of the natural gas it delivers. In addition, in 2018 SoCalGas injected the first California-produced renewable natural gas (natural gas from the decomposition of organic matter) into its pipeline system.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2007

Base year end

December 31, 2007

Base year emissions (metric tons CO2e)

9,906,143

Comment

Scope 2 (location-based)

Base year start

January 1, 2007

Base year end

December 31, 2007

Base year emissions (metric tons CO2e)

535,359

Comment

Scope 2 (market-based)

Base year start

January 1, 2007

Base year end

December 31, 2007

Base year emissions (metric tons CO2e)

0

Comment

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Climate Registry: Electric Power Sector (EPS) Protocol
The Climate Registry: General Reporting Protocol
US EPA Mandatory Greenhouse Gas Reporting Rule
Other, please specify
California Air Resources Board (CARB) subpart c, w; CARB oil and gas regulation

C5.2a

(C5.2a) Provide details of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

California Air Resources Board (CARB) subpart c, w; CARB oil and gas regulation; California Air Resources Board (CARB) subpart c, w; CARB oil and gas regulation

C6. Emissions data

C6.1

(C6.1) What were your organization’s gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

5,217,660

Comment

C6.2

(C6.2) Describe your organization’s approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We have operations where we are able to access electricity supplier emission factors or residual emissions factors, but are unable to report a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

220,585.79

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Small blowdowns with chamber volume of less than 50ft3 (e.g. regulator station blowdowns for maintenance)

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions excluded

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions excluded

Explain why this source is excluded

These emissions are excluded from Subpart W reporting and are therefore excluded from this report. We do not believe these emissions are relevant to overall totals.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO2e

243,200

Emissions calculation methodology

Emissions data from our supply chain were calculated using several sources of information, including procurement information and supplier environmental performance data, supplemented by an econometric model that estimates environmental impacts (impact spend analysis).

Percentage of emissions calculated using data obtained from suppliers or value chain partners

6

Please explain

In 2014 we completed a supply chain analysis for our corporate center, SDG&E, and SoCalGas suppliers which provided us with an estimate of greenhouse gas emissions from purchased goods and services based on our 2013 suppliers and spend. This does not include emissions from fuel and energy related activities, which we hope to include in future years.

Capital goods

Evaluation status

Not relevant, explanation provided

Please explain

We do not believe these emissions are relevant considering the quantity of emissions from other sources

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2,027,903

Emissions calculation methodology

The Climate Registry's Electric Power Sector Protocol v1.0 Emissions from Purchased Power [MT GHG] = Power Delivered onto System [MWh] x Emission Factor [MT GHG/MWh] This calculation is repeated for each GHG (CO2, CH4, N2O) using the appropriate emission factors.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Emissions provided are for power purchased on behalf of and delivered to our utility SDG&E's customers.

Upstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

The primary products in Sempra Energy's supply chain are electricity and natural gas. The emissions that arise from the transportation and distribution of these products are included in our scope 1 and 2 emissions figures. We do not consider any other emissions from transportation and distribution to be relevant considering the quantity of emissions from other sources.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Please explain

We do not believe these emissions are relevant considering the quantity of emissions from other sources.

Business travel

Evaluation status

Not relevant, calculated

Metric tonnes CO2e

8,310

Emissions calculation methodology

Emissions from employee air travel are calculated by our corporate travel services. Flights are categorized into short, medium, and long-haul. Total distance travelled in each category is then multiplied by the appropriate emissions factor using the World Resources Initiative Global Reporting Protocol.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Emissions provided are for employee air travel booked through Sempra Energy's corporate travel services and do not include all work-related flights taken by employees. Emissions are in CO2.

Employee commuting

Evaluation status

Not relevant, explanation provided

Please explain

We do not believe these emissions are relevant considering the quantity of emissions from other sources.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

Leased assets are not a significant part of our operations.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

We do not believe these emissions are relevant considering the quantity of emissions from other sources.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Most of the electricity and natural gas sold by Sempra Energy companies is sold to end users and not used as an intermediate product.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

64,836,391

Emissions calculation methodology

Emissions from delivery of natural gas to our end users are calculated based on Subpart NN of CARB reporting regulation. Using aggregated natural gas volumes (Mcf) we use the measured high heating value to convert to equivalent MMBtu of total gas supplied. The MMBtu/yr value was then multiplied by the approved emission factor 53.02 kg CO2/MMBtu to render the CO2 totals for the year. CH4 and N2O are calculated from emission factors of 0.001 and 0.0001 kg/MMBtu, respectively.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Emissions resulting from the combustion of natural gas sold to SoCalGas, SDG&E and IEnova customers.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Sempra Energy businesses sell natural gas and electricity. End of life treatment is not relevant for these products.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

We do not believe these emissions are relevant considering the quantity of emissions from other sources.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

Sempra Energy does not have any franchises.

Investments

Evaluation status

Relevant, calculated

Metric tonnes CO2e

483,317.74

Emissions calculation methodology

Emissions are calculated based on EPA guidelines, subpart c and w.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Sempra Energy has a 50.2 percent non-controlling interest in Cameron LNG, which began operations in 2019. These emissions represent our ownership share from the facility in 2019.

Other (upstream)

Evaluation status

Relevant, not yet calculated

Please explain

Other (downstream)

Evaluation status

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.00052

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

5,658,832

Metric denominator

unit total revenue

Metric denominator: Unit total

10,829,000,000

Scope 2 figure used

Location-based

% change from previous year

5

Direction of change

Decreased

Reason for change

Sempra Energy's revenue decreased by 7 percent from 2018 to 2019 and emissions decreased by 12 percent, leading to an overall decrease in this intensity figure year-over-year. Part of this decrease can be attributed to the sale of our operations in Chile and Peru. These businesses were held for sale in 2019 and not included in revenue or emissions figures. Emissions reduction activities at SoCalGas, SDG&E and IEnova also contributed to this decrease. Fugitive emissions reduction efforts, including pipeline replacements, maintenance to minimize leaks, pressure adjustments, and altered emergency shutdown practices, resulted in a total reduction of approximately 258,406 metric tons CO2e.

