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<b>Docket Number:</b>	24-OPT-02
<b>Project Title:</b>	Compass Battery Energy Storage
<b>TN #:</b>	255577-10
<b>Document Title:</b>	Appendix 4-10A_Economic and Public Revenue Impact Study
<b>Description:</b>	The study estimates the potential economic and public revenue impacts of the Project for the City of San Juan Capistrano and Orange County.
<b>Filer:</b>	Erin Phillips
<b>Organization:</b>	Dudek
<b>Submitter Role:</b>	Applicant Consultant
<b>Submission Date:</b>	4/8/2024 3:57:30 PM
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# **Appendix 4.10A**

## Economic and Public Revenue Impact Study



## ***TECHNICAL MEMORANDUM***

To: Paul McMillan, Broad Reach Power  
From: Economic & Planning Systems, Inc.  
Subject: Compass Battery Energy Storage Project Economic and Public Revenue Impact Study; EPS #231063  
Date: November 27, 2023

*The Economics of Land Use*



Compass Energy Storage LLC (Applicant) is proposing to construct and operate the Compass Battery Energy Storage Project (Project), an approximately 250-megawatt (MW) battery energy storage system on a 13-acre site at the northern end of the City of San Juan Capistrano. The Project is designed to have a useful life of up to 35 years. The Applicant has retained Economic & Planning Systems, Inc. (EPS) to estimate the potential economic and public revenue impacts of the Project for the City of San Juan Capistrano and Orange County.

This memorandum is divided into four parts, including Summary of Key Findings, Project Background, Study Area Socioeconomic Overview, an explanation of the Economic Impact Analysis Methodology, Economic Impact Analysis and Results, and Public Revenue Impact Analysis and Results. **Appendix A** contains additional tables pertaining to the analysis.

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## Summary of Key Findings

### 1. The Project is expected to generate substantial construction and ongoing economic activity and associated jobs and worker compensation in San Juan Capistrano.

As shown in **Table 1**, in aggregate, Project construction is estimated to generate 127 full- and part-time jobs, about \$17.9 million in employee compensation, and about \$51.6 million in total economic output in San Juan Capistrano. Project operation will provide 8 ongoing jobs, about \$840,000 in employee compensation, and \$1.5 million in economic output each year during its 35-year lifetime. Cumulatively over the 35-year period, Project Operations will provide 280 job-years, \$29.3 million in employee compensation, and \$53.8 million in economic output activity in the City. The total economic impact values described here and displayed in **Table 1** include direct effects and the smaller multiplier (indirect and induced) effects in the City, which are described in more detail in the body of the memorandum.

**Table 2** displays the economic activity generated by the Project in Orange County (rather than just in San Juan Capistrano), which utilizes the larger multiplier effects that occur in the County.

**Table 1. Total Employment, Employee Compensation, and Economic Output Impacts in San Juan Capistrano**

Project Phase	Employment <sup>1</sup>	Employee Compensation	Economic Output
Construction	127	\$17,867,000	\$51,565,000
Operations (Annual)	8	\$838,000	\$1,536,000
Operations (Lifetime)	280 <sup>2</sup>	\$29,319,000	\$53,769,000

Note: Values shown are rounded; numbers may not sum due to rounding. Additionally, all values shown represent combined Direct, Indirect, and Induced effects in the City.

[1] These figures represent **IMPLAN Jobs, not standard full-time equivalents (FTEs)**. See the **Project Background** section for an explanation of this distinction. See **Table 12** for breakdown between direct, indirect, and induced employment totals.

[2] Job-years. Represents the 8 annual operations employment figure multiplied over the 35-year project lifetime.

Source: IMPLAN; Broad Reach Power; Economic & Planning Systems, Inc.

**Table 2. Total Employment, Employee Compensation, and Economic Output Impacts in Orange County**

Project Phase	Employment <sup>1</sup>	Employee Compensation	Economic Output
Construction	238	\$28,682,000	\$81,112,000
Operations (Annual)	12	\$1,143,000	\$2,365,000
Operations (Lifetime)	427 <sup>2</sup>	\$40,014,000	\$82,762,000

Note: Values shown are rounded; numbers may not sum due to rounding. Additionally, all values shown represent combined Direct, Indirect, and Induced effects in the County.

[1] These figures represent IMPLAN Jobs, not standard full-time equivalents (FTEs). See the Project Background section for an explanation of this distinction. See Table 16 for breakdown between direct, indirect, and induced employment totals that result in the 238 value shown here.

[2] Job-years. Represents the 12.2 annual operations employment figure (per Table 18) multiplied over the 35-year project lifetime.

Source: IMPLAN; Broad Reach Power; Economic & Planning Systems, Inc.

**2. The Project is expected to generate appreciable tax revenues to the City, including one-time and ongoing tax revenues.**

The Project is estimated to generate \$8.3 million in new property tax and local sales tax revenues over the lifetime of the Project (2023-dollar terms). As shown in Table 3, the City is expected to receive about \$2.3 million in one-time sales and use tax revenues from the construction phase. The Project is also expected to generate an annual average of about \$170,000 each year in property taxes, totaling about \$6 million in property tax revenues over the life of the Project.

**Table 3. Summary of Local Property Tax and Sales and Use Tax Revenues**

City Revenues	One-Time <sup>1</sup>	Ongoing Revenues		Lifetime Total
		Annual Avg.	Over 35 Years	
General Property Tax <sup>2</sup>	\$0	\$172,000	\$6,006,000	\$6,006,000
Local Sales Taxes <sup>3</sup>	\$2,253,000	-	-	\$2,253,000
<b>Total Revenue</b>	<b>\$2,253,000</b>	<b>\$172,000</b>	<b>\$6,006,000</b>	<b>\$8,259,000</b>

Note: values shown are rounded to nearest thousand. Values may not sum due to rounding.

[1] One-time revenues generated prior to and during the construction period.

[2] Represents total property tax revenues to the City of San Juan Capistrano General Fund over the life of the project as shown in Table A-2. Annual value represents average over project lifetime.

[3] Includes one-time sales tax on construction material & fixture purchases that could accrue to the City of San Juan Capistrano.

Source: IMPLAN; Orange County Auditor-Controller; Broad Reach Power; Economic & Planning Systems, Inc.

**3. Overall, the Project will generate substantial property tax and sales and use tax revenues that will provide funding to Orange County, the State of California, as well as to the City.**

As shown in **Table 4**, the Project is expected to generate an average of about \$1.5 million in property taxes each year and a total of \$52.2 million in total over the 35-year period. Under current tax allocation factors, of this total, about \$6 million would accrue to the City (as shown in **Table 3**), \$12.4 million to Orange County, and \$33.8 million to the State for school funding. Additionally, about \$9.3 million in sales and use taxes are expected to be generated over the lifetime of the project for the San Jan Capistrano’s General Fund, County transportation projects, and the State of California.

**Table 4. Summary of Total Property Tax and Sales and Use Tax Payments**

Total Revenues	One-Time <sup>1</sup>	Ongoing Revenues		Lifetime Total
		Annual Avg.	Over 35 Years	
General Property Tax <sup>2</sup>	\$0	\$1,491,000	\$52,200,000	\$52,200,000
Sales and Use Taxes <sup>3</sup>	<u>\$9,272,000</u>	=	=	<u>\$9,272,000</u>
<b>Total Revenue</b>	<b>\$9,272,000</b>	<b>\$1,491,000</b>	<b>\$52,200,000</b>	<b>\$61,472,000</b>

Note: values shown are rounded to nearest thousand. Values may not sum due to rounding.

[1] One-time revenues generated prior to and during the construction period.

[2] Represents total property tax revenues over the life of the project, regardless of recipient agency, as shown in **Table A-2**. Annual value represents average over project lifetime.

[3] Includes potential one-time sales tax on construction material & fixture purchases.

Source: IMPLAN; Orange County Auditor-Controller; Broad Reach Power; Economic & Planning Systems, Inc.

