INTRODUCTION

The proposed plan provides significant support for the DCP's most important goals and objectives.

Below is a description of sustainability measures that are to be incorporated into the project along with a description of how these measures support the DCP. The redevelopment plan also follows and is consistent with the provisions of the Sustainable City Plan.

The Plan is configured to support the DCP goal of providing pedestrian, human-scaled development. It offers increased public access to the historic Moreton Bay Fig Tree by creating a cross site public pedestrian pathway past the tree. This pathway contrasts with the current site plan that tends to hide the tree behind a screen of buildings and parking lots and discourages pedestrian access to the site. Opening up the site to the intersection of Wilshire Boulevard and Ocean Avenue further advances the DCP goal of creating major urban design focus and providing the open public amenity space described in the DCP.

The second major component of the DCP addressed by the Plan is its proposed contribution of the increased sustainability of the city infrastructure. A number of measures have been adopted in the proposed building design to significantly reduce energy and water consumption as compared to the existing hotel and to reduce sewage and storm water outflow from the site. Other measures are designed to reduce the heat island impact on the City, and to decrease the carbon impact of the construction both in terms of embodied carbon in the materials and carbon generation by the construction process.

VISION 2030

The first guiding principle of the DCP is to prioritize the pedestrian experience by maintaining and enhancing walkability. The proposed Plan is a significant improvement over the existing site plan, providing new pedestrian pathways through the site and adjacent to the historic Moreton Bay Fig Tree. In concert with the sidewalk enhancements proposed for the south side for Wilshire Boulevard, the intersection of Ocean Avenue and Wilshire Boulevard will become a major pedestrian node with views extending up and down the shoreline from the open space provided by this project. The northeast corner of Wilshire Boulevard and Second Street, currently a parking lot with no direct pedestrian access from the public right of way, will be energized by new street level retail, further energizing the pedestrian experience. The new site plan addresses another of the plan's guiding principles; that of addressing vehicular congestion in the Downtown, through thoughtful distribution of the vehicular access points to the site and removing the access point from a mid-block location on a major thoroughfare - Wilshire Boulevard. The thoughtful rehabilitation of the existing historic Palisades Building addresses yet another guiding principle, preserving one of the buildings and facades that helps to define the Downtown's historic character.

INFRASTRUCTURE

The plan focuses on sustainability, thereby minimizing the project's impact on the environment and achieving significant amenities while conserving natural resources. The project will be equipped with energy and water conserving systems and fixtures throughout. In achieving these goals, the project also minimizes its impact on Santa Monica's utility-related infrastructure.

There are several water efficiency and reuse strategies. The hotel and conference center will utilize heat recovery variable refrigerant flow air-source heat pumps to minimize water consumption while maintaining energy efficient operation. The system uses no water to reject heat from the air conditioning, while achieving a significant reduction in energy consumption compared with the existing facility. The residences will have individual air source heat pumps that do not use water; instead all air conditioning heat will be rejected directly to the outdoor air.

No potable water will be utilized for irrigation, a key city goal. This will be accomplished through a combination of an efficient, subsurface drip irrigation system combined with a weather-based irrigation controller that will achieve a minimum 70% water use reduction (compared to a conventional irrigation system), the use of recycled water from onsite sources, and drought tolerant plants. There are several possible sources of onsite recycled water, including wash-water, recovered air conditioning condensate and harvested storm water runoff. Harvesting storm water runoff would also mitigate the project's impact on Santa Monica's storm water management system; similarly, low flow plumbing fixtures and air-cooled air conditioning equipment reduce sewage discharge from the site, further benefiting the city's infrastructure.

While a preliminary analysis indicates that a connection to the SMURRF supply line that runs up Ocean Avenue is not required, the Applicant is proposing to connect to the SMURRF as a contingency/backup plan and potentially for use for the site's water features.

Preliminary water usage estimates completed by Zinner and Associates and Syska Hennesy suggest that the new Miramar will utilize approximately one third less water than the existing hotel.

The proposed energy systems, which may evolve during the detailed design process, have been selected to achieve the maximum cost-effective level of energy efficiency. The residences' heat pump units are particularly efficient during part load operation, which will encompass the great majority of their operation. Separate units will be installed for each residence so that occupants will be incentivized to conserve energy. The lighting design utilizes state of the art LED sources to minimize the power density required to meet illumination targets and to maximize controllability to adapt lighting systems to varying internal needs. Research will be conducted to determine the appropriateness of a demand response system that would enable standard operating parameters, such as outdoor air ventilation rates and site lighting operation, to be adjusted to help Southern California Edison resolve a peak demand crisis.

Preliminary energy use estimates completed by Syska Henessy suggest that the new Miramar will utilize approximately 29% less energy than the current hotel.

