5.19 ENERGY

The components of the proposed Project analyzed herein are:

1) Adoption and implementation of the General Plan Update (Beaumont 2040 Plan) and
2) Adoption and implementation of the revised Zoning Ordinance and Zoning Map.

Of the two Project components, the revised Zoning Ordinance is not considered to have impacts related to energy because it addresses site planning, building design, and community aesthetics, rather than physical changes to the land, and it was prepared for compatibility with the proposed Beaumont 2040 Plan. The revised Zoning Map will have similar types of land uses as the Beaumont 2040 Plan for consistency purposes; therefore, all discussions which apply to the Beaumont 2040 Plan shall also apply to the revised Zoning Map.

Since an Initial Study was not prepared with the issuance of the Notice of Preparation (Appendix A), the focus of the following discussion is related to potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources and whether the Project conflicts or obstructs a state or local plan for renewable energy or energy efficiency.

In response to the Notice of Preparation, the City received no comment letters regarding energy. These letters are included in Appendix A and are summarized in **Table 2-A – Summary of Written Comments Received in Response to the Notice of Preparation**. No oral comments were received regarding energy at the Project's public scoping meeting.

5.19.1 Setting

Energy sources are non-renewable if they cannot be replenished in a short period of time. Non-renewable energy resources include fossil fuels, which consist of oil, coal, natural gas, and associated byproducts such as gasoline and diesel. Energy used to power residences and commercial/industrial buildings, heat and cool buildings, and operate vehicles require the burning of nonrenewable fossil fuels. Energy use relates can adversely affect air quality and can generate greenhouse gas (GHG) emissions that contribute to climate change and thus impact environmental quality. The discussion of energy most relevant to the Project is focused on electricity demand, natural gas demand, and fuel consumption.

Electricity

The City of Beaumont (City) electricity purveyor is Southern California Edison, a public utility company. SCE serves 50,000 square miles and delivers more than 87 billion kilowatt-hours (kWh) of electricity to 15 million people across 180 cities and 15 counties. SCE monitors and maintains a vast electricity system consisting of approximately 12,635 miles of transmission lines and 91,375 miles of distribution lines (SCE 2019a).

Currently, SCE is undertaking several projects in Riverside County to improve overall reliability. One major project that will benefit the City of Beaumont is the West of Devers (WOD) Upgrade project. The WOD project will help upgrade the existing transmission lines between Devers, El Casco, San Bernardino, and Vista substations to increase system transfer capacity from 1,600 megawatts (MW) to 4,800 MW. The project is undergoing construction (SCE 2019b).

SCE is dedicated to conserving energy generated by fossil fuels and increasing its portfolio of renewable energy sources. In 2017, 32 percent of SCE's energy supply was generated from renewable energy sources (CPUC 2018, p. 3), which includes biopower, geothermal, hydropower, wind, and solar photovoltaic power (CPUC 2018, p. 10). Solar photovoltaic and wind energy generates approximately 68 percent of SCE's electricity (CPUC 2018, p 10). The Renewable Portfolio Standard (RPS), discussed in

detail in subsequent discussion, requires SCE, and other utilities providers, to increase their renewable energy supply, per SB 100, to 60 percent by 2030. SCE is well positioned to meet their procurement requirement for the 60 percent RPS by 2030 per the SB 100 mandate which took effect January 1, 2019 (CPUC 2018, pp. 2, 3). SCE's electricity consumption by sector as of 2018 is provided in **Table 5.19-A – SCE Electricity Consumption in 2018 (GWh)**.

Table 5.19-A – SCE Electricity Consumption in 2018 (GWh)[a, b]

Agricultural & Water Pump	Commercial Building	Commercial Other	Industry	Mining & Construction	Residential	Streetlight	Total Usage
3,192	31,574	4,367	13,392	2,390	29,865	496	85,276

Notes:
[a] Source: (CEC 2018a)
[b] all units are in millions of kilowatt-hours (GWh) and rounded to the nearest whole number

As reported by the California Energy Commission (CEC) in **Table 5.19-A**, above, SCE consumed approximately 85.3 billion kilowatt-hours (kWh) in 2018, of which approximately 30 billion kWh were consumed by the residential sector and 31.6 billion kWh were consumed by the commercial building sector.

According to SCE, the City of Beaumont consumed approximately 205,785,604 kWh in 2018, of which the residential sector consumed 114,480,422 kWh while the nonresidential sector consumed 91,303,164 kWh.[1]

Additionally, the City entered an Energy Leaders Partnership (ELP) with SCE in 2010 to help the community, public agencies, businesses, and residents to reduce energy consumption. The ELP created and implemented an Energy Action Plan (EAP) which lists energy reducing goals for the City's and sets forth commitments to achieve these goals through specific actions. These actions include but not limited to retrofitting municipal facilities to provide greater energy efficiency (EAP 2011).

Natural Gas

The City's natural gas purveyor is Southern California Gas Company (SoCalGas), a subsidiary of Sempra Energy, a private company. As a public utility, SCG is under the jurisdiction of California Public Utilities Commission (CPUC), but can also be affected by actions of federal regulatory agencies (CPUC NGC). SoCalGas is the nation's largest natural gas distribution utility, serving 24,000 square miles and delivering natural gas to more than 500 communities.

California's existing gas supply portfolio is regionally diverse and includes supplies from on- and off-shore California sources, southwestern United States supply sources, the Rocky Mountains, and Canada (CGEU 2018, p. 12). The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), SCG, San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities (CPUC NGC).

Natural gas demand statewide, including volumes not served by utility systems, is expected to decrease at an annual rate of 0.5 percent from 2018 to 2035, and residential gas demand is expected to decline at an annual average rate of 1.4 percent, whereas demand in commercial and industrial markets is expected to increase slightly at an annual rate of 0.2 percent. While gas-fired generation will continue to be the technology of choice to meet the ever-growing demand for electric power, overall gas demand for electric

[1] Data provided by Raimi and Associates (R+A 2020)

generation is expected to decline at a rate of 1.4 percent per year for the next 17 years due to more efficient power plants, statewide efforts to minimize greenhouse gas emissions through more efficient power plants, aggressive programs pursuing demand-side reductions, and the acquisition of preferred power generation resources that produce little or no carbon emissions. Gas demand for electric power generation is expected to be moderated by CPUC-mandated goals for electric energy efficiency programs and renewable power, with 33 percent of energy needs met with renewable power by 2020 and 50 percent by 2030 and beyond (CGEU 2018, p. 4-5).

SCG projects total gas demand to decrease at an annual rate of approximately 0.74 percent from 2018 to 2035, due to modest economic growth, CPUC-mandated energy efficiency standards and programs, tighter standards created by revised Title 24 Codes and Standards, renewable electricity goals, the decline in commercial and industrial demand, and conservation savings linked to advanced metering infrastructure. By comparison, the 2016 California Gas Report projected an annual decline in demand of 0.7 percent over the forecast horizon. The difference between the two forecasts is caused primarily by stricter goals on the energy efficiency portfolio, which includes the revised updates to the Title 24 codes and standards as well as Senate Bill (SB) 350 goals that are designed to double energy efficiency savings by the year 2030. (CGEU 2018, p. 66.)

SCG also implements energy efficiency programs. SCG's conservation and energy efficiency activities are intended to help customers evaluate energy efficient options, and encourage customers to install energy efficient equipment, such as offering rebates for new hot water heaters (CGEU 2018, p. 78). SCG's cumulative annual energy efficiency cumulative savings goals are expressed for different sectors in billion cubic feet (Bcf) as seen on page 79 of the 2018 California Gas Report (CGEU 2018). SCG's goals for energy efficiency for 2018-2030 are based on the levels authorized by the CPUC's *Decision Adopting Energy Efficiency Goals for 2018-2030* (CPUC D.17-09-025), which is based on the *Energy Efficiency Potential and Goals Study for 2018* (CGEU, p. 78). SCG is subject to energy efficiency targets established by SB 32 and SB 350. SB 32, which went into effect on January 1, 2017, sets a 2030 GHG emission target of 40 percent below 1990 levels. SB 350, which was signed into law on October 7, 2015, extends this target to 50 percent by 2030. Additionally, the law requires the state to double statewide energy efficiency savings in both the electric and natural gas sectors by 2030 (CGEU 2018, pp. 89-90).