## Project Background

The Compass Battery Energy Storage Project is a proposed 250-megawatt battery energy storage system in northern San Juan Capistrano, in Orange County, California, with an anticipated capital cost in excess of \$300 million. For the purposes of this analysis, the project is split into two distinct phases: construction and ongoing operations. The construction phase is anticipated to last 18 months with direct on-site employment averaging out to 123 full-time equivalent (FTE) positions, with **Table 5** below demonstrating the anticipated number of workers by Trade expected to be employed each month during the construction phase. It is important to emphasize that this memorandum and the underlying methodology of the analysis is required to distinguish between Full Time Equivalent (FTE) employees and IMPLAN job counts. The IMPLAN employee count includes all full-time, part-time, and temporary positions, and therefore the original direct construction phase FTE value of 123 must be converted to IMPLAN employees in order to correctly generate economic impact estimates via IMPLAN. This conversion results in the employee count of 127 that is utilized throughout this memorandum.

The Applicant has indicated the intent to compensate employees with prevailing wage rates, which are used in this analysis. The operations phase, or total project lifetime, is expected to have a timeline of 35 years. For a project of this scale, the Applicant anticipates the employment of eight full-time employees throughout the project's lifetime. These jobs represent direct project jobs; additional Project-related jobs are described further below.

**Table 5 Monthly FTEs by Trade during Construction Phase**

Trade	FTE Projection by Month																		Annual FTEs over Project Lifetime <sup>1</sup>
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Electrician	-	-	-	40	50	50	50	50	50	50	50	40	30	30	46	19	25	21	50
Lineman	-	-	-	-	-	-	-	-	-	-	-	10	10	10	10	10	-	-	4
Operator	30	30	30	27	15	15	15	15	15	15	15	12	9	9	9	-	-	-	22
Laborer	10	10	10	8	6	6	6	6	6	6	6	8	5	5	21	24	22	19	15
Civil	-	-	-	28	38	38	38	38	38	38	38	28	18	18	18	-	-	-	31
<b>Total FTEs</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>103</b>	<b>109</b>	<b>98</b>	<b>72</b>	<b>72</b>	<b>104</b>	<b>53</b>	<b>47</b>	<b>40</b>	<b>123</b>						

[1] Divides sum of FTE Projection by Month values by 12 to derive annual FTE equivalents over the entire Project lifetime.

Source: Broad Reach Power; Economic & Planning Systems, Inc.

## Study Area Socioeconomic Overview

The Compass Battery Energy Storage Project’s proposed location is in San Jaun Capistrano in southern Orange County and, as result, Orange County was selected as the appropriate study area. This section provides an overview of the study area and its economic base and fiscal resources.

### Economic Base

**Table 6** displays 2021 Orange County employment and economic output by industry. The predominant employing industries in the county are Professional-Scientific & Technical Services (accounting for 10.8 percent of total employment), Health Care and Social Assistance (10.5 percent), Administrative and Support and Waste Management and Remediation Services (8.8 percent), and Accommodation and Food Services (8.4 percent). Economic output reflects the value of production by industry in a given year. As shown, the industries with the largest 2021 economic outputs in Orange County are Manufacturing (14.8 percent of the 2021 countywide output), Real Estate and Rental (13.5 percent), Finance and Insurance (10.2 percent), and Professional-Scientific & Technical Services (10.0 percent).

**Table 6 Orange County Employment and Economic Output by Industry**

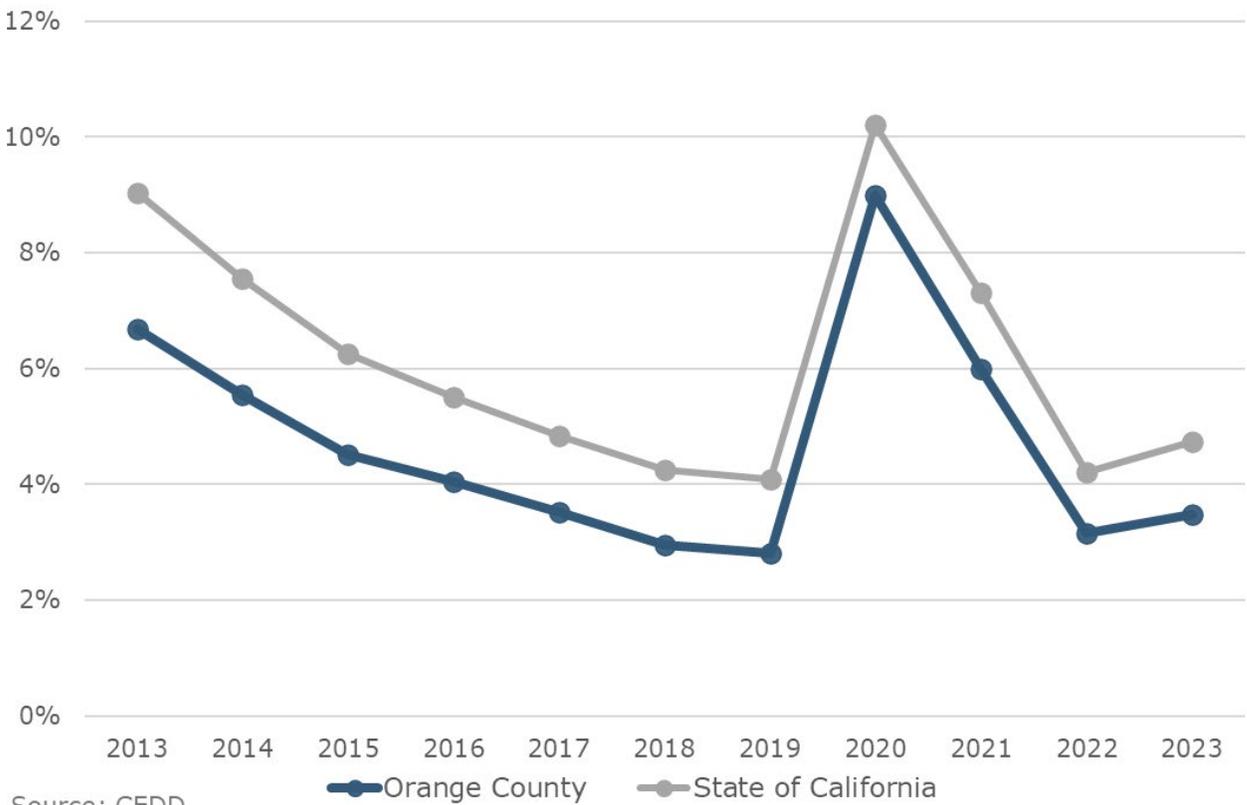
NAICS Industry	Total Employment		Economic Output <sup>1</sup>	
	#	%	#	%
Ag., Forestry, Fishing & Hunting	2,334	0.1%	\$139	0.0%
Mining	1,957	0.1%	\$982	0.2%
Utilities	3,009	0.1%	\$5,100	1.1%
Construction	133,925	6.1%	\$26,757	5.7%
Manufacturing	158,021	7.2%	\$69,826	14.8%
Wholesale Trade	87,025	3.9%	\$41,543	8.8%
Retail Trade	171,731	7.8%	\$22,268	4.7%
Transportation & Warehousing	65,213	3.0%	\$6,990	1.5%
Information	28,738	1.3%	\$21,645	4.6%
Finance & Insurance	148,371	6.7%	\$48,372	10.2%
Real Estate & Rental	145,778	6.6%	\$63,880	13.5%
Professional-Scientific & Tech. Svcs.	237,751	10.8%	\$47,092	10.0%
Management of Companies	40,255	1.8%	\$10,887	2.3%
Admin. & Support and Waste Mgmt. and Rem. Svcs.	192,999	8.8%	\$23,003	4.9%
Educational Services	42,393	1.9%	\$3,077	0.7%
Health Care and Social Assistance	231,753	10.5%	\$27,573	5.8%
Arts, Entertainment & Recreation	38,532	1.7%	\$3,056	0.6%
Accommodation & Food Services	184,406	8.4%	\$18,194	3.8%
Other Services (except Public Administration)	136,971	6.2%	\$11,618	2.5%
Government Enterprises	11,957	0.5%	\$3,120	0.7%
Administrative Government	140,861	6.4%	\$17,995	3.8%
<b>Total</b>	<b>2,203,982</b>	<b>100%</b>	<b>\$473,117</b>	<b>100%</b>

[1] Dollar values shown in millions.