Intensity figure

0.342

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

5,658,832

Metric denominator

megawatt hour generated (MWh)

Metric denominator: Unit total

7,752,547

Scope 2 figure used

Location-based

% change from previous year

60

Direction of change

Increased

Reason for change

The figure provided is metric tons of CO2 per megawatt-hour of power generated. The rate increase from 2018 to 2019 is due to an increase in generation from natural gas-fired power plants relative to generation from renewable sources. All of Sempra Energy's U.S. based wind and solar assets were sold in 2018 and 2019.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	3,430,175	IPCC Second Assessment Report (SAR - 100 year)
CH4	82,422	IPCC Second Assessment Report (SAR - 100 year)
SF6	0.41	IPCC Second Assessment Report (SAR - 100 year)
N2O	7	IPCC Second Assessment Report (SAR - 100 year)

HFCs	2	IPCC Second Assessment Report (SAR - 100 year)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	2,410.94	72,824.52	0.41	1,557,275.55	
Combustion (Electric utilities)	1,053,054.08	19.37	0	1,054,063.38	
Combustion (Gas utilities)	129,828.53	2.452	0	129,955.94	
Combustion (Other)	9,016.21	0.16	0	9,025.05	
Emissions not elsewhere classified	0	0	0	0	

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	2,871,879.83
Mexico	2,345,780.26

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
Sempra Utilities	2,860,534
Sempra North American Infrastructure	2,357,126

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Electric utility activities	1,053,054	Stationary combustion emissions for San Diego Gas & Electric

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
United States of America	214,489	0		0

Mexico	6,097	0		0

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Sempra Utilities	214,489	0
Sempra North American Infrastructure	6,097	0

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions	Direction of change	Emissions value (percentage)	Please explain calculation

	(metric tons CO2e)			
Change in renewable energy consumption	0	No change	0	
Other emissions reduction activities	258,406	Decreased	4	This decrease is due to emissions reduction activities related to fugitive emissions at SoCalGas, SDG&E and IEnova including pipeline replacements, maintenance to minimize leaks, pressure adjustments, and altered emergency shutdown practices for a total reduction of approximately 258,406 metric tons CO2e. Our total Scope 1 and 2 emissions in the previous year were 6,423,168 metric tons CO2e. Therefore, we arrived at a 4% decrease: (258,406/6,423,168) *100.
Divestment	306,777	Decreased	4.8	This decrease is due to the sale of our electric utilities in Chile and Peru, which was completed in 2020. (These were considered as discontinued operations in 2019 and not included in our data) Total scope 1 and 2 emissions from these operations in the previous year were 306,777 metric tons CO2e. Therefore, we arrived at a 4.8% decrease: (306,777/6,426,866) *100.
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	104,088	Increased	1.6	We experienced an increase in stationary combustion emissions due to higher natural gas fuel usage at our power plants, as dictated by CAISO and market forces.
Change in methodology	314,375	Decreased	4.9	Venting emissions were registered with more precision at our IEnova operations.
Change in boundary	0	No change	0	

Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 30% but less than or equal to 35%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No

Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	19,859,240	19,859,240
Consumption of purchased or acquired electricity		78,927	267,654	346,581
Consumption of self-generated non-fuel renewable energy		3,908		3,908
Total energy consumption		82,835	20,126,894	20,209,729

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No

Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

19,729,592.68

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

53.02

Unit

kg CO2 per million Btu

Emissions factor source

17 CCR Section 95115 (CARB GHG reporting regulation)

Comment

0.001 Kg CH4 per million BTU 0.0001 Kg N2O per million BTU

Fuels (excluding feedstocks)

Compressed Natural Gas (CNG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

5,542

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

0.05444

Unit

kg CO2 per gallon

Emissions factor source

TCR Table 13.1

Comment

The CNG conversion factor of 127 scf per GGE is not in available as an option in the pulldown list. CNG usage is provided in gallons. This is converted to kg CO2 per GGE by multiplying by 0.05444 x 127.

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

34,573

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

73.96

Unit

kg CO2 per million Btu

Emissions factor source

17 CCR Section 95115 (CARB GHG reporting regulation)

Comment

0.003 Kg CH4 per million BTU 0.0006 Kg N2O per million BTU

Fuels (excluding feedstocks)

Motor Gasoline

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

89,717.38

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

70.22

Unit

kg CO2 per million Btu

Emissions factor source

17 CCR Section 95115 (CARB GHG reporting regulation)

Comment

0.003 Kg CH4 per million BTU 0.0006 Kg N2O per million BTU

Fuels (excluding feedstocks)

Propane Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

730

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

0.091

Unit

kg CO2 per gallon

Emissions factor source

0.091 MMBTU/gallon is the default HHV listed in section 95115 of the CARB Mandatory Reporting Regulation for GHG emissions (17CCR Part 95). Conversion factor of 0.29307 MWh/MMBTU.

Comment

Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

Heating value

Total fuel MWh consumed by the organization

19.26

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

Emission factor

Unit

Emissions factor source

Comment

LPG is used for the forklift at our TDM natural gas generation plant.

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	7,953,796	201,249	1,484,039	31,347
Heat	0	0	0	0
Steam	0	0	0	0
Cooling	0	0	0	0

C-EU8.2d

(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

Coal – hard

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Lignite

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Oil

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Gas

Nameplate capacity (MW)

1,818

Gross electricity generation (GWh)

6,469.76

Net electricity generation (GWh)

6,299.86

Absolute scope 1 emissions (metric tons CO2e)

2,652,985

Scope 1 emissions intensity (metric tons CO2e per GWh)

421

Comment

Biomass

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Waste (non-biomass)

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Nuclear

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Fossil-fuel plants fitted with CCS

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Geothermal

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Hydropower

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Wind

Nameplate capacity (MW)

329.5

Gross electricity generation (GWh)

1,102.58

Net electricity generation (GWh)

1,077.17

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Solar

Nameplate capacity (MW)

241

Gross electricity generation (GWh)

381.46

Net electricity generation (GWh)

375.52

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Marine

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Other renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Other non-renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Total

Nameplate capacity (MW)

2,389

Gross electricity generation (GWh)

7,953.8

Net electricity generation (GWh)

7,752.55

Absolute scope 1 emissions (metric tons CO2e)

2,652,985

Scope 1 emissions intensity (metric tons CO2e per GWh)

342

Comment

C-EU8.4

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?

Yes

C-EU8.4a

(C-EU8.4a) Disclose the following information about your transmission and distribution business.