Natural gas service must be provided in accordance with SCG's policies and extension rules on file with CPUC at the time contractual agreements are made. The viability of natural gas is based on present conditions of gas supply and regulatory policies. The natural gas consumption by sector within SCG's service area is provided in **Table 5.19-B – Natural Gas Consumption in SCG Service Area in 2018.**

Table 5.19-B – Natural Gas Consumption in SCG Service Area in 2018[a, b]

Agricultural & Water Pump	Commercial Building	Commercial Other	Industry	Mining & Construction	Residential	Total Usage
78	913	75	1,714	229	2,147	5,156

Notes:
[a] Source: CEC 2018b
[b] all numbers in millions of therms and rounded to the nearest whole number

As shown in the table above, SCG consumed approximately 5.2 billion therms in 2018, of which approximately 2.1 billion therms were consumed by the residential sector and 913 million therms were consumed by the commercial building sector.

According to SCG, the City of Beaumont consumed approximately 5,943,283 therms in 2018, of which the residential sector consumed 5,199,772 therms while the nonresidential consumed 743,511 therms.[2]

Transportation Fuel

Fossil fuels are known to create the United States' transportation fuels. Fossil fuel energy sources include oil, coal, and natural gas, which are non-renewable resources that formed when prehistoric plants and animals died and were gradually buried by layers of rock; however, fossil fuel industries drill or mine for these energy sources, burn them to produce electricity, or refine them for use as fuel for heating or transportation (USDOE).

The U.S. and specifically California is defined by the automobile. In 2018, there were over 25 million vehicles registered in California by the Department of Motor Vehicles (CDMV 2018). In 2016, 39.8 percent[3] of all of California's energy use was used for transportation, approximately 3,115.6 trillion British thermal units (Btu) (USEIA F30). In 2016, California consumed 574,228 thousand barrels[4] of petroleum for transportation uses, which is approximately 3,064.8 trillion Btu (USEIA CT7).

The *2017 Integrated Energy Policy Report*, which provides the results of the California Energy Commissions assessments of a variety of energy related issues facing California, estimated that between 2018 and 2030, gasoline fuel demand for transportation in California will decline from close to 16 billion gallons in 2018 to between 12.5 billion gallons in 2030, primarily due to increases in fuel efficiency and electrification. Further, while petroleum-based fuels continue to represent the largest share of transportation fuel demand, alternative fuel demand for transportation is anticipated to increase. Electricity fuel is expected to increase from close to 150 million gallons of gasoline equivalent in 2018 to almost 600 million gallons of gasoline equivalent in 2030. Natural gas, hydrogen, and E85[5] demand is also expected to increase, however at slower rates. The growth in electricity is tied primarily to the electrification of light-duty vehicles, while the growth in natural gas reflects increased fuel diversification in trucks and buses. Compared to the billions of gallons of gasoline equivalent consumed overall, these numbers are not large, but they do represent growing sources of demand (TEFA 2017, pp. 212-213).

5.19.2 Related Regulations

Federal Regulations

Energy Independence and Security Act

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law (EISA). Among other key measures, the Act would do the following, which would aid in the reduction of national mobile and non-mobile GHG emissions:

1 Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.

2 Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.

[2] Data provided by Raimi and Associates (R+A 2020)

[3] 3,115.6 trillion Btu (from transportation consumption in California) / 7,830.3 trillion Btu (from total energy consumption in California) = approximately 39.8%

[4] One barrel (in reference to petroleum) is a unit of volume equal to 42 U.S. gallons (USEIA Glossary)

[5] E85 is a fuel blend of 85 percent ethanol and 15 percent gasoline (TEFA 2017, p. 182)

3 While superseded by NHTSA and USEPA actions described above, EISA also set miles per gallon targets for cars and light trucks and directed the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs."

USEPA and National Highway Traffic Strategy Administration (NHTSA) Joint Rulemaking for Vehicle Standards

In April 2018, the USEPA signed the Mid-term Evaluation Final Determination, which finds that the model years 2022 to 2025 GHG standards are not appropriate and should be revised (88 FR 16077). This Final Determination serves to initiate a notice to further consider appropriate standards for model years 2022 to 2025 light-duty vehicles. On August 24, 2018, the USEPA and NHTSA published a proposal to freeze the model year 2020 standards through model year 2026 and to revoke California's waiver under the CAA to establish more stringent standards (NHTSA 2018). On March 31, 2020, the NHTSA and USEPA finalized the SAFE Vehicle Rule, which increased stringency of CAFE and CO_2 emissions standards by 1.5% each year through model year 2026 (NHTSA 2020). California has filed lawsuits against the USEPA over the amendments and repeal of the waiver. As of the time of this writing, the outcome of the lawsuits were still pending.[6]

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

In response to the Massachusetts v. EPA ruling discussed above, the Bush Administration issued an Executive Order on May 14, 2007, directing the USEPA, the Department of Transportation (DOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) was created to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, and energy efficient. Major features of the ISTEA include (DOT):

- A National Highway System (NHS), consisting primarily of existing Interstate routes and a portion of the Primary System, was established.
- State and local governments were given more flexibility in determining transportation solutions, whether transit or highways, and the tools of enhanced planning and management systems to guide them in making the best choices.
- New technologies, such as intelligent vehicle highway systems (now known as Intelligent Transportation Systems or ITS) and prototype magnetic levitation systems, were funded.
- The private sector was tapped as a source for funding transportation improvements.
- The Act continued discretionary and formula funds for mass transit.
- Highway funds were available for activities that enhance the environment, such as wetland banking, mitigation of damage to wildlife habitat, historic site, activities that contribute to meeting air quality standards, a wide range of bicycle and pedestrian projects, and highway beautification.
- Highway safety was further enhanced by a new program to encourage the use of safety belts and motorcycle helmets.

[6] https://oag.ca.gov/news/press-releases/attorneys-general-becerra-james-sue-trump-administration-unlawfully-cutting; https://oag.ca.gov/news/press-releases/attorney-general-becerra-files-lawsuit-against-epa-attacking-california%E2%80%99s

- State uniformity in vehicle registration and fuel tax reporting was required.

The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) builds upon the initiatives established in the ISTEA legislation discussed previously (DOT). TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs (FHWA 2015). TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety (FHWA 1998).

State Regulations

At the State level, the California Air Resources Board (CARB), CEC and CPUC are agencies with authority over different aspects of energy. CPUC regulates privately-owned utilities in the energy, rail, telecommunications, and water sectors. CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. CARB focuses on California's unique air quality challenges by setting the state's own stricter emissions standards for a range of statewide pollution sources including vehicles, fuels and consumer products. Major State energy-related laws and plans are discussed below.