Source: IMPLAN 2021 Data; Economic & Planning Systems, Inc

**Figure 1** shows annual unemployment rates in Orange County and statewide from 2013-2023. Following the 2008-09 recession, statewide unemployment rates were still high in 2013 at nine percent, but lower in Orange County, where under 7 percent of the labor force was unemployed. In the years since, the county continued to recover and by 2019 had reduced unemployment to about three percent, lower than the statewide rate at the time. However, the COVID pandemic caused a rapid increase in unemployment, and the unemployment rate in Orange County rose to nine percent and over ten percent in the state. In the last three years, unemployment rates have dropped to pre-pandemic levels, and in 2022 the unemployment rate was about three percent in the County and approximately four percent in the state. According to the California Employment Development Department (CEDD), the most recent data for Orange County (September 2023) indicates the county unemployment rate is 3.7 percent.

**Figure 1 Ann. Avg. Unemployment Rates – Orange County and the State of California**



**Table 7** below presents ACS 2017-2021 5-Year Estimates for Orange County’s existing construction industry labor force. As stated above, the CEDD indicates Orange County’s most recent unemployment rate (September 2023) is at 3.7 percent. It is therefore estimated that 3.7 percent of the County’s construction labor force, or about 2,558 construction workers out of the total 69,126 workers, are available and could conceivably be hired as part of the Project’s construction phase. As the construction phase of the Project will require 123 total FTEs, it is therefore assumed that the County’s existing construction labor force has a sufficient number of currently unemployed construction workers to fulfill the needs of the construction phase of the Project, and the labor force is anticipated to be sourced from within the County.

**Table 7 Orange County Construction Labor Force**

Construction Occupation	Orange County Labor Force
First-line supervisors of construction trades and extraction workers	5,808
Brickmasons, blockmasons, stonemasons, and reinforcing iron and rebar workers	970
Carpenters	10,521
Carpet, floor, and tile installers and finishers	1,935
Cement masons, concrete finishers, and terrazzo workers	426
Construction laborers	22,543
Construction equipment operators	1,270
Drywall installers, ceiling tile installers, and tapers	971
Electricians	6,719
Glaziers	390
Insulation workers	177
Painters and paperhangers	7,523
Pipelayers	531
Plumbers, pipefitters, and steamfitters	5,549
Plasterers and stucco masons	456
Roofers	1,405
Structural iron and steel workers	588
Helpers, construction trades	517
Elevator installers and repairers	319
Other construction and related workers	<u>508</u>
<b>Total Orange County Construction Labor Force</b>	<b>69,126</b>

Source: 2017-2021 5-Year ACS PUMS; Economic & Planning Systems

## Fiscal Resources

The local agency with taxing authority is Orange County. **Table 8** presents Orange County’s total change in net position for both governmental and business-type activities for Fiscal Years (FY) 2021 and 2022. In 2022, the County had about \$5.64 billion in revenue, an increase of about one percent from \$5.60 billion in 2021. The County’s expenditures decreased by almost 11 percent in 2022, from \$4.78 billion 2021 to \$4.26 billion in 2022. This resulted in the County having a positive \$1.38 billion change in position in 2022, as compared to \$819 million in 2021.

**Table 8 Orange County Change in Net Position – Total Activities (in thousands)**

Item	FY2021	FY2022
<u>Revenues</u>		
Charges for Services	\$914,405	\$1,002,675
Operating Grants/Contributions	\$3,221,552	\$3,187,387
Capital Grants/Contributions	\$147,270	\$131,253
Property Taxes	\$624,552	\$653,893
Property Taxes in Lieu of Motor Vehicle License Fees	\$438,321	\$455,578
Other Taxes	\$127,791	\$149,568
Grants and Contributions not Restricted to Specific Programs	\$15,547	\$4,631
State Allocation of Motor Vehicle License Fees	\$3,528	\$3,863
Other General Revenues	\$103,675	\$55,748
<b>Total Revenues</b>	<b>\$5,596,641</b>	<b>\$5,644,596</b>
<u>Expenses</u>		
General Government	\$188,668	\$189,650
Public Protections	\$1,513,781	\$1,377,502
Public Ways and Facilities	\$138,670	\$149,290
Health and Sanitation	\$1,106,989	\$830,673
Public Assistance	\$1,358,723	\$1,224,045
Education	\$52,579	\$57,060
Recreation and Cultural Services	\$128,747	\$129,380
Interest on Long-Term Debt	\$27,232	\$35,148
Airport	\$128,160	\$133,555
OC Waste & Recycling	\$134,202	\$134,620
Compressed Natural Gas	\$11	\$13
<b>Total Expenses</b>	<b>\$4,777,762</b>	<b>\$4,260,936</b>
Change in Position	\$818,879	\$1,383,660

Note: Values shown in thousands

Source: 2022 Orange County Final Annual Comprehensive Financial Report

**Table 9** shows the County’s actual General Fund revenues in FY 2022-2023 and the projected General Fund revenues in FY 2023-2024. As shown, Intergovernmental Revenues are the largest source of revenue for Orange County’s General Fund. Taxes are the second largest funding source, accounting for 17 percent of General Fund revenues in FY 2022-2023. Total General Fund revenues are anticipated to increase in FY 2023-2024 from the previous year due to general increases across all sources of revenue, with a steep increase in Reserve Cancellations.

**Table 9 Orange County General Fund Financing Sources (in millions)**

Description	FY2022-23 Actual		FY2023-24 Final	
	#	%	#	%
<b>General Fund Revenues</b>				
Intergovernmental Revenues	\$3,097.4	43%	\$3,532.1	38%
Fund Balance Unassigned (FBU)	-	-	\$318.7	3%
Charges For Services	\$969.6	14%	\$1,060.2	11%
Taxes	\$1,246.2	17%	\$1,339.1	14%
Miscellaneous Revenues	\$474.4	7%	\$507.2	5%
Other Financing Sources	\$909.7	13%	\$1,309.7	14%
Revenue From Use Of Money & Property	\$169.0	2%	\$242.6	3%
Reserve Cancellations	\$197.6	3%	\$930.0	10%
Fines & Forfeitures/License & Permits	\$89.2	1%	\$88.1	1%
<b>Total Revenues</b>	<b>\$7,153.1</b>	<b>100%</b>	<b>\$9,327.7</b>	<b>100%</b>

Note: Values shown in millions

Source: Orange County Final Budget FY 2023-2024

In addition to Orange County, the City of San Juan Capistrano is also an applicable local agency with taxing powers on the Project as the Project will be located within city limits. **Table 10** shows San Juan Capistrano’s total change in net position for governmental and business-type activities for Fiscal Years (FY) 2021 and 2022. From 2021 to 2022, the City’s revenue decreased by approximately 11 percent from \$79.9 million to \$71.1 million. Meanwhile, the City’s expenses decreased by only four percent from \$63.0 million in 2021 to \$60.6 million in 2022. As a result, the City had a positive position of \$10.5 million in 2022 compared to \$16.8 million in 2021.