Country/Region

United States of America

Voltage level

Transmission (high voltage)

Annual load (GWh)

17,946

Annual energy losses (% of annual load)

3.12

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO2e)

118,342

Length of network (km)

41,297

Number of connections

1,471,300

Area covered (km2)

10,619

Comment

This represents data for the combined transmission and distribution system of SDG&E, this data is not reported separately. Losses are primarily for the power sent over our transmission lines from the various sources. The 2018 FERC loss factor is used as the 2019 figure is not yet available.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-EU9.5a

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
Gas	143,000,000	36	2024	SDG&E and IEnova natural gas-fired power plants.
Wind	150,000,000	33	2022	IEnova wind
Solar	145,000,000	32	2022	IEnova solar

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan

Large-scale storage	SDG&E owns and operates battery storage capable of storing 120 megawatt hours of energy – another 260-megawatt-hour system is slated to come online by 2021.	95,000,000	1.1	2024
Charging networks	This includes planned capital expenditures related to the implementation of California assembly bills 1082 and 1083 which will allow SDG&E to install a mix of public DC fast chargers and level 2 chargers. CAPEX is also planned for charging infrastructure for medium and heavy-duty vehicles.	24,000,000	1.4	2024
Other, please specify Replacement of customer information system	SDG&E is working to replace its existing legacy Customer Information System and related sub-systems with a modern, industry standard platform designed to meet the information needs of customers in the current and future environment. The new CIS solution will transform key business, billing and IT processes and enable SDG&E to more effectively and efficiently implement customer programs and rate options. including time of use rates, through a comprehensive 360-degree view of the customer.	118,000,000	1.3	2024

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	

C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Unable to disaggregate by technology area		81-100%	765,000	This represents 2019 expenditures for electric program investment charge. The California Public Utilities Commission (CPUC) established the Electric Program Investment Charge (EPIC) to assist the development of non-commercialized new and emerging clean energy technologies in California while providing assistance to commercially viable projects. EPIC consists of three program areas: (1) Applied research and development; (2) Technology demonstration and deployment; and (3) Market facilitation, consisting of market research, regulatory permitting and streamlining, and workforce development activities. EPIC activities must be designed to produce electricity ratepayer benefits for customers.
Unable to disaggregate by technology area		81-100%	13,142,010	This represents R&D spending at SoCalGas, which is focused on the development of low-carbon technologies, including the use hydrogen, renewable natural gas, fuel cells.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place

Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance

Reasonable assurance

Attach the statement

- Verification Statement SoCal Gas End User Emissions CY18-FINAL.pdf
- 2.3.1 TDM-GHG CO2e verification report 2018.pdf
- SDG&E Verification Report.pdf
- Dictamen -GDT 1.1.pdf
- Dictamen -DEN 1.1 (1).pdf
- Dictamen -GDN 1.1.pdf

Page/ section reference

Verification Statement SoCal Gas End User Emissions CY18-FINAL.pdf: page 1
2.3.1 TDM-GHG CO2e verification report 2018.pdf: pages 1-7
SDG&E Verification Report.pdf: pages 1-18

Relevant standard

The Climate Registry's General Verification Protocol

Proportion of reported emissions verified (%)

53

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

IEnova Sustainability_Financial_Report_2019.pdf

Page/ section reference

For IEnova scope 1 emissions, the Independent Assurance Report was published in their annual sustainability report on page 182. The assurance process was performed according to ISAE 3000 principles and includes the verification of IEnova energy consumption and Scope 1, 2 and 3 emissions according the following contents of the GRI Standards methodology:
302-1: Energy consumption within the organization

305-1: Direct GHG Emissions (Scope 1)

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

43

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance

Reasonable assurance

Attach the statement

Verification Statement SoCal Gas End User Emissions CY18-FINAL.pdf

2.3.1 TDM-GHG CO2e verification report 2018.pdf

SDG&E Verification Report.pdf

Page/ section reference

Verification Statement SoCal Gas End User Emissions CY18-FINAL.pdf: page 1
2.3.1 TDM-GHG CO2e verification report 2018.pdf: pages 1-7
SDG&E Verification Report.pdf: pages 1-18

Relevant standard

The Climate Registry's General Verification Protocol

Proportion of reported emissions verified (%)

97

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

IEnova Sustainability_Financial_Report_2019.pdf

Page/ section reference

For IEnova scope 2 emissions, the independent assurance report was published in their annual sustainability report on page 182. The assurance process was performed according to ISAE 3000 principles and include the verification of energy consumption and Scope 1, 2 and 3 emissions of IEnova operations according to the following contents of the GRI Standards methodology:
302-1: Energy consumption within the organization
305-2: Indirect GHG Emissions (Scope 2)

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

3

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Use of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance

Reasonable assurance

Attach the statement

CY19 104085 SDGE Subpart NN verification_statement.pdf

Verification Statement SoCal Gas End User Emissions CY18-FINAL.pdf

Page/section reference

Verification Statement SoCal Gas End User Emissions CY18-FINAL.pdf: page 1

CY19 104085 SDGE Subpart NN verification_statement.pdf: pages 1-2

Relevant standard

California Mandatory GHG Reporting Regulations (CARB)

Proportion of reported emissions verified (%)

69

Scope 3 category

Scope 3: Use of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

IEnova Sustainability_Financial_Report_2019.pdf

Page/section reference

For IEnova's scope 3 emissions, the Independent Assurance Report was published in their annual sustainability report on page 182. The assurance process was performed according to ISAE 3000 principles and includes the verification of energy consumption and Scope 1, 2 and 3 emissions of IEnova operations.

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

28

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C8. Energy	Energy consumption	ISAE 3000 by the IAASB/IFAC considering the Global Reporting Initiative Standards	For our IEnova operations, we conducted an assurance process of some relevant indicators that are published in the annual. Sustainability and Financial Report. This report utilizes the methodology of the Standards of the Global Reporting Initiative.

			302-1: Energy Consumption was verified.
C7. Emissions breakdown	Other, please specify Scope 1, 2 and 3 emissions breakdown	ISAE 3000 by the IAASB/IFAC considering the Global Reporting Initiative Standards The Climate Registry's General Verification Protocol	For SDG&E and SoCalGas operations verification of the breakdown of scope 1, 2, and 3 emissions by gas is verified through the climate registry verification process. For IEnova operations, as part of the sustainability report assurance process, the GRI indicators below were verified based on GRI standards. 305-1: Direct GHG Emissions 305-2: Energy Indirect GHG Emissions 305-3: Other Indirect GHG emissions 305-5: Reduction of GHG emissions

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

California CaT - ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

California CaT

% of Scope 1 emissions covered by the ETS

40

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2019

Period end date

December 31, 2019

Allowances allocated

28,792,759

Allowances purchased

Verified Scope 1 emissions in metric tons CO2e

2,860,534

Verified Scope 2 emissions in metric tons CO2e

214,489

Details of ownership

Facilities we own and operate

Comment

Under California Air Resource Board rules, SoCalGas and SDG&E are prohibited from disclosing any information about allowances purchased. Unverified 2019 emissions are provided as the verification process is not yet complete.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Under rules defined by the California Air Resources Board, SDG&E and SoCalGas are prohibited from disclosing any information about strategy for compliance. To manage compliance costs, SDG&E created a GHG procurement strategy that was approved by the California Public Utilities Commission (CPUC) in 2012, 2014 and amended in 2018. This strategy allows SDG&E to employ several procurement mechanisms such as participation in ARB's quarterly allowance auctions, transacting via a Request for Offers process, transacting via broker and transacting via exchanges. The CPUC adopted similar procurement options for gas utilities in 2014. We utilize public external carbon prices to determine our costs of compliance.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Navigate GHG regulations

GHG Scope

Scope 1

Application

Given that Sempra Energy's utilities SDG&E and SoCalGas are covered under the state of California's cap and trade program, they use a price of carbon to determine compliance costs.