California Air Resources Board (CARB)

CARB's 2016 Mobile Source Strategy demonstrates how the State can simultaneously meet air quality standards, achieve greenhouse gas emission reduction targets, decrease health risk from transportation emissions, and reduce petroleum consumption over the next fifteen years. The estimated benefits of the strategy in reducing emissions from mobile sources includes an 80 percent reduction of smog-forming emissions and a 45 percent reduction in diesel particulate matter from today's levels in the South Coast. Statewide, the Mobile Source Strategy would also result in a 45 percent reduction in greenhouse gas emissions, and a 50 percent reduction in the consumption of petroleum-based fuels. (CARB 2016, p. 3)

Regulations adopted or under development as a result of the Mobile Source Strategy include: increases to fuel efficiency, near-zero and zero-emission technologies, renewable fuels for on-road vehicles, and deployment of zero-emission technology, increases to worksite efficiencies, and increases in renewable fuels for off-road equipment, (CARB 2016, p. 11)

California Energy Commission (CEC)

The CEC was formed by Assembly Bill (AB) 1575, also known as the Warren-Alquist Act (CEC WAA), and is the State's primary energy policy and planning agency (CEC 2019). AB 1575, also requires EIRs to consider wasteful, inefficient, and unnecessary consumption of energy (CEC AB 1575, p. 2) and was the driving force behind the creation of Appendix F to the CEQA Guidelines. CEC was established to address the State's energy challenges, and is responsible for the creation of the State Energy Plan. The State Energy Plan identifies the emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The State Energy Plan recommends that the State assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the fewest environmental and energy costs. The State Energy Plan also identifies a number of strategies, including providing assistance to public agencies and fleet operators, encouraging urban designs that reduce vehicles miles traveled, and accommodating pedestrian and bicycle access.

California Public Utilities Commission (CPUC)

CPUC regulates investor-owned electric and natural gas utilities operating in California, which includes SCG and SCE (CPUC Electric). The CPUC regulates the natural gas rates and natural gas services, including in-State transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering, and billing (CPUC NGC). In 2008, the CPUC adopted the state's first "Long-Term Energy Efficiency Strategic Plan" for achieving energy savings in various sectors throughout California. In 2011, the Strategic Plan was updated to include a chapter related to lighting (CPUC EESP).

California Code of Regulations (CCR Title 24)

CCR Title 24, Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) (Title 24), was established in 1978 to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Although it was not originally intended to reduce GHG emissions, electricity production by fossil fuels and natural gas use result in GHG emissions and energy efficient buildings require less electricity and natural gas. Therefore, increased energy efficiency results in decreased GHG emissions. (SB 2015, p. 6.)

The CEC adopted 2019 Standards which became effective January 1, 2020. The 2019 Standards will reduce energy use by seven and 30 percent for residential and non-residential buildings, respectively (CEC 2019, p. 1.). The 2019 Standards also require residential buildings to included photovoltaic (PV) systems.

CCR Title 24, Part 11 (California's Green Building Standard Code) (CALGreen), was adopted in 2010 and went into effect January 1, 2011. CALGreen is the first statewide mandatory green building code and significantly raises the minimum environmental standards for construction of new buildings in California. The mandatory provisions in CALGreen will reduce the use of volatile organic compounds (VOC) emitting materials, strengthen water conservation, and require construction waste recycling. (SB 2015, p. 7.)

The 2019 CALGreen Code also became effective January 1, 2020 (CBSC 2019, webpage). The 2019 CALGreen Code requires, among other things, waste reduction measures including: providing readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of nonhazardous materials for recycling, and a minimum 65 percent diversion of construction and demolition waste from landfills. Site development measures include electric vehicle charging facilities and bicycle racks. Water reduction measures include: the reduction of generation of wastewater by either installing water-conserving fixtures or using non-potable water systems. Pollution reduction measures include requiring low-pollutant emitting interior finish materials such as paints, carpet, vinyl flooring, and particleboard. Mandatory inspections of energy systems (i.e., heat furnace, air conditioner, mechanical equipment) for nonresidential buildings over 10,000 square feet are required to ensure that all are working at their maximum capacity according to their design efficiencies.

Assembly Bill 939 and Assembly Bill 341

Assembly Bill 939, The California Integrated Waste Management Act of 1989, which was later modified by AB 341, required each jurisdiction within the state to include the following:

- Diversion of 25% of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities
- Diversion of 50% of all solid waste on and after January 1, 2000
- Source reduction, recycling, and composting of 75% of all sold waste on or after 2020 and annually thereafter

The California Department of Resources Recycling and Recovery (CalRecycle) was required to develop strategies, including source reduction, recycling, and composting activities, to achieve the 2020 goal. (CalRecycle 2020, webpage)

Assembly Bill 1493

Known as "Pavley I," AB 1493 standards were the nation's first GHG standards for automobiles. AB 1493 required CARB to adopt vehicle standards that lower GHG emissions from new light-duty autos to the maximum extent feasible. Additional strengthening of the Pavley standards (previously referred to as "Pavley II," now referred to as the "Advanced Clean Cars" measure) has been proposed for vehicle model years 2017–2025. Together, the two standards are expected to increase average fuel economy to roughly 43 miles per gallon by 2020 (and more for years beyond 2020). (SB 2015, p. 5.)

Renewable Portfolio Standard

The Renewable Portfolio Standard (RPS) required energy providers to derive 33 percent of their electricity from qualified renewable sources by 2020. This is anticipated to lower emission factors (i.e., fewer GHG emissions per kilowatt-hour used) from utilities across the state; however, potential GHG reductions from this legislation were not applied to the electricity in Southern California Edison (SCE) service territory due to the uncertainty in SCE's generation sources after the closure of the San Onofre Nuclear Generating Station. (SB 2015, p. 7.)

Senate Bill 350 (SB 350), signed in 2015, increased the RPS from 33 percent in 2020 to 50 percent by 2030 and will double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation by 2030. (CARB 2017, p. 2)

Senate Bill 100 (SB 100) was subsequently signed in 2018 and directs the California Public Utilities Commission (CPUC), CEC, and CARB to plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 also accelerates the RPS to 50 percent by 2026 and to 60 percent target 2030. (SB 100 2018)

Assembly Bill 1007- State Alternative Fuels

Assembly Bill (AB) 1007 requires the CEC to prepare a plan to increase the use of alternative fuels in California. The State Alternative Fuels Plan was prepared by the CEC with the California Air Resources Board and in consultation with other federal, state, and local agencies to reduce petroleum consumption; increase use of alternative fuels (e.g., ethanol, natural gas, liquefied petroleum gas, electricity, and hydrogen); reduce GHG emissions; and increase in-state production of biofuels. The State Alternative Fuels Plan recommends a strategy that combines private capital investment, financial incentives, and advanced technology that will increase the use of alternative fuels; result in significant improvements in the energy efficiency of vehicles; and reduce trips and vehicle miles traveled through changes in travel habits and land management policies. The Alternative Fuels and Vehicle Technologies Funding Program legislation (AB 118, Statutes of 2007) proactively implements this plan (CEC 2007, p. 10).

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations (California Code of Regulations [CCR] Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings) that are sold or offered for sale in California.

Local Regulations

Sustainable Beaumont

In 2015, the City of Beaumont developed and approved *Sustainable Beaumont: The City's Roadmap to Greenhouse Gas Reductions*, a plan for reducing greenhouse gas emissions. The City committed to providing a more livable, equitable, and economically vibrant community through the incorporation of energy efficient features and the reduction of GHG emissions. (Beaumont 2040 Plan, p. 198.)

The Sustainable Beaumont Plan details a variety of goals, policies, and actions at the community and municipal levels aimed at conserving energy and reducing emissions in order to meet its GHG reduction targets. By implementing Statewide and local reduction measures, the City would achieve its reductions targets for 2020 and 2030. (SB 2015, p. 64.)

Beaumont Municipal Code

The following chapter of the Beaumont Municipal Code address energy conservation topics:

Title 15 – Building and Construction, Chapter 15.19 – Energy Code

Chapter 15.19 of the City of Beaumont Municipal Code (BMC) adopted the California Energy Code, Title 24, California Code of Regulations, Part 6, including any and all amendments thereto that may hereafter be made and adopted by the State of California through the approval of ordinance no. 1079 § 14, 12-6-2016.