**Table 10 San Juan Capistrano Change in Net Position – Total Activities (in thousands)**

Item	FY2021	FY2022
<b>Revenues</b>		
Charges for Services	\$34,672	\$20,110
Operating Grants and Contributions	\$3,990	\$3,802
Capital Grants and Contributions	\$1,809	\$4,080
General Revenues:		
Taxes:		
Sales Tax	\$10,689	\$11,932
Property Tax	\$15,803	\$16,325
Franchise Tax	\$1,985	\$1,389
Other Taxes	\$2,209	\$3,549
Investment Income, Unrestricted	\$439	(\$230)
Intergovernmental	\$1,168	\$8,003
Miscellaneous	\$7,115	\$2,154
<b>Total Revenues</b>	<b>\$79,878</b>	<b>\$71,114</b>
<b>Expenses</b>		
General Government	\$3,743	\$4,003
Public Safety	\$11,452	\$11,598
Development Services	\$3,286	\$4,786
Community Services	\$2,879	\$2,084
Public Works/Utilities	\$14,645	\$25,094
Interest and Fiscal Charges	\$963	\$929
Water	\$21,000	\$8,863
Municipal Sewer	\$4,605	\$2,837
Housing Authority	\$461	\$390
<b>Total Expenses</b>	<b>\$63,035</b>	<b>\$60,584</b>
Change in Position	\$16,843	\$10,530

Note: Values shown in thousands

Source: 2022 San Juan Capistrano Annual Comprehensive Financial Report.

**Table 11** shows San Juan Capistrano’s General Fund revenues in FY 2022-2023 and the projected General Fund revenues for FY 2023-2024. Property taxes are the largest source of General Fund revenue for the City, accounting for 38 percent of total General Fund revenues in FY 2022-23. Sales taxes are the second largest funding source, accounting for 30 percent of General Fund revenues in FY 2022-2023. Total General Fund revenues are anticipated to decrease by approximately one percent in FY 2023-2024 from the previous year due primarily to a projected decline in Licenses, Fees and Permits and Other Revenue.

**Table 11 San Juan Capistrano General Fund Financing Sources (in thousands)**

Description	FY2022-23		FY2023-24	
	Amended <sup>1</sup>		Adopted	
	#	%	#	%
<b>General Fund Revenues</b>				
Property Taxes	\$14,753	38%	\$15,017	39%
Sales Tax	\$11,580	30%	\$12,232	32%
Other Taxes	\$2,859	7%	\$3,068	8%
Franchise Fees	\$1,863	5%	\$1,586	4%
Other Agencies	\$1,264	3%	\$1,113	3%
Licenses, Fees and Permits	\$3,431	9%	\$2,913	8%
Current Services	\$310	1%	\$409	1%
Use of Money & Property	\$496	1%	\$474	1%
Fines & Forfeitures	\$1,105	3%	\$1,130	3%
Other Revenue	\$807	2%	\$120	0%
Transfers In	\$738	2%	\$754	2%
<b>Total Revenues</b>	<b>\$39,206</b>	<b>100%</b>	<b>\$38,816</b>	<b>100%</b>

Note: Values shown in thousands

[1] Per Fiscal Year 2022/23 Second Quarter Financial Report and appropriations that were approved by City Council through March 21, 2023.

Source: San Juan Capistrano Fiscal Year 2023-24 Budget.

## Economic Impact Analysis Methodology

This analysis uses an Input-Output (I/O) modeling framework to quantify the project’s one-time and ongoing contributions to city and countywide output, employment, and labor income. The I/O modeling framework is premised on the concept that industries in a geographic region are interdependent in the sense that they purchase output from and supply input to other industries. This regional economic analysis relies on IMPLAN (Impact Analysis for Planning) software, an I/O model that draws on data collected by the IMPLAN Group, LLC, from several state and federal sources, including the Bureau of Economic Analysis, the Bureau of Labor Statistics, and the Census Bureau. The model is used widely for estimating economic impacts across a wide array of industries and economic settings.

Regional economic impact analysis and I/O models in particular provide a means to estimate total effects stemming from a particular industry or activity, and yield estimates of the number and types of jobs created, the wages associated with those jobs, and the total economic output or “final sales” generated within various industries. I/O models rely on economic “multipliers” that mathematically represent the relationship between the initial change in one sector of the economy and the effect of that change on other interdependent industry sectors, corresponding changes in demand for inputs to *those* interdependent sectors, and so on. These effects are commonly described as “direct,” “indirect,” or “induced” and are generally defined as follows:

- The **direct effect** is the initial change in economic activity in a specific industry or sector. For example, economic activities (business revenues, jobs, employee earnings) occurring at the Compass Project site would represent the direct impact on the San Juan Capistrano economy.

- The **indirect effect** results from industry-to-industry transactions required to support the direct activity. This effect is a measure of the change in the output of suppliers linked to the industry that is being evaluated. For example, the construction of the new battery energy storage project will cause an increase in sales of construction materials, engineering services, and other goods from “business-to-business” suppliers in San Juan Capistrano and elsewhere. While the project will create indirect effects in the State overall, for this analysis only indirect effects within San Juan Capistrano and, separately, Orange County, are estimated.
- The **induced effect** consists of impacts from employee spending in the regional economy. Specifically, the employees of directly and indirectly affected businesses generate this effect by purchasing goods and services in the regional economy (e.g., food, clothing, automobiles, health care, etc.). For this analysis, induced effects within San Juan Capistrano and Orange County are estimated separately. As with the indirect effects, there will be additional induced effects felt in the state above and beyond the citywide and countywide effects estimated in this analysis.
- The **total impact** is the sum of the direct, indirect, and induced effects. The total impact measures the overall impact as an activity as it “ripples” through the economy.

This report measures economic significance using common economic metrics, including employment, full-time equivalents, employee compensation, output, and value added, as defined below.

- **Employment** is equivalent to IMPLAN jobs, a headcount that includes part-time and full-time workers. All employment figures, unless indicated otherwise, are presented this way.
- **Full-Time Equivalents (FTE)** represent the total number of work hours, excluding overtime and holidays, worked by employees divided by the number of compensable hours in a full-time schedule. For example, if an employer considered 40 hours to be a full-time workweek through an entire year, an employee working 40-hour workweeks would be equivalent to one FTE while an employee that worked 20 hours weekly through the entire year would have an FTE of 0.5.
- A **Job-Year** is defined as one year of work for one person. For example, one person holding a job for 12 months equals one job-year, and two people each holding a job for six months would also equal one job-year.
- **Employee Compensation** represents payments to labor in the form of both income and fringe benefits paid by the employer (e.g., health, retirement).
- **Economic Output** represents a measure of economic activity, calculated as production value or final sales value. This measure indicates the total value of the economic activity including the value of intermediate inputs (i.e., the goods and services used in the production of final products that are not sold in final-demand markets).
- **Value Added** represents an alternative and smaller metric of economic activity than economic output. Similar to the concept and definition of Gross Domestic Product (GDP) often used to report national levels of economic activity, value added counts only the additional economic value added at a particular site or area, excluding the value of any intermediate inputs purchased. As a result, value added equals economic output (described above) minus the value of intermediate inputs. A successful project will cover employee compensation, proprietor income and profit, and tax payments with its value added.

## Notes on Input-Output Modeling

There are two important caveats relevant to the interpretation of IMPLAN model estimates derived in this report.

First, the input-output methodology assumes that demand for goods and services by industries or households directly relates to the increase in income and that an increase in demand results in a proportional increase in *local* supply and employment. This assumes fixed linear relationships between input (resource) use and output and between income and consumption. This assumption allows for economic modeling and best estimates of economic impacts, recognizing that, in reality, responses to final demand changes may not occur in direct linear proportions.

Second, I/O models assume that local suppliers have sufficient capacity to respond to changes in final demand by increasing their output and hiring additional workers without shifting any production resources (inputs) from other competing needs. This assumption may not hold in areas with tight labor or capital markets since suppliers may find it difficult to obtain these labor or material inputs or other resources necessary to expand production. While the County's unemployment rate of approximately 3.7 percent<sup>1</sup> is low, the large size of the County's labor force suggests that there should be sufficient labor available to support the project without affecting other businesses. Furthermore, it is important to note that I/O modeling does not delineate the origin of labor and whether or not the employees supported by projects would reside within the County or region of interest.