Actual price(s) used (Currency /metric ton)

16.41

Variance of price(s) used

In this example, the price would be differentiated as it specifically applies to SDG&E and SoCalGas and cap and trade compliance costs. This value does not remain constant and is updated based on the results of the program.

Type of internal carbon price

Other, please specify

Market-based price

Impact & implication

An internal price of carbon is particularly relevant for our utilities in California, where a cap and trade program has been adopted. SDG&E and SoCalGas were asked by the California Public Utilities Commission to calculate cap and trade compliance costs and thus, a proxy price was developed to forecast the price of allowances to protect confidential information related to GHG allowance prices and bid strategies in accordance with regulations. SoCalGas and SDG&E's methodology is based on the forward Intercontinental Exchange (ICE) settlement price of a California Carbon Allowance (CCA) with December delivery in the forecast year. The proxy for the 2019 GHG emissions price was $16.41/MT. The Proxy GHG Allowance price is the 5-day average of forward prices for October 1-5 on the Intercontinental Exchange (ICE) for a California Carbon Allowance with December delivery in 2019. We are now looking into other potential uses of this price, such as evaluating benefits of energy efficiency and other internal emissions reduction initiatives.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Compliance & onboarding

Details of engagement

Included climate change in supplier selection / management mechanism
Climate change is integrated into supplier evaluation processes

% of suppliers by number

10

% total procurement spend (direct and indirect)

44

% of supplier-related Scope 3 emissions as reported in C6.5

0.5

Rationale for the coverage of your engagement

The information is for SDG&E and SoCalGas only based on 2019 data and information. Sempra Energy's engagement with its suppliers begins with the supplier code of conduct, which outlines our expectations. It is a supplier's responsibility to know and understand the environmental issues associated with the production of their goods and services and be good stewards of the environment. We value suppliers that evaluate their products and services from a total lifecycle perspective, have solid environmental metrics tracking practices, use resources responsibly, reuse and recycle when possible, and work to eliminate environmental incidents. Our California utilities, SDG&E and SoCalGas, have and are currently implementing specific programs to address sustainable business practices with suppliers, including GHG emissions and climate

change. Both SDG&E and SoCalGas plan to expand and build upon their supply chain sustainability programs in 2020 through efforts including, but not limited to, developing processes to incorporate sustainability into their supply chains and pursuing opportunities to have our supplier partners pursue more sustainable business practices. Sustainability is addressed through two channels:
1. SDG&E and SoCalGas evaluate supplier operational impacts through Requests for Proposals (RFPs) above a certain dollar threshold by including sustainability questions that are given weight in the bid award evaluation, which is reflected in the percentages of suppliers covered by number and total procurement spend for 2019 above.
2. In addition, in 2019, SDG&E and SoCalGas surveyed 51 suppliers based on their criticality and overall spend on metrics addressing operational sustainability (presence of a management system and goal setting related to emissions, energy, water, and waste). Through this survey, SDG&E and SoCalGas have gathered data that provides baseline sustainability information for the selected vendors. The survey tool gives suppliers a score in the applicable areas, benchmarking dashboards to compare their performance against others in their category, and best practices to increase scores in the applicable areas. Additionally, the tool allows suppliers to create plans to enhance their everyday sustainability activities and thereby raise their scores in the following year.

Impact of engagement, including measures of success

The information provided in this section in this section is for SDG&E and SoCalGas only based on 2019 data and information. These businesses represent most of Sempra Energy's expenditures with suppliers. While measures of success may vary with each type of engagement, with regard to the sustainability metrics and the survey described above, SDG&E and SoCalGas achieved a completion rate of approximately 27% for the suppliers selected to take the survey and 54% of suppliers responded by at least initiating either the planning or assessment phase of the survey. Completion means that the supplier took the survey and received a score and also created a plan to enhance their sustainability score in the identified areas for improvement. For RFP questions, it is our goal to receive sustainability-related information from all bidders on RFPs with a value over $1 million. Therefore, our measure for success is receipt of additional information and data related to supplier sustainability efforts. Suppliers review requests for information as part of the initial phase of doing business. The Supplier Relationship Management (SRM) program administered by SoCalGas covers suppliers that also serve SDG&E. The SRM program requires submittal of sustainability-related data annually. The supplier questionnaire highlights sustainability as an area of focus for the California utilities, creating awareness among suppliers that we consider this area important to engage in business with them and that improvement is encouraged and expected.

Comment

The percentage of suppliers includes all bidders, not solely suppliers with whom the utilities contract with as a result of our evaluation. This process allows all bidders to understand the significance of sustainability as part of doing business with Sempra Energy by requiring bidders to answer sustainability related questions during the sourcing event and is mandatory before the RFP can be scored and a bid awarded. While 10% of all bidders are required to answer the related questions in the RFP process, this accounts for 82% of all dollars for RFP bid events in 2019. While the RFP policy indicates that suppliers with RFPs greater than $1,000,000 must respond to the questionnaire that includes sustainability related questions, requests are made for information at lesser dollar values where it is determined the inquiries are applicable for the type of work being bid upon. The procurement spend percentage is an estimate based on the number of suppliers with RFPs over $1,000,000 that go through the bidding process and ultimately are contracted by our California utilities. Therefore, we are including bid-winning suppliers with RFPs over $1,000,000 in 2019, and these represent approximately 44% of the procurement spend for the year. The percentage of Scope 3 GHG emissions is currently based on an assessment completed in 2014 and is a best estimate based on similar continued operations with respect to purchased goods and services.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

10

% total procurement spend (direct and indirect)

44

% of supplier-related Scope 3 emissions as reported in C6.5

0.5

Rationale for the coverage of your engagement

This information is for SoCalGas and SDG&E only based on 2019 data and information. There are two ways that we collect climate change and carbon information from suppliers. First, SDG&E is a member of the Electric Utility Industry Sustainable Supply Chain Alliance (the Alliance), a

non-profit organization formed by investor-owned utilities across the U.S. to promote environmental stewardship. The Alliance has created a set of voluntary standards to evaluate the supply chain on environmental performance. These standards include suggested questions on environmental compliance, environmental management, greenhouse gas emissions, energy consumption, water use, and waste management. Through the Alliance we send an annual survey to select suppliers that allows us to better understand their environmental impacts, policies, and any goal setting around resource use and emissions reduction. The suppliers selected to complete the survey include those considered top-tier (traditionally high spend suppliers) in each supply management category area (e.g. Electric Construction, IT, Support Services), those identified as part of the SRM program, and any other suppliers that are critical to the business based on the utilities Supply Management Business Resumption plans. At SoCalGas, suppliers that are identified as critical become part of the SRM program. Some of the critical suppliers that participate in the SoCalGas SRM Program also serve SDG&E. The current SRM supplier areas were determined to be critical based on a supplier assessment we originally conducted in 2015 (e.g. construction contractors) and have reviewed critical and high-risk suppliers as part of the utilities SRM program annually. Through this program, SoCalGas tracks supplier performance and look for ways to gain efficiencies, both in terms of cost and environmental impact.