5.19.3 Beaumont 2040 Plan and Revised Zoning Ordinance

This section presents those features of the proposed Project that reduce potential energy impacts.

Beaumont 2040 Plan

The Beaumont 2040 Plan goals, policies, and implementation actions that reduce potential energy impacts include:

Beaumont 2040 Plan, Chapter 3 – Land Use and Community Design

Goal 3.1: A City structure that enhances the quality of life of residents, meets the community's vision for the future, and connects new growth areas together with established Beaumont neighborhoods.

Policy 3.1.2 Re-establish the City's pedestrian-oriented Downtown, along Sixth Street and Beaumont Avenue, as a community anchor with a local and regional-serving mix of civic, commercial and residential uses.

Policy 3.1.3 Establish or preserve areas for mixed-use districts that contain a mix of retail, service, office, and residential uses in a compact, walkable setting along SR-79 (between I-10 and SR-60).

Policy 3.1.8 Require new major centers and larger residential developments to be accessible to major transportation facilities, a well-connected street network, and safe and efficient access to transit.

Policy 3.1.11 Strive to create development patterns such that most residents are within one-half mile walking distance of a variety of neighborhood-serving uses, such as parks, grocery stores, restaurants, cafes, dry cleaners, laundromats, banks, hair salons, pharmacies, religious institutions, and similar uses.

Goal 3.3: A City that preserves its existing residential neighborhoods and promotes development of new housing choices.

Policy 3.3.7 Require well-connected walkable neighborhoods with quality access to transit, pedestrian and bicycle facilities.

Goal 3.7: A City with a high-quality pedestrian environment for people, fostering interaction, activity, and safety.

Policy 3.7.1 Require that all new neighborhoods be designed and constructed to be pedestrian friendly and include features such as short blocks, wide sidewalks, tree-shaded streets, buildings oriented to streets or public spaces, traffic-calming features, convenient pedestrian street crossings, and safe streets that are designed for pedestrians, cyclists and vehicles.

Policy 3.7.2 Create pedestrian-oriented streetscapes by establishing unified street tree planting, sidewalk dimensions and maintenance, pedestrian amenities, and high-quality building frontages in all new development.

Goal 3.8: A City that encourages a healthy lifestyle for people of all ages, income levels, and cultural backgrounds.

Policy 3.8.1 Design neighborhoods to emphasize connectivity and promote physical activity, including increased pedestrian access by promoting high-density, mixed use development, access to existing and proposed transit, and the use of bicycles and walking as alternatives to driving.

Policy 3.8.3 Ensure the design of context-specific streetscaping that promotes safe travel for all users, including signs, curbs, trees and landscaping to provide a more pleasant environment for drivers, cyclists, and pedestrians.

Policy 3.8.6 Support Safe Routes to School partnerships that increase the number of school children who walk, bicycle, use public transportation and carpool to and from school.

Implementation LUCD10 Development Monitoring. Establish a monitoring and reporting system for land use development within the City. Key metrics may include housing by type and income level, commercial floor area, jobs, vehicle miles traveled, and greenhouse gas emissions. Report annual changes to the Planning Commission and City Council.

Implementation LUCD11 Pedestrian Improvements Funding. Pursue and prioritize funding for pedestrian improvements within the Downtown Area Plan area.

Implementation LUCD22 Tree Planting Program. Partner with local non-profit organizations to implement a tree planting program (planting of trees on City-owned and private property).

<u>Beaumont 2040 Plan, Chapter 4 – Mobility</u>

Goal 4.1: Promote smooth traffic flows and balance operational efficiency, technological, and economic feasibility.

Policy 4.1.4 Strengthen partnerships with transit management organizations to develop citywide demand management programs and incentives to encourage non-automotive transportation options.

Policy 4.1.5 Require residential and commercial development standards that strengthen connections to transit and promote walking to neighborhood services.

Goal 4.2: Support the development of a comprehensive network of complete streets throughout the City that provides safe, efficient, and accessible connectivity for users of all ages and abilities.

Policy 4.2.3 Design residential streets to minimize traffic volumes and/or speed, as appropriate, without compromising connectivity for emergency first responders, cyclists, and pedestrians.

Goal 4.3: A healthy transportation system that promotes and improves pedestrian, bicycle, and vehicle safety in Beaumont.

Policy 4.3.3 Support Safe Routes to School partnerships that increase the number of school children who walk, bicycle, use public transit, and carpool to and from school.

Policy 4.3.5 Integrate land use and transportation infrastructure to support higher-density development, a balanced mix of residential and commercial uses, and a connected system of sidewalks, bikeways, greenways, and transit.

Goal 4.4: A balanced transportation system that provides adequate facilities for people in the City to bicycle, walk, or take transit to their destinations.

Policy 4.4.1 Ensure connectivity of pedestrian and cyclist facilities to key destinations, such as downtown, commercial centers, and employment centers, and link these facilities to each other by providing trails along key utility corridors.

Policy 4.4.2 Develop an active transportation core in the Downtown Area and improve active transportation facilities near schools and in residential areas.

Policy 4.4.4 Develop a comprehensive trails network to connect neighborhoods and key attraction areas.

Policy 4.4.5 Promote policies and programs that encourage the use of transit and increased transit service.

Goal 4.5: Work collaboratively with regional transit agencies to enhance existing transit facilities and promote the implementation of future transit opportunities.

Policy 4.5.1 Collaborate with transit agencies and RCTC to ensure the development of transit facilities in Beaumont can accommodate future rail service between the Coachella Valley and City of Riverside.

Policy 4.5.3 Work with SunLine Transit and RCTC to analyze and forecast commuter traffic trends and develop strategies to make a more efficient transit system.

Goal 4.7: Manage and provide an adequate parking supply that meets the needs of people who live, work, and visit Beaumont.

Policy 4.7.2 Encourage developers to meet their minimum parking requirements via shared parking between uses, payment of in-lieu fees, joint parking districts, or off-site parking within a reasonable walking time of 10 minutes or less.

Policy 4.7.3 Actively identify and implement parking solutions that are sensitive to the environmental and aesthetic goals of the City and the Beaumont Downtown Area Plan.

Implementation M3 TDM Plan Requirements. Update the City's development processing requirements to require that TDM plans and strategies are developed for residential and employment land uses that reduce vehicle trips or vehicle trip lengths.

Implementation M4 Bicycle and Pedestrian Plan. Update the City's Bicycle and Pedestrian Connectivity Plan with a focus on connectivity to transit, neighborhood centers, and schools while identifying state-of-the-practice techniques for improving safety.

Implementation M14 Traffic Calming Measures in Downtown. Finalize standards to create a defined, walkable, and safe core, along the Sixth Street and Beaumont Avenue corridors, by implementing traffic calming features, planting street trees to provide shade, and providing on-street parking consistent with the Beaumont Downtown Area Plan.

Implementation M25 Special Events. Minimize parking and vehicle travel to special events through traffic management and promotion of transit to the event.

Implementation M29 Zoning Code Update. Update the City's parking Standards to:

- Provide a reduction in parking standards if comprehensive TDM programs are provided.
- Increase the number of electric vehicle charging stations in parking areas.
- Be consistent with the Downtown Area Plan.

Beaumont 2040 Plan, Chapter 5 – Economic Development and Fiscal

Goal 5.1: A dynamic local economy that attracts diverse business and investment.

Policy 5.1.4 Encourage growth and expansion of businesses and employment centers near public transit to increase transportation options for employees and limit traffic congestion.

Beaumont 2040 Plan, Chapter 6 – Health and Environmental Justice

Goal 6.5: A City that builds neighborhoods that enhance the safety and welfare of all people of all ages, income levels, and cultural backgrounds.