## Economic Impact Analysis and Results

EPS has estimated the economic impacts during the construction phase and operations phase of the Project as summarized in this section and the Appendix, with results presented for both the City of San Juan Capistrano and Orange County overall. All monetary estimates are in constant 2023 dollars.

### San Juan Capistrano Impacts

As shown in **Table 12** and **Table 13**, in the City of San Juan Capistrano, the construction phase results in a total employee compensation of about \$17.9 million and an economic output of \$51.6 million.<sup>2</sup> In **Table 14** and **Table 15**, the operations phase in the City is estimated to result in a total employee compensation of about \$840,000 annually, summing to \$29.3 million when considered over the Project's 35-year lifetime. As shown in **Table 15**, economic output of \$1.5 million annually, totaling \$53.8 million over the Project's 35-year lifetime.

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<sup>1</sup> Orange County unemployment rate in September 2023 per the California Employment Development Department.

<sup>2</sup> Employment totals are not representative of FTEs, which totals 123 as shown in Table 5. Rather, they are indicative of an employee headcount, which is an input used in IMPLAN I/O modeling.

**Table 12. Employment Indicators of Project Construction – San Juan Capistrano**

Type of Impact	Employment	Employee Compensation <sup>1</sup>
<u>Construction Phase</u>		
Direct Impacts <sup>2</sup>	127	\$17,830,833
Indirect and Induced Impacts	<u>0.26</u>	<u>\$36,163</u>
<b>Total Impacts</b>	<b>127</b>	<b>\$17,866,996</b>

[1] Employee compensation includes benefits in addition to wages and salaries. Direct compensation estimate based on anticipated prevailing wage rates by position provided by Broad Reach Power.

[2] The direct employment figure is the total number of wage and salary jobs. This number was calculated by converting the project's 123 FTE direct jobs figure using IMPLAN's FTE to Employee Count Converter. The FTE figure was calculated by EPS based on employment workforce numbers and job duration, which were provided by Broad Reach Power. EPS' FTE calculation is provided in **Table 5**.

Source: IMPLAN; Broad Reach Power; Economic & Planning Systems, Inc.

**Table 13. Economic Activity of Project Construction – San Juan Capistrano**

Type of Impact	Value Added	Economic Output
<u>Construction Phase</u>		
Direct Impacts	\$33,257,971	\$51,467,878
Indirect and Induced Impacts	<u>\$60,923</u>	<u>\$97,534</u>
<b>Total Impacts</b>	<b>\$33,318,894</b>	<b>\$51,565,412</b>

Source: IMPLAN; Broad Reach Power; Economic & Planning Systems, Inc.

**Table 14. Employment Indicators of Project Operations – San Juan Capistrano**

Type of Impact	Employment	Employee Compensation
<u>Operations Phase (Annual)</u>		
Direct Impacts	8	\$836,931
Indirect and Induced Impacts	<u>0.01</u>	<u>\$744</u>
<b>Total Impacts</b>	<b>8</b>	<b>\$837,676</b>
<u>Operations Phase (Lifetime)<sup>1</sup></u>		
Direct Impacts	280 <sup>2</sup>	\$29,292,598
Indirect and Induced Impacts	<u>0.35</u> <sup>2</sup>	<u>\$26,054</u>
<b>Total Impacts</b>	<b>280</b>	<b>\$29,318,652</b>

[1] Multiplies annual impacts by the 35-year project lifetime.

[2] Values represent job-years, i.e., the eight annual Direct jobs multiplied over the 35-year operations phase lifetime results in 280 Direct jobs over the life of the operations phase.

Source: IMPLAN; Economic & Planning Systems, Inc.

**Table 15. Economic Activity of Project Operations – San Juan Capistrano**

Type of Impact	Value Added	Economic Output
<u>Operations Phase (Annual)</u>		
Direct Impacts	\$1,068,375	\$1,534,364
Indirect and Induced Impacts	<u>\$1,269</u>	<u>\$1,879</u>
<b>Total Impacts</b>	<b>\$1,069,644</b>	<b>\$1,536,243</b>
<u>Operations Phase (Lifetime)<sup>1</sup></u>		
Direct Impacts	\$37,393,129	\$53,702,727
Indirect and Induced Impacts	<u>\$44,415</u>	<u>\$65,781</u>
<b>Total Impacts</b>	<b>\$37,437,543</b>	<b>\$53,768,508</b>

[1] Multiplies annual impacts by the 35-year project lifetime.

Source: IMPLAN; Economic & Planning Systems, Inc.

## Orange County Impacts

As shown in **Table 16** and **Table 17**, in Orange County the construction phase is estimated to result in a total economic output of \$81.1 million, with \$28.7 million in employee compensation. In **Table 18**, the operations phase is shown to result in \$1.1 million in annual employee compensation in the County, summing to \$40 million over 35 years of operation. **Table 19** displays the Project’s estimated Countywide economic output of \$2.4 million annually, totaling \$82.8 million when considered over the Project’s 35-year lifetime. The higher results for Orange County are the result of the greater multiplier effects (indirect and induced impacts) over this larger geography; the direct Project-related impacts are unchanged.

**Table 16. Employment Indicators of Project Construction – Orange County**

Type of Impact	Employment	Employee Compensation <sup>1</sup>
<u>Construction Phase</u>		
Direct Impacts <sup>2</sup>	127	\$17,830,833
Indirect and Induced Impacts	<u>111</u>	<u>\$10,851,301</u>
<b>Total Impacts</b>	<b>238</b>	<b>\$28,682,134</b>

[1] Employee compensation includes benefits in addition to wages and salaries. Direct compensation estimate based on anticipated prevailing wage rates by position provided by Broad Reach Power.

[2] The direct employment figure is the total number of wage and salary jobs. This number was calculated by converting the project's 123 FTE direct jobs figure using IMPLAN's FTE to Employee count converter. The FTE figure was calculated by EPS based on employment workforce numbers and job duration, which were provided by Broad Reach Power. EPS' FTE calculation provided in **Table 5**.

Source: IMPLAN; Economic & Planning Systems, Inc.

**Table 17. Economic Activity of Project Construction – Orange County**

Type of Impact	Value Added	Economic Output
<u>Construction Phase</u>		
Direct Impacts	\$33,257,971	\$51,467,878
Indirect and Induced Impacts	<u>\$18,598,795</u>	<u>\$29,644,435</u>
<b>Total Impacts</b>	<b>\$51,856,766</b>	<b>\$81,112,313</b>

Source: IMPLAN; Economic & Planning Systems, Inc.

**Table 18. Total Economic Impacts of Project Operations – Orange County**

Type of Impact	Employment	Employee Compensation
<u>Operations Phase (Annual)</u>		
Direct Impacts	8	\$836,931
Indirect and Induced Impacts	<u>4.20</u>	<u>\$306,334</u>
<b>Total Impacts</b>	<b>12</b>	<b>\$1,143,265</b>
<u>Operations Phase (Lifetime)<sup>1</sup></u>		
Direct Impacts	280 <sup>2</sup>	\$29,292,598
Indirect and Induced Impacts	<u>147 <sup>2</sup></u>	<u>\$10,721,683</u>
<b>Total Impacts</b>	<b>427</b>	<b>\$40,014,282</b>

[1] Multiplies annual impacts by the 35-year project lifetime.

[2] Values represent job-years, i.e., the eight annual Direct jobs multiplied over the 35-year operations phase lifetime results in 280 Direct jobs over the life of the operations phase.

Source: IMPLAN; Economic & Planning Systems, Inc.

**Table 19. Economic Activity of Project Operations – Orange County**

Type of Impact	Value Added	Economic Output
<u>Operations Phase (Annual)</u>		
Direct Impacts	\$1,068,375	\$1,534,364
Indirect and Induced Impacts	<u>\$517,172</u>	<u>\$830,270</u>
<b>Total Impacts</b>	<b>\$1,585,548</b>	<b>\$2,364,634</b>
<u>Operations Phase (Lifetime)<sup>1</sup></u>		
Direct Impacts	\$37,393,129	\$53,702,727
Indirect and Induced Impacts	<u>\$18,101,037</u>	<u>\$29,059,462</u>
<b>Total Impacts</b>	<b>\$55,494,165</b>	<b>\$82,762,189</b>

[1] Multiplies annual impacts by the 35-year project lifetime.