Impact of engagement, including measures of success

The information provided in this section in this section is for SDG&E and SoCalGas only based on 2019 data and information. These businesses represent most of Sempra Energy's expenditures with suppliers. Measures of success vary with each method of engagement. With regard to sustainability metrics, success in many cases is receipt of increased information and data related to suppliers' impacts. With the Alliance survey SDG&E and SoCalGas achieved a completion rate of approximately 27% for the suppliers selected to take the survey and 54% of suppliers responded by at least initiating either the planning or assessment phase of the survey. Completion means that the supplier took the survey and received a score and also created a plan to enhance their sustainability score in the identified areas for improvement. Suppliers are provided percentage scores based on their responses, including a percentage breakdown per area (e.g. Administration, Construction, etc.) to show areas of opportunity for improvement (starting with the 2019 survey). Each area provides methodologies to enhance performance in the targeted areas. With other programs mentioned, such as the SRM program, success can be measured in terms of reductions in cost and environmental impact.

As part of our SRM program at SoCalGas, suppliers meet with the utility and areas associated with the contractor (e.g. Safety, Contractor Controls, Pipeline Integrity, etc.) quarterly. During the meeting, the supplier informs us about the efforts they have made in the previous quarter regarding environmental, social, and economic sustainability aspects. The information obtained serves to gauge what activities suppliers are currently undertaking, and to define a baseline. Once we are able to get some best practice options, we may look to include a best practice as

part of any renegotiated contracts or in the execution of new requests for proposals.

Comment

The percentage of suppliers includes all bidders, not solely suppliers with whom the utilities contract with as a result of our evaluation. This process allows all bidders to understand the significance of this element as part of doing business. While 10% of all bidders are required to answer the related questions in the RFP process, this accounts for 82% of all RFP bid events in 2019. While the RFP policy indicates that suppliers with RFPs greater than $1,000,000 must respond to the questionnaire that includes sustainability related questions, requests are made for information at lesser dollar values where it is determined the inquiries are applicable for the type of work being bid upon. The procurement spend percentage is an estimate based on the number of suppliers with RFPs over $1,000,000 that go through the bidding process and ultimately are contracted by our California utilities. Therefore, we are including bid-winning suppliers with RFPs over $1,000,000 in 2019, representing approximately 44% of the procurement spend for the year. The percentage of Scope 3 GHG emissions is currently based on an assessment completed in 2014 and is a best estimate based on similar continued operations with respect to purchased goods and services.

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Other, please specify

Supplier relationship management program

% of suppliers by number

10

% total procurement spend (direct and indirect)

44

% of supplier-related Scope 3 emissions as reported in C6.5

0.5

Rationale for the coverage of your engagement

This information is for SoCalGas and SDG&E only based on 2019 data and information. Suppliers that are identified as critical based on a mix of spend amount and the business resumption plan (BRP) become part of the supplier relationship management (SRM) program. Through this program our California utilities track supplier performance and look for ways to gain efficiencies, both in terms of cost and environmental impact. Through these discussions in regularly scheduled meetings suppliers are requested to provide information on their sustainable efforts.

Impact of engagement, including measures of success

The information provided in this section in this section is for SDG&E and SoCalGas. These businesses represent most of Sempra Energy's expenditures with suppliers. Measures of success vary with each method of engagement. With regard to sustainability metrics, success in many cases is receipt of increased information and data related to suppliers impacts. With other programs mentioned, such as the SRM program, success can be measured in terms of reductions in cost and environmental impact. Some examples of past innovation and collaboration with suppliers include the following:

1. Some suppliers started monitoring engine idle speeds to reduce unnecessary idling speeds, which result in efficiencies in the form of fuel savings and reduced GHG emissions.
2. Construction suppliers have begun to trailer in needed water instead of having a water truck drive to the construction site, which has reduced fuel costs and GHG emissions. Suppliers also started providing information on activities the company has for their employees and the communities in which they reside.

Comment

The percentage of suppliers includes all bidders, not solely suppliers with whom the utilities contract with as a result of our evaluation. This process allows all bidders to understand the significance of this element as part of doing business. While 10% of all bidders are required to answer the related questions in the RFP process, this accounts for 82% of all RFP procurement spend in 2019. While the RFP policy indicates that suppliers with RFPs greater than $1,000,000 must respond to the questionnaire that includes sustainability related questions, requests are made for information at lesser dollar values where it is determined the inquiries are applicable for the type of work being bid upon. The procurement spend percentage is an estimate based on the number of suppliers with RFPs over $1,000,000 that go through the bidding process and ultimately are contracted by our California utilities. Therefore, we are including bid-winning suppliers with RFPs over $1,000,000 in 2019, representing approximately 44% of the procurement spend for the year. The percentage of Scope 3 GHG emissions is currently based on an assessment completed in 2014 and is a best estimate based on similar continued operations with respect to purchased goods and services.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

72

Please explain the rationale for selecting this group of customers and scope of engagement

California has the second-lowest per capita energy consumption in the U.S., in part because California regulators provide incentives for utilities to achieve energy-efficiency improvements at customer facilities. . By improving energy efficiency, the state has avoided the need to build additional power generation facilities. SDG&E and SoCalGas work with their residential, business and industrial customers to determine ways they can save energy and reduce their energy bills. Targeted energy efficiency programs are described on the utilities' websites. For example, the Energy Savings Assistance Program provides energy-saving improvements at no charge to customers that meet certain income requirements. Other programs include on-bill financing of energy upgrades, level-payment plans (which can reduce month-to-month differences in energy bills), time-of-use rates, "Reduce Your Use" days, and many other similar programs.

Percent of customers is percent of SDG&E and SoCalGas customers.

Impact of engagement, including measures of success

Measures of success for energy efficiency programs are megawatt-hours of electricity and therms of natural gas saved. In 2019 alone energy efficiency programs at SDG&E resulted in electricity savings of 218,000 MWh and reduced demand by 45 MW, reducing CO2 emissions by an estimated 154,000 metric tons. SoCalGas and SDG&E saved more than 53 million therms of natural gas, reducing CO2 emissions by about 280,000 metric tons over the year.Through the Energy Savings Assistance Program SDG&E and SoCalGas served more than 138,000 homes in 2019.

Type of engagement

Other, please specify

Offering 100% renewable electricity

Details of engagement

Other, please specify

To provide additional options, for customers, SDG&E customers can now opt to have 100 percent of their electricity come from renewable sources through a program called EcoChoice.