Policy 6.5.1 Design neighborhoods that promote pedestrian and bicycle activity as alternatives to driving. This policy is implemented through the Land Use and Community Design Element.

Policy 6.5.3 Integrate land use and transportation infrastructure to support higher-density development, a balanced mix of residential and commercial uses, and connected system of sidewalks, bikeways, greenways, and transit.

Policy 6.5.4 Prioritize transportation system improvements that encourage walking, biking and transit use in the areas with the highest need. This policy is implemented through the Mobility Element.

Beaumont 2040 Plan, Chapter 7 – Community Facilities and Infrastructure

Goal 7.1: City-wide infrastructure to support existing development and future growth.

Policy 7.1.7 Promote the design of infrastructure projects that use sustainable materials and minimize use of natural resources during construction.

Policy 7.1.8 As feasible, identify the long-term risks from climate change, including changes in flooding, storm intensity, water availability, and wildfire, during infrastructure planning and design to adapt to those changes. This policy is implemented through the Safety Element.

Goal 7.3: Buildings and landscapes promote water conservation, efficiency, and the increased use of recycled water.

Policy 7.3.1 Partner with BCVWD to promote and implement water conservation measures and reuse practices, including water efficient fixtures, leak detection, water recycling, grey water re-use and rainwater harvesting.

Policy 7.3.2 When feasible, augment regional conservation programs with City resources to encourage reduced water use in homes and businesses.

Policy 7.3.3 Support and engage in educational and outreach programs that promote water conservation and wide-spread use of water-efficient technologies to the public, homebuilders, business owners, and landscape installers.

Policy 7.3.4 Support and implement third-party programs and financing sources, such as the PACE program, to improve water efficiency of existing buildings.

Policy 7.3.5 Expand the supply of recycled water and distribution facilities in the City for irrigation at city facilities/parks/sports fields. When such supply is available, require new developments to utilize for their common irrigation needs.

Policy 7.3.6 Encourage innovative water recycling techniques, such as rainwater capture, use of cisterns, and installation of greywater systems.

Policy 7.3.7 Update and improve water conservation and landscaping requirements for new development.

Policy 7.3.8 Require the use of recycled water for irrigation of parks and golf courses in Beaumont.

Goal 7.4: Incorporate sustainable and improved stormwater management practices.

Policy 7.4.2 Explore opportunities for “green streets” that use natural processes to manage stormwater runoff, when feasible.

Policy 7.4.3 Require new development and redevelopment projects to reuse stormwater on-site to the maximum extent practical and provide adequate stormwater infrastructure for flood control.

Goal 7.6: A zero-waste program that increases recycling and reduces waste sent to the landfill.

Policy 7.6.2 Expand programs to collect food waste and green waste from commercial and residential uses.

Policy 7.6.3 Promote green purchasing options across all City departments. Consider the lifecycle effects from purchases.

Policy 7.6.5 Ensure construction demolition achieves the State’s 65 percent target for material salvage and recycling of non-hazardous construction materials.

Policy 7.6.6 Promote waste reduction, recycling, and composting by making separate containers available in gathering areas of City-owned facilities.

Goal 7.7: Provide for a clean and healthy community through an effective solid waste collection and disposal system.

Policy 7.7.1 Implement source reduction, recycling, composting, and other appropriate measures to reduce the volume of waste materials entering regional landfills. Establish a goal to achieve 100% recycling citywide for both residential and nonresidential development.

Policy 7.7.2 Implement a commercial solid waste recycling program that consists of education, outreach, and monitoring of businesses in order to divert commercial solid waste and report progress in the annual report to CalRecycle.

Policy 7.7.3 Require businesses (including public entities) that generate four cubic yards or more of commercial solid waste per week, or a multifamily residential dwelling of five units or more, to arrange for recycling services.

Policy 7.7.4 Offer economic incentives to businesses within the City which are "zero waste."

Policy 7.7.5 Develop City programs and/or advertise County-wide programs that encourage residents to donate or dispose of surplus furniture, old electronics, clothing, oils/ grease, household hazardous materials and other household items rather than disposing of such materials in landfills.

Goal 7.9: High-quality community facilities and services that meet the needs and preferences of all residents in the City.

Policy 7.9.2 Provide community facilities and services throughout the City close to or on accessible transit corridors and priority bikeways. Ensure connecting sidewalks are well maintained for accessibility.

Implementation CFI2 Zoning and Implementation Ordinances. Update zoning and building codes to enable innovative sustainability measures such as:

- Greywater capture and reuse systems
- On-site bioretention-based stormwater facilities
- Coordinated below grade installation/repair between various providers and agencies
- Wind generation on residential and commercial buildings
- Electric vehicle infrastructure requirements
- Green building performance standards

Implementation CFI6 Water Education. Develop a water conservation and stewardship strategy with local partners and water providers to reduce water consumption, raise awareness of stormwater pollution, and encourage conservation behaviors.

Implementation CFI7 Educational materials. Produce a City resource guide for commercial and residential water recycling techniques, including conservation strategies landscaping, rainwater capture, greywater systems, and use of cisterns.

Implementation CFI20 Green Streets. Implement best practices for Green Streets on transportation corridors associated with new and existing redevelopment projects.

Implementation CFI26 Zero Waste. Work with regional partners, such as the Riverside County Department of Waste Resources, and community partners to foster a zero-waste culture, including outreach, marketing, and local grant program to support efforts.

Implementation CFI27 Public Stewards of Zero Waste. Commit all City departments to zero waste, including provision of technical support and diversion at City facilities.

Implementation CFI28 Technical Assistance. Partner closely with commercial and owners of multi-family properties to start or expand recycling and waste reduction practices.

Implementation CFI29 Debris Recycling Ordinance. Create a construction and demolition debris recycling ordinance to support the diversion of recyclable and recoverable materials. Work with local partners to conduct outreach targeting waste generators.

Implementation CFI30 Composting Program. Expand existing recycling programs to include composting yard and garden waste.

Beaumont 2040 Plan, Chapter 8 – Conservation and Open Space

Goal 8.1: A City with green buildings and developments that promote energy efficiency.

Policy 8.1.1 Promote, and incentivize when possible, energy efficiency upgrades, such as weatherization and lighting retrofits for qualified households.

Policy 8.1.2 Increase educational and outreach efforts to residential, commercial, and institutional building owners to increase awareness of Southern California Edison programs and incentives to improve energy efficiency in existing buildings.

Policy 8.1.3 Support and implement third party programs and financing sources, such as PACE or HERO programs, to install energy efficiency upgrades in existing buildings. Provide incentives for households to improve resource efficiency, such as rebate programs, and giveaways of items such as low-flow shower heads and electrical outlet insulation.

Policy 8.1.4 Partner with local residential and business associations to create a policy requiring energy disclosure, audits, and/or upgrades at time of sale of residential and commercial properties.

Policy 8.1.5 Encourage new development to reduce building energy use by adopting passive solar techniques and heat island reduction strategies:

- Maximizing interior daylighting.
- Using cool exterior siding, cool roofing, and paving materials with relatively high solar reflectivity to reduce solar heat gain.
- Planting shade trees on south- and west-facing sides of new buildings to reduce energy loads.
- Installing water efficient vegetative cover and planting, substantial tree canopy coverage.

Policy 8.1.6 When reviewing development proposals, encourage applicants and designers to consider warming temperatures in the design of cooling systems.

Policy 8.1.7 Encourage new buildings and buildings undergoing major retrofits to exceed Title 24 energy efficiency standards.

Policy 8.1.8 Require design of new development and renovations to not impair adjacent buildings' solar access, unless it can be demonstrated that the shading benefits substantially offset the impacts of solar energy generation potential.

Policy 8.1.9 Require that any new building constructed in whole or in part with City funds incorporate passive solar design features, where feasible.