Source: IMPLAN; Economic & Planning Systems, Inc.

## **Direct Economic Impacts**

### ***Direct Economic Impacts during the Construction Phase***

**Table 12** and **Table 13**, and **Table 16** and **Table 17**, summarize the Project's estimated construction phase direct impacts on employment, employee compensation, and economic output in the City and County, respectively. As previously stated, onsite construction activities will support employment for a total of about 127 jobs over the 18-month construction period. The employment value of 127 shown in **Table 12** represents the total number of wage and salary jobs. This number was calculated by converting the 123 FTEs to a headcount figure from IMPLAN's FTE to Employee count converter. The FTE figure was calculated by EPS based on employment workforce numbers and job duration, which were provided by Broad Reach Power. These jobs will include electricians, linemen, and other skilled laborers in addition to general laborers. Direct impacts are equivalent for both the City and County as these values represent the on-site activities for Project Construction.

### ***Direct Economic Impacts during the Operations Phase***

**Table 14** and **Table 15** display the estimated direct impacts in San Juan Capistrano during the Project's operation phase, and **Table 18** and **Table 19** display the County equivalent. Project operations will involve monitoring system status, performance, diagnostics, and planning, as well as preventive maintenance activities and periodic corrective maintenance activities. The developer anticipates that an average of eight full-time employees will be required to manage the Project's ongoing operations, each earning about \$72,000 in annual compensation including benefits, resulting in an annual employee compensation (including proprietor income) of about \$840,000 and a total economic output of \$1.5 million. Estimated employee compensation is based on compensation estimates from other California renewable energy projects. Direct impacts are equivalent for both the City and County as these values represent the on-site activities during the Project's operations phase.

## **Economic Impacts from Multiplier Effects**

Based on the Project's direct spending on labor as well as required materials and services, additional rounds of spending will occur in the City as well as the County and State. This section focuses on effects specific to San Juan Capistrano and Orange County. It does not review the significant additional effects that will be felt in the State above and beyond those felt locally. Businesses in the supply chain (providing materials, equipment, and services) will respond to meet the Project's demand and constitute the Project's "indirect" effects. Employees' spending on goods and services for their households —groceries, housing, healthcare, education, etc.—are also expected in the City and County and constitute the Project's "induced" effects. In both cases, additional rounds of spending are captured in the impact estimates, such as, for example, the spending of an equipment rental company owner on maintenance services for their equipment and on groceries for their family. Together, the indirect and induced effects are known as multiplier effects.

### ***Indirect Economic Impact***

For both the construction and operations phases, estimated local spending is based on cost estimates for goods and services that are anticipated to be sourced from vendors locally via San Juan Capistrano- and Orange County-specific industry multiplier effects obtained from IMPLAN modeling. Exemplary purchases would include industrial supplies, business and professional services, labor and materials for periodic improvements (e.g., access road maintenance and weed abatement), and similar costs of doing business, and providers of these goods and services

are expected to be available in the City or County and most convenient and cost-effective to serve the Project.

### **Induced Economic Impact**

Induced impacts are based on the conversion of estimated labor incomes into household spending, or the “third round” of economic activity created by the direct impacts and subsequent indirect impacts. Employees of the Project and employees at local businesses indirectly affected by the Project will spend their wages on a variety of goods and services. For example, if an employee at the Project spends her wages on food for her family, part of that spending goes to the retail worker who sells the food, part goes to the trucker who delivers the food, part goes to the farmer who grows the food, and part goes to various intermediaries (processors, wholesalers, transportation companies, etc.). Thus, in aggregate, the spending associated with direct and indirect employees’ purchases creates demand for other businesses and helps to support other jobs in the City or County economy. Using IMPLAN outputs specific to the relevant geographies, EPS estimated the additional economic impacts that would be generated through the Project’s induced effects in the rest of the City and County.

**Table 12** and **Table 13** also show the indirect and induced impacts in San Juan Capistrano on employment, employee compensation, and economic output during the construction phase of the Project, with the operations phase equivalent shown in **Table 14** and **Table 15**. To summarize, the indirect and induced effects from the construction phase are estimated at about \$100,000 in economic output in the City. The operations phase is estimated to generate indirect and induced impacts of \$66,000 over the Project’s lifetime in the City of San Juan Capistrano.

**Table 16** through **Table 19** show the equivalent results, but specific to the County overall. In Orange County, the indirect and induced effects from the construction phase are estimated at about \$30 million in economic output in the City. The operations phase is estimated to generate indirect and induced impacts of about \$30 million in Orange County over the Project’s lifetime.

## **Public Revenue Impact Analysis and Results**

In addition to the broader economic impacts described in the preceding sections, the Project will also benefit the City, County, and State by generating new tax revenues. **Table 4** (in the **Summary of Key Findings** section) shows the overall total property and sales and use taxes expected to be generated, and **Table 3** shows the subset of these revenues that are expected to accrue to the City. The construction sales and use tax estimate assumes the Project will “localize” (i.e., capture) the maximum sales and use taxes on all purchases by establishing a “job site” address for all materials and equipment purchases.

### **Local Sales and Use Tax**

The total estimated taxable sales generated as a result of Project development is calculated in **Table A-1**. Direct taxable sales are based on the Project’s projected taxable purchases, which include materials and fixtures but exclude costs for labor and overhead. The developer can ask Project suppliers and contractors to establish a billing and delivery address at the jobsite in San Juan Capistrano for sales tax payment on all purchases of equipment and materials for the Project’s construction. Without such a “job site” address for the jobsite, only those purchases made at locations in San Juan Capistrano would generate sales and use taxes for the City. Per direction from the developer, EPS has assumed that all such purchases will have the necessary

billing and delivery address established and as such the sales tax revenue estimate reflects a situation wherein San Juan Capistrano accrues the entirety of sales and use tax revenues applicable to Project construction costs.

The City's taxable base of the Project's construction cost (major equipment) is estimated at \$225 million. Again, regardless of whether the component materials are purchased in the City, in-State but in a different City, or internationally, the establishment of a job site address would result in these sales being taxed at the point of use (i.e., at the project site in San Juan Capistrano) and therefore the total one percent sales and use tax rate is estimated to accrue to the City, resulting in the \$2.3 million revenue figure shown in **Table A-2**. Overall, the Project is estimated to generate a total of \$9.3 million in sales tax revenue, with about \$1.8 million accruing to Orange County, \$5.0 million to the State, and the remaining accruing to other cities within Orange County.

### **Property Tax Impacts**

Three potential valuation methodologies for determining the assessed value of an energy project include the sales comparison approach, the cost approach, and the income approach. As the sales comparison approach is only reliable when comparable sales data exist along with details regarding those sales, this method is not considered for this Project. The cost approach arrives at a value by summing the cost of the land and the construction cost of the improvements, less depreciation, and the income approach arrives at a value through capitalization of the projected income stream of the property. This analysis utilizes the cost approach as it requires the fewest additional assumptions.

**Table A-3** and **Table A-4** estimate the assessed value of the project over the 35 years of its anticipated lifetime and the additional property tax revenues that will be generated by the Project. The Applicant provided an initial total Project taxable valuation of \$300 million based on Project cost estimates and EPS adjusted the Project's taxable value through time to account for depreciation. The analysis utilizes a straight-line depreciation method, assuming a 25-year economic life of the Project with a residual value of 20 percent.

This depreciated assessed value will be taxed at the County's general property tax rate of one percent, resulting in \$3 million in total property tax collected in the first year of operations, gradually falling to \$600,000 by Year 26 and beyond. Cumulatively, this results in aggregate estimated property tax payments of \$52.2 million over the Project's lifetime (2023 constant dollars). This full amount is allocated to a range of different taxing entities.