% of customers by number

0.3

% of customer - related Scope 3 emissions as reported in C6.5

3

Please explain the rationale for selecting this group of customers and scope of engagement

About 45 percent of the power SDG&E delivers to its customers comes from renewable sources of energy. SDG&E customers can opt to have up to 100 percent of their electricity come from renewable sources through a program called EcoChoice. An interested customer enrolls in the EcoChoice program online at www.sdge.com/EcoChoice.Once enrolled, the customer can specify how much of their power will come from renewable sources – from 50 percent to 100 percent. SDG&E purchases additional renewable power to serve the EcoChoice customers' specified renewable percentage.

Impact of engagement, including measures of success

One measure of success is the number of enrolled customers. As of June 2020, 4,031 residential, commercial and industrial customers were enrolled in the EcoChoice program, representing 50.42 megawatts.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers

Trade associations

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify GHG emissions reduction mandates	Support with minor exceptions	We engaged with policymakers concerning California legislation promoting the in-state production and distribution of biomethane as a practical step toward furthering the state's GHG and short-lived climate pollutant reduction goals.	We advocate for greenhouse gas emission reduction policies that help California meet its climate change goals while also protecting the livelihood of Californians, businesses, and the economy. We encourage emissions reductions from all sectors of the economy to meet emissions goals. Given that the largest source of GHG emissions is transportation, we are working to implement solutions promoting electrification of the passenger vehicle fleet and development of renewable gas alternatives for larger vehicles.
Energy efficiency	Support with minor exceptions	SDG&E and SoCalGas monitored several energy efficiency bills and engaged with policymakers when called upon to share their expertise in this area.	Sempra Energy supports an all-of-the-above energy policy to reduce carbon emissions: a combination of energy efficiency, renewable energy and natural gas, which over time, will increase the diversity of the

			country's energy mix and shrink the country's carbon footprint. We have strongly supported energy efficiency programs over the years and continue to do so. Over time, energy efficiency programs have averted the need to build dozens of power plants and has helped per capita energy usage in California to remain close to flat over time.
Clean energy generation	Support with minor exceptions	SDG&E and SoCalGas engaged with policymakers to assess the potential for the state to reduce GHG emissions from residential and commercial building stock by at least 40 percent below 1990 levels by 2030. They also worked to support expansion of renewable portfolio generation standards. At the federal level, Sempra Energy supported legislative efforts to maintain tax credits for wind energy production, solar energy investment, and development and deployment of electric vehicles, fuel cells and fuel cell vehicles, hydrogen fuel infrastructure, natural gas vehicle fuel and fuelling infrastructure, and renewable natural gas capture, processing and integration. Sempra Energy has also worked in support of legislation boosting federal funding for research and technology development for innovation in wind and solar energies at Advanced Research Projects Agency - Energy, as well as federal storage capacity research efforts.	Consistent with our focus on low-carbon energy, Sempra Energy supports the development of reasonable federal and state energy policies to regulate and reduce greenhouse gas emissions. We believe that when states adopt clean energy standards and programs, the standards and programs should be transparent and allocate costs fairly across customer classes without opportunity for bypass. We propose clean energy tax policies that level the playing field for tax incentives across clean energy technologies and that encourage further development of a variety of low-carbon technologies.
Other, please specify Alternative fuel transportation	Support with minor exceptions	At the state level, we supported legislative efforts to encourage the growth of alternative fuel transportation to meet the state goal to put at least 5 million ZEVs on California roads by 2030. For example we supported legislation allowing electric utilities to install EV charging stations and we supported legislation providing for financial incentives for clean vehicles. At the	We support alternative-fuel transportation programs that provide financial and nonfinancial incentives to help offset the cost of vehicle purchases. In legislative efforts, we propose parity between the costs and incentives applicable to natural gas and other alternative fuels. We believe legislation should also

		federal level, we supported tax credits for development and deployment of electric vehicles, fuel cells and fuel cell vehicles, hydrogen fuel infrastructure, natural gas vehicle fueling infrastructure, and natural gas and hydrogen as a vehicle fuel.	support the deployment of alternative fuel filling stations. We support expansion of the Department of Energy's Advanced Vehicle Manufacturing loan program to include medium and heavy-duty trucks, buses and rail transit vehicles. We also support an extension of the AFV Infrastructure refueling credit, AFV fuel and refuelling infrastructure credits, excise tax credit, tax credits for renewable natural gas, and ensuring parity between taxation of CNG versus diesel as a transportation fuel.
Other, please specify Natural gas policy	Support	In California, we supported legislation that would allow natural gas distributors to rate-base the interconnection between biogas facilities and transmission/distribution pipelines. We also supported using greenhouse gas reduction funds to capture biogenetic sources of methane with the intent of injecting conditioned biogas into our pipelines. Additionally, we supported power-to-gas technologies and increasing the amount of synthetic gas that is created and used by our customers. SB44 and SB457 dealt with the issue of biogas and both were signed into law by California's Governor. Sempra Energy supported federal research efforts into advanced uses natural gas infrastructure, including integration of power-to-gas, renewable natural gas, and hydrogen energy as an energy source.	We support policies that expand the use of natural gas and renewable natural gas in the electric power and transportation sectors, provide exports to other countries to improve air quality globally and grow the U.S. economy. Sempra Energy advocates for an approach that includes natural gas as a fuel pathway to achieve near-zero emissions.
Other, please specify Wildfire-related matters	Support with major exceptions	Our businesses engaged with policymakers concerning legislation aimed at enhanced wildfire prevention and mitigation, cost recovery, and deenergization of power lines. We advocated the development of policies that foster enhanced wildfire mitigation efforts in California, as well as economic stability of	Sempra Energy is dedicated to partnering with the state on enhancing climate resiliency and disaster planning. We supported legislative efforts designed to address California's wildfire mitigation and liability crisis jeopardizing the state and its electric utilities.

		utilities in the face of increasing risks of catastrophic wildfires. The legislation, AB 1054, was signed by the Governor.	

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

The Business Council for Sustainable Energy

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

A national policy on climate change should consider the full impact of climate change and address greenhouse gas (GHG) emissions reductions and incorporate adaptation and resilience measures. Policies should also incentivize and leverage actions by state, local and tribal governments, as well as the private sector. The Business Counsel for Sustainable Energy's policy can be found at https://www.bcse.org/images/2019%20Clean%20Air/BCSE%20Climate%20Change%20Policy%20Principles%20(2019).pdf

How have you influenced, or are you attempting to influence their position?

Sempra Energy participated in the development of the Business Council for Sustainable Energy's climate change principles.