Policy 8.1.10 Strive for high levels of energy efficiency in municipal facilities.

Policy 8.1.11 Whenever possible, use energy-efficient models and technology when replacing or providing new city facilities and infrastructure, such as streetlights, traffic signals, water conveyance pumps, or other public infrastructure.

Goal 8.2: A City which encourages energy from renewable sources.

Policy 8.2.1 Promote the incorporation of alternative energy generation (e.g., solar, wind, biomass) in public and private development.

Policy 8.2.2 Establish clear guidance for new solar residential mandate established by the California Energy Commission as part of the 2019 California Building Code update.

Policy 8.2.3 Establish an expedited and streamlined permit process for small photovoltaic systems (10-15 kW maximum power output).

Goal 8.3: A City that reduces citywide greenhouse gas emissions.

Policy 8.3.1 Establish greenhouse gas emission reduction targets in line with State requirements that call for reducing greenhouse gas emissions as follows:

- 1990 levels by 2020
- 40 percent below 1990 levels by 2030
- 60 percent below 1990 levels by 2040

Policy 8.3.2 Implement greenhouse gas reduction measures to achieve greenhouse gas reduction targets by updating the Climate Action Plan or similar.

Policy 8.3.4 Use the emissions inventory and monitoring tools to identify, prioritize, and update programs that effectively contribute to greenhouse gas reductions.

Policy 8.3.5 Prioritize municipal policies and programs that reduce the City's carbon footprint such as purchasing alternative fuel vehicles, pursuing solar installations, implementing green purchasing policies, and retrofitting existing buildings.

Policy 8.3.6 Promote greenhouse gas reduction measures that support local job training and placement in green industries focused on environmental sustainability, renewable energy, renewable-related technologies, and bioremediation.

Policy 8.3.7 Collaborate with regional and State partners to implement the Sustainable Communities Strategy to reduce greenhouse gas emissions, balance jobs and housing, and develop transportation systems that support all modes of circulation.

Goal 8.11: A City where archaeological, cultural resources, tribal cultural resources, and historical places are identified, recognized, and preserved.

Policy 8.11.5 Consider incentives for the inclusion of live/work creative studio space in new developments in Downtown.

Implementation C1 Energy Efficiency Programs. Develop and advertise energy efficiency programs that improve energy efficiency in existing buildings. Coordinate with WRCOG on regional initiatives.

Implementation C2 Energy Disclosure Policy. Develop a policy requiring energy disclosure, audits, and/or upgrades at time of sale for all residential and commercial buildings.

Implementation C3 Passive Solar Techniques. Review proposed developments for solar access, site design techniques, and use of landscaping that can increase energy efficiency

and reduce lifetime energy costs without significantly increasing housing production costs.

Implementation C4 Green Affordable Housing. Develop incentives for affordable housing projects that integrate sustainable and long-term green building design.

Implementation C5 Green Building Design. Update the Municipal Code to identify and prioritize green building design features that mitigate the impacts of climate change.

Implementation C6 Shade Assessment. Partner with local and regional agencies to identify and prioritize areas for shade in public places.

Implementation C8 Greenhouse gas inventory. Prepare a revised greenhouse gas inventory on regular 3-year cycles.

Implementation C9 Climate Adaptation Plan. Develop a Climate Adaptation Plan to identify Beaumont's most significant potential climate change risks and vulnerabilities in order to create a framework for decision makers to build a more resilient and sustainable community. The Climate Adaptation Plan shall include a vulnerability assessment, adaptation strategy, and plan maintenance. Special focus should be provided related to drought, extreme heat, and wildfire risk.

Implementation C10 Advanced and Green Industry Workforce Training. Coordinate with local, regional, and state entities to identify or create training and placement programs in advances and green industries, including advanced manufacturing, green building, and sustainable industries (e.g. renewable energy industries, water treatment, and wastewater management).

Implementation C11 Sustainable Communities Strategy. Coordinate with state and regional agencies to implement the Sustainable Communities Strategy.

Implementation C12 Energy Education. Promote awareness and incorporation of energy efficiency best practices for new development, including incorporation of alternative energy generation and energy efficient retrofits.

Implementation C13 Solar Access. Update municipal code to require design of new development and renovations to not impair adjacent buildings' solar access, unless shading benefits substantially offset the impacts of solar energy generation potential.

Beaumont 2040 Plan, Chapter 9 – Safety

Goal 9.10: A City that is prepared for the potential impacts of climate change.

Policy 9.10.1 Establish partnerships with Federal, State, regional, and local agencies to cooperate and better understand regional impacts of climate change and develop multijurisdictional solutions.

Policy 9.10.2 Encourage new development and redesign of existing buildings to take steps to reduce the impacts of extreme heat events, including:

- Design buildings to use less mechanical heating and cooling through use of passive solar techniques.
- Support and incentivize, as feasible, energy efficiency and weatherization programs.
- Protect and expand the City's urban tree canopy to provide shade, increase carbon sequestration, and purify the air.

- Provide shade structures in public parks, outdoor playgrounds, and bus shelters.

Policy 9.10.3 Require enhanced water conservation measures in new development and redesign of existing buildings to address the possibility of constrained future water supplies, including:

- Compliance with existing landscape water conservation ordinance (Chapter 17.06 of the Municipal Code).
- Use of water conservation measures in new development beyond current requirements.
- Installation of recycled water use and graywater systems.

Policy 9.10.4 Continue to work with the Riverside University Health Services Department and County of Riverside Emergency Management Department to establish public outreach programs (through social media and websites) to distribute information on climate change impacts on vulnerable populations including actions they can take to reduce exposure to unhealthy conditions.

Policy 9.10.5 Prioritize programs that ensure the benefits of climate action programs are fairly distributed and prioritized to those most in need, particularly populations most likely to be impacted by climate change.

Policy 9.10.6 Pursue climate change grant funding opportunities for expanding education programs and funding necessary retrofits.

Implementation S8 Climate Change Risk Assessment. Conduct a climate change risk assessment to identify potential risks and vulnerable populations. Prioritize programs and funding for populations most likely to be impacted by climate change, in accordance with SB379.

Implementation S28 Water Conservation. Review Chapter 17.06 of the Municipal Code to consider adding additional water conservation measures.

Beaumont 2040 Plan, Chapter 11 – Downtown Area Plan

Goal 11.1: Create a balanced and integrated mix of residential, office, retail and civic land uses that generate daily activity in the daytime and evenings to create a lively and dynamic environment.

Policy 11.1.2 Promote residential and office uses on the upper floors within the Downtown Core district.

Policy 11.1.3 Specify land uses along the eastern portion of 6th Street that complement the pedestrian-oriented atmosphere in the Downtown Core district.

Policy 11.1.4 Adopt zoning districts with appropriate development standards that create a walkable downtown.

Policy 11.1.5 Encourage high-density multifamily residential uses in the Extended 6th Street district.

Policy 11.1.6 Discourage or prohibit uses that are not appropriate for the pedestrian orientation or the vibrancy and liveliness of the downtown.

Policy 11.1.8 Consider development patterns that create active transportation and transit opportunities and alternatives to the automobile.

Goal 11.3: Promote public realm improvements that contribute towards the creation of a clear sense of identity and place in Downtown Beaumont.

Policy 11.3.1 Create a street environment that is comfortable and inviting for pedestrians including wide sidewalks, landscaping, street furniture, streetlights, etc.

Policy 11.3.2 Provide additional street trees, landscaping and green space throughout the Downtown to improve the area's visual appeal and increase visitors' and residents' connection with nature.

Goal 11.4: Develop design regulations that support a beautiful Downtown and a high-quality pedestrian environment.