Based on current tax allocation factors from the Orange County Auditor-Controller Office for the Tax Rate Area in which the Project is proposed to be located: 11.5 percent of the aggregate property tax revenues will flow to the City of San Juan Capistrano for a total of \$6 million over the life of the Project. About 24 percent is allocated to Orange County (\$12.4 million over the life of the project), 37.2 percent to Capistrano Unified School District General Fund (\$19.4 million lifetime), 9.2 percent to the South Orange County Community College District (\$4.8 million lifetime), 1.7 percent to the Orange County Department of Education (about \$900,000 lifetime), and 16.6 percent to the Educational Revenue Augmentation Fund (\$8.6 million lifetime). It is important to note that the property tax revenue apportionment to the School District flows to the State to help fund schools throughout California with funding allocated to school districts based on number of students and other factors.

## **Retail Sales Impacts**

As discussed above, the “induced” impacts of the Project are generated as employees of the Project (during construction and operations) and employees of the affected supply chain vendors spend their wages in the local economy. These employees will purchase many things for their households, including typical retail expenditures (clothing, groceries, etc.) as well as housing, healthcare, education, and other goods and services. The distribution of household spending by category tends to vary by income level, so **Table A-5** estimates the average wage of the Project’s direct, indirect, and induced employees during the construction and operations periods in order to determine the correct spending distribution to apply. Note that these figures differ from the direct compensation values in previous tables shown because they include only the value of actual wages that generate discretionary income and therefore exclude employee benefits, and they are also a weighted average of direct, indirect, and induced wages. **Table A-6** applies typical consumer expenditure pattern data from the United States Bureau of Labor Statistics and illustrates the likely expenditures associated with employees supported directly or indirectly by the Project. As shown, the construction period is estimated to generate \$3.2 million in retail sales and the operations period may support another \$150,000 in annual retail sales. These additional direct, indirect, and induced potential employee household retail sales tax revenues are not included in the summary sales tax estimates in **Table 3** or **Table 4** and are included here for illustrative purposes. Note that not all of these expenditures would be expected to occur within the City of San Juan Capistrano.

## **School Impact Fees**

The project is located within the Capistrano Unified School District (CUSD), which charges developer fees on new residential, commercial, and industrial developments. However, the proposed project does not include any buildings, and therefore will not be subject to CUSD developer fees.



## APPENDIX TABLES

**Table A-1**  
**Construction-Related Taxable Sales Estimate**  
**Compass Battery Energy Storage Project; EPS #231063**

Taxable Sales	Total Estimated Amount <sup>1</sup>	City of San Juan Capistrano		Other Orange County Jurisdictions	
		%	\$	%	\$
<b>Construction Phase Direct Purchases (One-Time)</b>					
Major Equipment Procurement <sup>2</sup> (Batteries)	\$150,000,000	100.0%	\$150,000,000	0.0%	\$0
Other Major Equipment <sup>2</sup> (Inverters, Switchyard Equipment, etc.)	\$75,000,000	100.0%	\$75,000,000	0.0%	\$0
Other Taxable Items <sup>3</sup> (Civil Works, Materials, etc.)	<u>\$18,200,000</u>	<u>1.40%</u>	<u>\$254,800</u>	<u>98.6%</u>	<u>\$17,945,200</u>
<b>Total Construction-Related Taxable Sales</b>	<b>\$243,200,000</b>	<b>92.6%</b>	<b>\$225,254,800</b>	<b>7.4%</b>	<b>\$17,945,200</b>

[1] Estimated amounts per Broad Reach Power, with any adjustments made by EPS noted in following footnotes.

[2] Taxable sales amounts assume local sales tax capture on the identified major equipment materials purchases. This assumes these purchases are from out-of-State suppliers and that Broad Reach establishes a job site address. All taxable sales on contracts greater or equal to \$5 million are routed directly to the jurisdiction within which the job site is located and it is assumed that all major equipment purchases involve contracts of above this amount.

[3] Other Taxable Items (civil works, materials, sub-contracts, etc.) is equal to the direct inputs calculated by subtracting the Value Added (appx. \$33M per **Table 13**) from the Direct Construction Output (appx. \$51 million per **Table 13**) and is expected to be sourced within Orange County. The share of Countywide taxable sales within San Juan Capistrano is 1.4%, based on California Dept. of Tax and Fee Administration data, so this is the percentage applied to the total amount as an estimate of the portion of taxable materials assumed to be purchased within the City of San Juan Capistrano. All other material purchases are assume to come from elsewhere in California or involve contracts of less than \$5 million and so not will be localized.

Source: Broad Reach Power; IMPLAN 2023; CDTFA 2022; Economic & Planning Systems

**Table A-2  
Construction-Related Sales Tax Revenue Estimate  
Compass Battery Energy Storage Project; EPS #231063**

Taxable Sales Category			City of San Juan Capistrano	Other Orange County Jurisdictions	Total
<b><u>Direct Taxable Sales</u></b>					
Construction Phase <sup>1</sup>			\$225,254,800	\$17,945,200	\$243,200,000
<hr/>					
<b>Sales and Use Tax</b>					
<u>Direct Sales Tax Revenue</u>	<u>Tax Rate</u>	<u>Recipient</u>			
City General Fund Share	1.0000%	City	\$2,252,548	\$179,452	\$2,432,000
County Transportation	0.2500%	County	\$563,137	\$44,863	\$608,000
County Measure M2 <sup>2</sup>	0.5000%	County	\$1,126,274	\$89,726	\$1,216,000
State Share <sup>3</sup>	<u>2.0625%</u>	State	<u>\$4,645,880</u>	<u>\$370,120</u>	<u>\$5,016,000</u>
<b>Total Direct Sales Tax Revenue</b>	<b>3.8125%</b>		<b>\$8,587,839</b>	<b>\$684,161</b>	<b>\$9,272,000</b>
<b>Revenue Accruing to San Juan Capistrano</b>	<b>1.0000%</b>		<b>\$2,252,548</b>	<b>\$0</b>	<b>\$2,252,548</b>
<b>Revenue Accruing to Orange County</b>	<b>0.7500%</b>		<b>\$1,689,411</b>	<b>\$134,589</b>	<b>\$1,824,000</b>

[1] See Table A-1 for how these values are derived.

[2] Measure M2, originally approved in 1990 and extended through 2041, is a voter-approved half-cent sales tax used to fund transportation improvements throughout Orange County.

[3] The standard 6.0% of sales tax charged by the State that flows to nonlocal (State-level) funds is reduced by 3.9375% (the portion that typically goes to the State General Fund) per Assembly Bill 398 partial sales and use tax exemption. The Developer has indicated their intent to utilize this exemption. As shown, this exemption does not reduce the amount of sales tax revenues that accrue locally.

Source: Broad Reach Power; CDTFA; Economic & Planning Systems

**Table A-3**  
**Summary of Assessed Value and Property Tax Estimation**  
**Compass Battery Energy Storage Project; EPS #231063**

Item	Tax Rate	Annual Average	Total
Existing Assessed Value of Property			\$1,976,039
Project Capital Expenditure			<u>\$300,000,000</u>
Total Assessed Value			\$301,976,039
<hr/>			
New Net Assessed Value of Property			\$300,000,000
Countywide General Property Tax	1.0%	\$1,491,429	\$52,200,000
<u>Allocation<sup>2</sup></u>			
City of San Juan Capistrano	11.5%	\$171,608	\$6,006,265
Orange County	23.8%	\$355,159	\$12,430,560
Capistrano Unified School General Fund	37.2%	\$555,393	\$19,438,765
South Orange County Community College District	9.2%	\$136,592	\$4,780,730
Orange County Department of Education	1.7%	\$25,173	\$881,047
Educational Revenue Augmentation Fund (ERAF)	<u>16.6%</u>	<u>\$247,504</u>	<u>\$8,662,633</u>
<b>Total</b>	<b>100.0%</b>	<b>\$1,491,429</b>	<b>\$52,200,000</b>

[1] Depreciation calculated using a straight-line method with an economic life of 25 years and a residual value of 20 percent.