Trade association

American Gas Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The American Gas Association is committed to reducing greenhouse gas emissions through smart innovation, new and modernized infrastructure, and advanced technologies that maintain reliable, resilient, and affordable energy service choices for consumers. The AGA's climate change position can be found at https://www.aga.org/globalassets/aga_climate-change-document_final.pdf.

How have you influenced, or are you attempting to influence their position?

Sempra Energy participated in the development of the American Gas Association's climate change position statement.

Trade association

California Chamber of Commerce

Is your position on climate change consistent with theirs?

Mixed

Please explain the trade association's position

The California Chamber of Commerce supports climate change laws and regulations that are cost-effective, technology-neutral, and promote the use of market-based strategies to reduce GHGs. The Legislature should help ensure that any changes to California law safeguard the economy while having a demonstrable impact on GHG reduction and attract private capital to the state. The California Chamber of Commerce's position can be found at https://advocacy.calchamber.com/policy/issues/greenhouse-gas-regulation.

How have you influenced, or are you attempting to influence their position?

One of Sempra Energy's operating company executives serves on the board of the California Chamber of Commerce. As such, the company provides input on a variety of topics, including climate change. We generally agree with the Chamber's focus on achieving cost-effective GHG reductions while being sensitive to higher energy costs for businesses in California.

Trade association

California Council for Environmental and Economic Balance

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

CCEEB seeks to advance policies that improve the environment and protect the public health, while maintaining a strong economy and competitive businesses. Foster collaboration among business, labor, and public leaders to develop innovative policy solutions. The California Council for Environmental and Economic Balance's mission and vision statement is located at https://cceeb.org/about-us/mission-and-vision/.

How have you influenced, or are you attempting to influence their position?

Sempra Energy supports the California Council for Environmental and Economic Balance's efforts to create clear and consistent reporting protocols to reduce greenhouse gas emissions.

Trade association

California Electric Transportation Coalition

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The California Electric Transportation Coalition supports a growing market for electric transportation, including cars, trucks, buses and equipment, to reach California's clean-air, public health, climate change, equity and economic goals. California Electric Transportation Coalition's charter is located at https://caletc.com/about-us//

How have you influenced, or are you attempting to influence their position?

Sempra Energy supports electric vehicle proliferation as part of a larger effort to reduce greenhouse gas emissions and is therefore supportive of and participates in the California Electric Transportation Coalition's efforts.

Trade association

California Natural Gas Vehicle Coalition

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

The California Natural Gas Vehicle Coalition supports new initiatives, provides up-to-date information on NGV technology and market developments, and works with legislators and regulators to develop policies that will increase alternative fuel and vehicle use. The California Natural Gas Vehicle Coalition advises stakeholders on testing and demonstration programs and help NGV-related businesses break into the California market. See: https://cngvc.org/about-us/.

How have you influenced, or are you attempting to influence their position?

Sempra Energy supports natural gas vehicle use as a means to help reduce greenhouse gas emissions and is therefore supportive of and participates in the California NGV Coalition's efforts.

Trade association

Center for LNG

Is your position on climate change consistent with theirs?

Mixed

Please explain the trade association's position

Sempra Energy supports responsible efforts to reduce carbon emissions while promoting economic growth and development and is therefore supportive of the Center for LNG's efforts to include natural gas in the nation's efforts to reduce greenhouse gas emissions.

How have you influenced, or are you attempting to influence their position?

Sempra supports responsible efforts to reduce carbon emissions while promoting economic growth and development and is therefore supportive of the Center for LNG's efforts to include natural gas in the nation's efforts to reduce greenhouse gas emissions.

Trade association

Interstate Natural Gas Association of America

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

INGAA supports a mandatory federal climate change program that would avoid redundant and potentially conflicting state or regional initiatives.

How have you influenced, or are you attempting to influence their position?

Sempra Energy supports requirements that avoid conflicting initiatives and clarify requirements in a responsible manner and is therefore supportive of INGAA's efforts.

Trade association

California Hydrogen Business Council

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

CHBC advocates for public policies that recognize hydrogen and fuel cell technologies as a clean, zero emission energy source that can be utilized across sectors for a wide range of applications including transportation, goods movement, storage, and stationary power.

How have you influenced, or are you attempting to influence their position?

Sempra Energy supports the development and utilization of hydrogen energy and fuel cells to achieve significant reductions in carbon emissions from the heavy-duty transportation and goods movement sectors and beyond.

Trade association

The Edison Electric Institute

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

EEI and its member companies—America's investor-owned electric companies— are united in our commitment to get the energy we provide as clean as we can, as fast as we can, while keeping reliability and affordability front and center as always for the customers and communities we serve. EEI's member companies are leading the clean energy transformation by continuing to reduce carbon emissions in our sector and by helping other sectors, particularly the transportation and industrial sectors, transition to clean, efficient electric energy. See: https://www.eei.org/issuesandpolicy/environment/climate/Pages/default.aspx

How have you influenced, or are you attempting to influence their position?

Sempra Energy is a very active participant at EEI, including the Board of Directors, and various EEI committees in which we voice our views on these and other matters, including promoting clean energy, electric vehicles, and energy efficiency with an eye toward reliability and affordability.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Sempra Energy has a centralized external affairs department that works closely with external affairs groups across the Company's operating companies to develop policy positions on climate change issues and help ensure consistency of direct and indirect activities. This function plays an essential role in coordinating and making consistent the Company's approach across operating companies and geographies. In addition, the external affairs team engages with our operating companies on issues related to climate change, regularly attending meetings with operating company external affairs groups and other relevant departments. This engagement allows Sempra Energy to monitor activities related to climate change so that they are consistent with the Company's overall strategy.
In addition, Sempra Energy's sustainability steering committee, comprised of executives of all of our operating companies, builds off of the efforts of the external affairs groups and also helps to ensure that policy-related activities are consistent with our climate strategy.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

Sempra Energy 2019 10K.pdf

Page/Section reference

34; 36; 38-39; 41-42; 44-46

Content elements

Risks & opportunities

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

2019-sempra-corporate-sustainability-report.pdf

Page/Section reference

Governance: 12
Strategy: 14-23; 34-35; 41
Risks and opportunities: 14, 26-29
Emissions figures and targets: 36-40
TCFD: 63-65

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures

Emission targets
Other metrics

Comment

TCFD recommendations are utilized.