Policy 11.4.2 Create development and design standards that produce a high-quality pedestrian oriented downtown and a sense of place, such as:

a. Orient primary building facades and front entries toward the street. Reduce side yard and front yard setbacks along 6th Street to create a more dynamic and unified street environment.

b. Encourage buildings that enclose and frame the corners of major intersections to define and identify the street.

c. Prohibit building design in the Downtown Core district that does not contribute to a vibrant and lively downtown (e.g., storage areas, long blank walls, and parking lots in front of the buildings).

d. Place parking lots in courtyards, behind buildings, or in structures that have retail adjacent to the street.

Policy 11.4.3 Develop appropriate landscape standards that complement the vision of a pedestrian-oriented streetscape.

Goal 11.8: Create a circulation system that provides a strong emphasis on "Complete Streets," safe and efficient pedestrian pathways and alternative modes of travel while facilitating movement of vehicles.

Policy 11.8.1 Protect the existing grid street system and implement Downtown Street designs.

Policy 11.8.2 Adopt traffic calming measures to improve the pedestrian environment.

Policy 11.8.3 Implement the concepts of Complete Streets, balancing the needs of automobiles, cyclist, pedestrians, and transit as appropriate.

Policy 11.8.4 Implement road diet on Sixth Street to reduce traffic speeds and thus create a safer, more pedestrian oriented streetscape.

Policy 11.8.5 Install bulb-outs to "choke" down street widths at key intersections and street segments to slow traffic and enhance pedestrian safety.

Policy 11.8.6 Ensure sidewalks are provided on both sides of all streets, with wider sidewalks in retail areas, and replace and repair missing sidewalks.

Policy 11.8.7 Provide better and more frequent pedestrian crosswalks, with special priority treatments such as bulb-outs, elevated crosswalks, in-pavement markers or texture, or high-visibility crosswalks in areas with high levels of pedestrian activity.

Policy 11.8.9 Maximize the use of alleys and rear building entries to provide access and reduce congestion on the street system.

Policy 11.8.10 Create pedestrian linkages throughout the Downtown Core district (e.g. alleys, sidewalks, and paseos).

Policy 11.8.11 Implement a safe, complete, and well-connected bicycle network.

Policy 11.8.14 Establish standards for bicycle parking for all development.

Goal 11.12: Encourage development to be efficient in the use of non-renewable resources, including water, energy, and air quality.

Policy 11.12.1 Promote the use of energy and water conservation technologies and practices.

Policy 11.12.2 Adopt new guidelines, ordinances, and incentive programs that encourage sustainable development practices and green building design.

Policy 11.12.3 Consider sustainable development practices that reduce energy and water demand.

Policy 11.12.4 Ensure that new development does not result in wind and solar access impacts.

Policy 11.12.5 Avoid creating a "canyon effect" through sensitive design and attention to the massing and orientation of new buildings.

Policy 11.12.6 Improve air quality through improved walkability, reduced vehicular use and enhanced non- vehicular travel.

Policy 11.12.7 Consider changes to the building code that will increase energy efficiency.

Implementation DAP4 Pedestrian Improvements Funding. Pursue and prioritize funding for pedestrian improvements within the Downtown Area Plan area.

Implementation DAP6 Core Service Areas. Prioritize capital spending in Downtown to promote active transportation, mixed use support improvements and establish Downtown as a destination.

Implementation DAP11 Placemaking Program. Implement recommended street improvements including sidewalk widening, street trees, street furniture and lighting installation in Downtown.

Implementation DAP12 Tree Planting Program. Partner with local non-profit organizations to implement a tree planting program (planting of trees on City-owned and private property).

Revised Zoning Ordinance

The Revised Zoning Ordinance adds Section 17.11.140 to provide regulations for the establishment, maintenance and operation of wind energy conversion systems (WECS) in the City, which reduces potential energy impacts.

5.19.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the *CEQA Guidelines*. Therefore, significance determinations utilized in this section are from Appendix G of the *CEQA Guidelines*. A significant impact will occur if implementation of the proposed Project will:

- (Threshold A) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. and/or,
- (Threshold B) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

5.19.5 Environmental Impacts before Mitigation

At the programmatic level addressed in this EIR, a variety of regulatory measures, including compliance with and implementation of Federal, State, Regional, and Local regulations as well as proposed Beaumont 2040 Plan goals, policies, and implementation actions are intended to reduce potential energy impacts to less than significant. (See full discussion on environmental impacts below.) In addition, all future implementing projects would be subject to further CEQA review focusing on the specifics of the proposed project which cannot be foreseen at this time since no specific development proposals are included as part of the Beaumont 2040 Plan.

For purposes of the analyses herein, the discussion includes the City limits as well as the City's SOI (collectively referred to as "Planning Area"). Future development of properties within the City's SOI that are annexed to the City would be subject to the City's entitlement process while future development within the City's SOI that is under the County's land use control would be subject to the County's entitlement requirements.

Threshold A: ***Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

Based on CEQA Guidelines, Appendix G, Environmental Checklist Form, and Appendix F, Energy Conservation, to ensure energy implications are considered in project decisions, CEQA requires that EIRs include a discussion of the potential impacts of proposed projects with particular emphasis on avoiding or reducing wasteful, unnecessary, or inefficient use of energy resources, as applicable. Environmental effects may include a proposed project's energy requirements and its energy-use efficiencies by amount and fuel type during demolition, construction, and operation; the effects of a proposed project on local and regional energy supplies; the effects of a proposed project on peak and base period demands for electricity and other forms of energy; the degree to which a proposed project complies with existing energy standards; the effects of a proposed project on energy resources; and the proposed project's projected transportation energy use requirements and its overall use of efficient transportation alternatives, if applicable. The energy and fuel usage information provided in this section are based on data provided by Raimi and Associates (R+A 2020).

Short Term Construction Impacts

Development projects constructed under the Beaumont 2040 Plan would create temporary demands for electricity. Natural gas is not generally required to power construction equipment, and therefore is not anticipated during construction phases. Electricity use would fluctuate according to the phase of construction. Additionally, it is anticipated that most electric-powered construction equipment would be hand tools (e.g., power drills, table saws, compressors) and lighting, which would result in minimal electricity usage during construction activities.

Development projects would also temporarily increase demands for energy associated with transportation. Transportation energy use depends on the type and number of trips, VMT, and fuel efficiency of vehicles. Energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction employee vehicles that would use diesel fuel or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. It is anticipated that most off-road construction equipment, such as those used during grading, would be gas or diesel powered. In addition, all operation of construction equipment would cease upon completion of project construction. Furthermore, the construction contractors are required to minimize nonessential idling of construction equipment during construction, in accordance with Section 2449 of 13 CCR Article 4.8, Chapter 9. Such required practices

would limit wasteful and unnecessary energy consumption. Energy use during construction would be temporary and over time would become more energy and fuel-efficient due to advances in technology and fuel economy described above in Section 5.19.2 and therefore would not be wasteful or inefficient; construction impacts to energy resources are considered be **less than significant and no mitigation measures are necessary**.

Long Term Impacts During Operation

Operation of new development projects accommodated under the Beaumont 2040 Plan would create additional demand for electricity and natural gas compared to existing conditions. Operational use of electricity and natural gas would include heating, cooling, and ventilation of buildings; water heating; operation of electrical systems; use of on-site equipment and appliances; and lighting.

Electricity and Natural Gas

Raimi and Associates (R+A) estimated the future electricity and natural gas usage at buildout of the Beaumont 2040 Plan as part of the GHG analysis evaluated in Section 5.7 of this Draft PEIR. The energy consumption estimates incorporated the regulatory requirements from the Renewable Portfolio Standard (RPS) which requires 60 percent electricity be renewable in 2030, and 100 percent be carbon-free in 2045 and current Title 24 requirements. These estimates are shown in **Table 5.19-C – 2040 Forecast Energy Consumption**.