[2] Orange County Auditor-Controller, Annual Tax Increment by Tax Rate Area, FY2023-24.

Source: Orange County Auditor-Controller; Broad Reach Power; Economic & Planning Systems

**Table A-4  
Assessed Value and Property Tax Estimation (Part 1 of 2)  
Compass Battery Energy Storage Project; EPS #231063**

Item	Tax Rates	Annual Average	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<b>Cost-Basis Method</b>																	
Circle Battery Valuation			300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000	300,000,000
Less: Depreciation <sup>1</sup>			240,000,000	-	(9,600,000)	(19,200,000)	(28,800,000)	(38,400,000)	(48,000,000)	(57,600,000)	(67,200,000)	(76,800,000)	(86,400,000)	(96,000,000)	(105,600,000)	(115,200,000)	(124,800,000)
Battery Depreciated Value				300,000,000	290,400,000	280,800,000	271,200,000	261,600,000	252,000,000	242,400,000	232,800,000	223,200,000	213,600,000	204,000,000	194,400,000	184,800,000	175,200,000
Countywide General Property Tax	1.00%	1,491,429	52,200,000	3,000,000	2,904,000	2,808,000	2,712,000	2,616,000	2,520,000	2,424,000	2,328,000	2,232,000	2,136,000	2,040,000	1,944,000	1,848,000	1,752,000
<b>Allocation<sup>2</sup></b>																	
City of San Juan Capistrano	11.5%	171,608	6,006,265	345,188	334,142	323,096	312,050	301,004	289,958	278,912	267,866	256,820	245,774	234,728	223,682	212,636	201,590
Orange County <sup>3</sup>	23.8%	355,159	12,430,560	714,400	691,539	668,678	645,818	622,957	600,096	577,235	554,374	531,514	508,653	485,792	462,931	440,070	417,210
Capistrano Unified School General Fund	37.2%	555,393	19,438,765	1,117,170	1,081,421	1,045,672	1,009,922	974,173	938,423	902,674	866,924	831,175	795,425	759,676	723,926	688,177	652,428
South Orange County Community College District	9.2%	136,592	4,780,730	274,755	265,962	257,170	248,378	239,586	230,794	222,002	213,210	204,417	195,625	186,833	178,041	169,249	160,457
Orange County Department of Education	1.7%	25,173	881,047	50,635	49,015	47,394	45,774	44,154	42,533	40,913	39,293	37,672	36,052	34,432	32,811	31,191	29,571
Educational Revenue Augmentation Fund (ERAF)	16.6%	247,504	8,662,633	497,852	481,921	465,990	450,059	434,127	418,196	402,265	386,334	370,402	354,471	338,540	322,608	306,677	290,746
Total	100.0%	1,491,429	52,200,000	3,000,000	2,904,000	2,808,000	2,712,000	2,616,000	2,520,000	2,424,000	2,328,000	2,232,000	2,136,000	2,040,000	1,944,000	1,848,000	1,752,000

[1] Depreciation calculated using a straight-line method with an economic life of 25 years and a residual value of 20 percent.

[2] Orange County Auditor-Controller, Annual Tax Increment by Tax Rate Area, FY2023-24.

[3] Orange County includes monies for the County General Fund, Public Library, Flood Control District, Vector Control, Fire Authority, and Transit Authority.

Source: Orange County Auditor-Controller, Broad Reach Power; Economic & Planning Systems



**Table A-5**  
**Estimation of Wages Excluding Benefits**  
**Compass Battery Energy Storage Project; EPS #231063**

Project Phase	Economic Activity	Type of Impact	Employment <sup>1</sup>	Employee Compensation (w/ Benefits) <sup>1</sup>	Employee Compensation (w/o Benefits) <sup>2</sup>
<b>Construction</b> (12 months)	Project Development	Direct Impacts	127	\$17,830,833	\$11,887,281
	Supply Chain Impacts & Employee Spending	Indirect & Induced Impacts	<u>0.3</u>	<u>\$36,163</u>	<u>\$24,108</u>
		<b>Total Impacts</b>	<b>127</b>	<b>\$17,866,996</b>	<b>\$11,911,390</b>
<b>Operations</b> (35 years)	Project Development	Direct Impacts	280	\$29,292,598	\$19,528,497
	Supply Chain Impacts & Employee Spending	Indirect & Induced Impacts	<u>0.4</u>	<u>\$26,054</u>	<u>\$17,369</u>
		<b>Total Impacts</b>	<b>280</b>	<b>\$29,318,652</b>	<b>\$19,545,866</b>

[1] Construction values per **Table 12**, operations values per **Table 15**. Values shown represent San Juan Capistrano-specific impacts.

[2] Assumes benefits constitute one-third of total employee compensation.

Source: IMPLAN; Broad Reach Power; Economic & Planning Systems

**Table A-6**  
**Estimation of Annual Retail Sales**  
**Compass Battery Energy Storage Project; EPS #231063**

Retail Categories	Construction		Operations (Annual)		Operations (Lifetime)	
	% of Income <sup>1</sup>	\$	% of Income <sup>1</sup>	\$	% of Income <sup>1</sup>	\$
<b>Total Aggregate Compensation<sup>2</sup></b>		\$11,911,390		\$558,453		\$19,545,866
Apparel Incl. Footware	1.8%	\$217,844	1.8%	\$10,213	1.8%	\$357,469
Other Apparel and Services	0.2%	\$27,295	0.2%	\$1,280	0.2%	\$44,789
Personal care products and services	0.2%	\$28,583	0.2%	\$1,340	0.2%	\$46,903
Reading	0.1%	\$15,612	0.1%	\$732	0.1%	\$25,619
Tobacco products and smoking supplies	0.5%	\$58,234	0.5%	\$2,730	0.5%	\$95,559
Food at home	2.2%	\$265,813	2.2%	\$12,462	2.2%	\$436,183
Food away from home	3.6%	\$424,156	3.6%	\$19,886	3.6%	\$696,014
Alcoholic beverages	0.6%	\$75,035	0.6%	\$3,518	0.6%	\$123,128
Housekeeping supplies	1.1%	\$125,723	1.1%	\$5,894	1.1%	\$206,304
Household furnishings and equipment	3.6%	\$427,003	3.6%	\$20,020	3.6%	\$700,687
Vehicle purchases (net outlay)	6.1%	\$728,284	6.1%	\$34,145	6.1%	\$1,195,069
Gasoline, other fuels, and motor oil	2.9%	\$350,829	2.9%	\$16,448	2.9%	\$575,689
Drugs	0.1%	\$16,837	0.1%	\$789	0.1%	\$27,628
Education	0.1%	\$11,761	0.1%	\$551	0.1%	\$19,299
<u>Entertainment</u>						
Audio and visual equipment and services	1.1%	\$133,013	1.1%	\$6,236	1.1%	\$218,267
Pets, toys, hobbies, and playground equipment	1.5%	\$180,256	1.5%	\$8,451	1.5%	\$295,788
Other entertainment supplies, equipment, and services	<u>0.8%</u>	<u>\$91,623</u>	<u>0.8%</u>	<u>\$4,296</u>	<u>0.8%</u>	<u>\$150,347</u>
<b>Total Retail Expenditures</b>	<b>26.7%</b>	<b>\$3,177,901</b>	<b>26.7%</b>	<b>\$148,993</b>	<b>26.7%</b>	<b>\$5,214,743</b>

[1] Percent of income spent on various retail categories is based on Bureau of Labor Statistics data regarding typical consumer expenditures for households earning the average compensation calculated for this project.

[2] Values represent sum total employee compensation less benefits for all direct, indirect, and induced workers (in the City of San Juan Capistrano geography) per **Table A-5**.

Source: U.S. BLS Consumer Expenditure Survey (2021) Table 1203; Economic & Planning Systems