C15. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

This response contains statements that are not historical fact and constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward looking statements are based on assumptions with respect to the future, involve risks and uncertainties, and are not guarantees of performance. Future results may differ materially from those expressed in the forward- looking statements. These forward-looking statements represent our estimates and assumptions only as of August 25, 2020. We assume no obligation to update or revise any forward-looking statement as a result of new information, future events or other factors.
In this response, forward-looking statements can be identified by words such as “believes,” “expects,” “anticipates,” “plans,” “estimates,” “projects,” “forecasts,” ”should,” could,” “would,” “will,” “confident,” “may,” “can,” “potential,” “possible,” “proposed,” “target,” “pursue,” “outlook,” “maintain,” or similar expressions, or when we discuss our guidance, strategy, goals, vision, mission, opportunities, projections or intentions. 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: California wildfires and the risk that we may be found liable for damages regardless of fault and the risk that we may not be able to recover any such costs from insurance, the wildfire fund established by California Assembly Bill 1054 or in rates from customers; decisions, investigations, regulations, issuances of permits and other authorizations, renewal of franchises, and other actions by (i) the Comisión Federal de Electricidad, California Public Utilities Commission (CPUC), U.S. Department of Energy, Public Utility Commission of Texas, and other regulatory and governmental bodies and (ii) states, cities, counties and other jurisdictions in the U.S., Mexico and other countries in which our companies operate or do business; the success of business development efforts, construction projects and major acquisitions and divestitures, including risks in (i) the ability to make a final investment decision and completing construction projects on

schedule and budget, (ii) obtaining the consent of partners, (iii) counterparties' financial or other ability to fulfill contractual commitments, (iv) the ability to complete contemplated acquisitions, and (v) the ability to realize anticipated benefits from any of these efforts once completed; the impact of the COVID-19 pandemic on our (i) ability to commence and complete capital and other projects and obtain regulatory approvals, (ii) supply chain and current and prospective counterparties, contractors, customers, employees and partners, (iii) liquidity, resulting from bill payment challenges experienced by our customers, including in connection with a CPUC-ordered suspension of service disconnections, decreased stability and accessibility of the capital markets and other factors, and (iv) ability to sustain operations and satisfy compliance requirements due to social distancing measures or if employee absenteeism were to increase significantly; the resolution of civil and criminal litigation, regulatory inquiries, investigations and proceedings, and arbitrations; actions by credit rating agencies to downgrade our credit ratings or to place those ratings on negative outlook and our ability to borrow at favorable interest rates; moves to reduce or eliminate reliance on natural gas and the impact of the extreme volatility and unprecedented decline of oil prices on our businesses and development projects; weather, natural disasters, accidents, equipment failures, computer system outages and other events that disrupt our operations, damage our facilities and systems, cause the release of harmful materials, cause fires and subject us to 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; 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; 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; expropriation of assets, the failure of foreign governments and state-owned entities to honor the terms of contracts, and property disputes; the impact at San Diego Gas & Electric Company (SDG&E) on competitive customer rates and reliability due to the growth in distributed and local power generation, including from departing retail load resulting from customers transferring to Direct Access, Community Choice Aggregation or other forms of distributed or local power generation, and the 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 and governance requirements and commitments, including by actions of Oncor's independent directors or a minority member director; volatility in foreign currency exchange, interest and inflation rates and commodity prices and our ability to effectively hedge the risk of such volatility; changes in trade policies, laws and regulations, including tariffs and revisions to or replacement of international trade agreements, such as the newly effective United States-Mexico-Canada Agreement, that may increase our costs or impair our ability to resolve trade disputes; the impact of changes to U.S. federal and state and foreign tax laws and our ability to mitigate adverse impacts; 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, and on the company's website, www.sempra.com. You should not rely unduly on any forward-looking statements.

This response may include market, demographic and industry data and forecasts that are based on or derived from third-party sources such as independent industry publications, publicly available information, government data and other similar information from third parties. We do not guarantee the accuracy or completeness of any of this information, and we have not independently verified any of the information provided by these third-party sources. In addition, market, demographic and industry data and forecasts involve estimates, assumptions and other uncertainties and are subject to change based on various factors, including those discussed above. Accordingly, you should not place undue reliance on any of this information.
This response also contains links to third-party websites that are not hosted or managed by Sempra Energy or its family of companies. We are not responsible for, nor do we recommend, endorse or support, any information contained on any such third-party websites.

Sempra North American Infrastructure, Sempra LNG, Sempra Mexico, Sempra Texas Utilities, Oncor and Infraestructura Energética Nova, S.A.B. de C.V. (IEnova) are not the same companies as the California utilities, SDG&E or Southern California Gas Company, and Sempra North American Infrastructure, Sempra LNG, Sempra Mexico, Sempra Texas Utilities, Oncor and IEnova are not regulated by the CPUC.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Senior Vice President, Corporate Affairs and Chief Sustainability Officer	Chief Sustainability Officer (CSO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	10,829,000,000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

	ISIN country code (2 letters)	ISIN numeric identifier and single check digit (10 numbers overall)
Row 1	US	8168511090

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member

AT&T Inc.

Scope of emissions

Allocation level

Allocation level detail

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified

Allocation method

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

We currently do not have a system for allocating emissions to our customers and suggest they consult published emissions factors to calculate their scope 2 emissions from purchased electricity. To calculate emissions from natural gas purchased we also recommend the use of verified data available through public reports to the EPA, the California Air Resources Board, and The Climate Registry.

Requesting member

Los Angeles Department of Water and Power

Scope of emissions

Allocation level

Allocation level detail

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified

Allocation method

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

We currently do not have a system for allocating emissions to our customers and suggest they consult published emissions factors to calculate their scope 2 emissions from purchased electricity. To calculate emissions from natural gas purchased we also recommend the use of verified data available through public reports to the EPA, the California Air Resources Board, and The Climate Registry.

Requesting member

NRG Energy Inc

Scope of emissions

Allocation level

Allocation level detail

Emissions in metric tonnes of CO2e

Uncertainty (±%)

Major sources of emissions

Verified

Allocation method

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

We currently do not have a system for allocating emissions to our customers and suggest they consult published emissions factors to calculate their scope 2 emissions from purchased electricity. To calculate emissions from natural gas purchased we also recommend the use of verified data available through public reports to the EPA, the California Air Resources Board, and The Climate Registry.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

We currently do not have a system for allocating emissions to our customers and suggest they consult published emissions factors to calculate their scope 2 emissions from purchased electricity. To calculate emissions from natural gas purchased we also recommend the use of verified data available through public reports to the EPA, the California Air Resources Board, and The Climate Registry.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Other, please specify Lack of protocols	A primary challenge in allocating emissions to different customers is the lack of protocols available for these calculations.
Other, please specify Process is resource intensive	Together, Sempra Energy's electric and natural gas distribution companies serve a large customer base of approximately 35 million consumers. Allocating emissions to commercial and industrial customers on an individual level could become very resource intensive as the interest in this information grows.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Sempra Energy's operating companies stay informed of updates and changes to greenhouse gas emissions reporting methodologies.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?

No

SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission	Are you ready to submit the additional Supply Chain Questions?
I am submitting my response	Investors Customers	Public	Yes, submit Supply Chain Questions now

Please confirm below

I have read and accept the applicable Terms