Table 5.19-C – 2040 Forecast Energy Consumption

Category	2040 Annual Energy Usage	
	Electricity (KWh)	Natural Gas (Therms)
Residential	279,177,409	12,680,412
Nonresidential	295,339,560	2,405,045
Total	**574,516,969**	**15,085,457**

Source: R+A 2020

As previously stated in Section 5.19.1, the existing (2018) electricity and natural gas consumption within the City limits total 205,783,586 kWh and 5,943,283 therms, respectively. In comparison, SCE produced approximately 85 billion kWh of electricity in 2018 and SCG produced approximately 5.2 billion therms of natural gas in 2018 (**Tables 5.19-A** ad **5.19-B**). Thus, the Beaumont 2040 Plan's energy requirements would account for a negligible percent (approximately 0.7 and 0.3 percent, respectively) of the existing consumption of electricity and natural gas and would not significantly affect regional supplies.

While the electricity and natural gas demand for the Planning Area would increase compared to existing conditions, developments accommodated under the Beaumont 2040 Plan would be required to comply with the regulations described above in Section 5.19.2. In particular, current and future updates to the Title 24 Building Energy Efficiency Standards and CALGreen Code would contribute in reducing the energy demands shown in **Table 5.19- C**. New and replacement buildings in compliance with these standards would generally have greater energy efficiency than existing buildings. It is anticipated that each update to the Title 24 Building Energy Efficiency Standards and CALGreen Code will result in greater building energy efficiency and move closer toward buildings achieving zero net energy. In addition, the RPS increases energy sourced from renewable resources, towards being carbon free in 2045.

Implementation of the Beaumont 2040 Plan goals 8.1, 8.2, 8.3, 8.11, 9.10, and 11.12 and their policies and implementation actions listed above in Section 5.19.3, above, contribute to reducing energy consumption through increasing energy efficiency, energy conservation, and use of renewable energy. The Revised Zoning Ordinance also includes a new section (Section 17.11.140) that provides regulations for wind energy conversion systems (WECS) which accommodates future development of renewable energy sources in the Planning Area. When taken together, these policies and requirements increase energy efficiency and reduce wasteful, inefficient use of energy resources.

Transportation Fuel

Raimi and Associates (R+A) estimated the GHG emissions from future gasoline and diesel fuel usage at buildout of the Beaumont 2040 Plan as part of the GHG analysis evaluated in Section 5.7 of this Draft PEIR. The transportation fuel estimates incorporated the regulatory requirements from the Clean Car Standards currently available in CARB emissions factor (EMFAC) model and the vehicle miles traveled (VMT) data from the Traffic Impact Analysis (TIA) (Appendix F.1). These standards require that vehicles sold in California meet minimum fuel efficiency requirements, and that fuel sold in the state emits less GHGs during production and use. The EMFAC model contains fuel consumption data that was used to estimate the gasoline and diesel fuel consumption for the Planning Area. These estimates are shown in **Table 5.19-D – 2040 Forecast Fuel Consumption**.

Table 5.19-D – 2040 Forecast Fuel Consumption

Category	2040 Annual Estimate	
	VMT	Gallons
Gasoline	1,527,906,125	40,221,722
Diesel	197,399,736	26,603,256
Total	**1,725,305,861**	**66,824,978**

Source: R+A 2020

In 2019, the State of California consumed approximately 15.3 billion gallons of gasoline and 3.0 billion gallons of diesel fuel (CDTFA). Thus, the annual fuel usage at buildout of the Beaumont 2040 Plan would account for a negligible percent of the existing diesel and gasoline fuel consumption in California.

Implementation of the Beaumont 2040 Plan Beaumont 2040 Plan goals 3.1, 3.3, 3.7, 3.8, 4.1, 4.2, 4.3, 4.4, 4.5, 4.7, 5.1, 6.5, 8.3, 8.11, 11.1, 11.3, 11.4,11.8, and 11.12 and their policies and implementation actions listed above in Section 5.19.3, above, promote mixed-use development, alternative forms of transportation and investing in infrastructure for public and active transport, contributing to the reduction of transportation fuel.

In conjunction with regulatory requirements, implementation of the Beaumont 2040 Plan will ensure that energy demand associated with growth in the Planning Area would not be inefficient, wasteful, or unnecessary. Therefore, energy impacts associated with implementation the Beaumont 2040 Plan would be **less than significant and no mitigation measures are necessary**.

Threshold B: ***Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?***

There are two renewable energy plans that would apply to the project; the Renewables Portfolio through the State and the local Sustainable Beaumont Plan.

Renewables Portfolio Standard (RPS)

The state's electricity grid is transitioning to renewable energy under the RPS. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. As stated in Section 5.19.2, the RPS goals have been updated since adoption with 50 percent by 2026, 60 percent by 2030, and 100 percent by 2045. SB 100 also establishes RPS requirements for publicly owned utilities that consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. The statewide RPS requirements do not directly apply to individual development projects, but to utilities and energy providers such as SCE, whose compliance with RPS requirements would contribute to the State objective of transitioning to renewable energy. The development accommodated under the Beaumont 2040 Plan would comply with the current and future iterations of the Title 24 Building Energy Efficiency Standards and CALGreen Code. Furthermore, as discussed under Threshold A, the Beaumont 2040 Plan includes goals 8.1, 8.2, 8.3, 8.11, 9.10, and 11.12 and their policies and implementation actions listed above in Section 5.19.3, above, contribute to reducing energy consumption through increasing energy efficiency, energy conservation, and use of renewable energy. The Revised Zoning Ordinance also includes a new section (Section 17.11.140) that provides regulations for wind energy conversion systems (WECS) which accommodates future development of renewable energy sources in the Planning Area. Therefore, implementation of the Beaumont 2040 Plan would not conflict with or obstruct implementation of the RPS, and **no impact** would occur.

Sustainable Beaumont Plan

As stated in Section 5.19.2, the City adopted the Sustainable Beaumont Plan in 2015, which provides a comprehensive plan to use energy more efficiently, harnessing renewable energy to power buildings, recycling waste, and enhancing access to sustainable transportation modes, so the City can keep dollars in its local economy, create new green jobs, and improve community quality of life in addition to reducing greenhouse gas (GHG) emissions. (SB 2015, p. 1).

The Beaumont 2040 Plan builds upon the Sustainable Beaumont Plan and includes goal 8.3 and associated policies and implementation actions listed above in Section 5.19.3, above, that require the City to establish GHG reduction targets, implement reduction measures, monitor and update programs that address energy from all sectors. As discussed for Threshold A, addition goals involve increasing energy conservation and efficiency, mixed-use development, alternative forms of transportation and investing in infrastructure for public and active transportation, all of which contribute to the reduction of electricity, natural gas, and transportation fuel. These goals and their associated policies and implementing actions would contribute to the reduction in energy demand throughout the city. Thus, implementation of the Beaumont 2040 Plan would not conflict with or obstruct implementation of the Sustainable Beaumont Plan, and thus **no impact** would occur.

5.19.6 Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (*CEQA Guidelines*, Section 15126.4). Because the proposed Project will not result in significant adverse impacts with regards to energy, no mitigation measures are necessary.

5.19.7 Level of Significance after Mitigation

No mitigation measures are necessary regarding the Project's impacts to energy. With adherence to and implementation of the above Beaumont 2040 Plan goals, policies, and implementation, and applicable federal, state, and local standards/regulations discussed herein, the Project's potential impacts regarding energy were found to be **less than significant**.

The significance of energy impacts resulting from specific future development projects will be evaluated on a project-by-project basis and Beaumont 2040 Plan policies as well as City standards and practices will be applied, individually or jointly, as necessary and appropriate. If project-level impacts are identified at that time, specific mitigation measures may be required by CEQA.

5.19.8 References

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