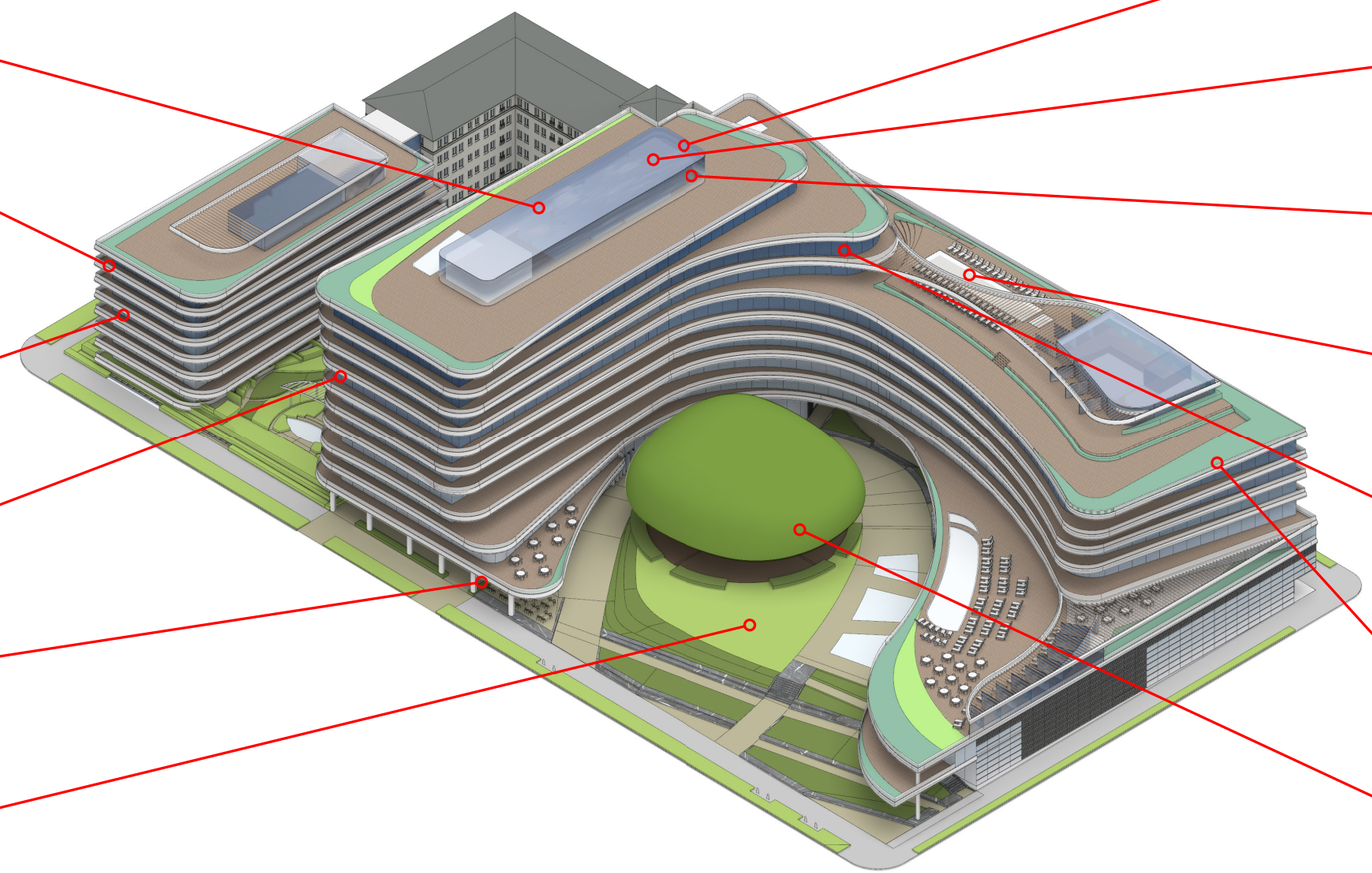
The project will incorporate renewable energy resources as consistent with the building program and to the extent the available space has solar access. The current design sites photovoltaic panels in various roof and canopy locations as appropriate. Solar pool heating, possibly through combination photovoltaic/solar thermal collectors, will also be installed.

LEED

The project will pursue LEED V3 Platinum certification as targeted by the Downtown Community Plan. Platinum requires a minimum of 80 of the possible 110 LEED points. The preliminary LEED checklist, illustrates how the green building strategy aligns with the DCP and other Santa Monica sustainability priorities. Sustainable Sites points will be earned because of the urban Santa Monica site and key project strategies including controlling storm water quantity and quality and reducing the urban heat island effect through the use of reflective materials. A large number of points will also be earned for water and energy efficiency. Additional construction and operational measures will help insure a healthful indoor environmental for all occupants.

SUMMARY

The goal of this project is to combine architectural excellence with community enhancement, value creation and exemplary sustainable performance to create an exemplary project for the City of Santa Monica. The aim of the project is compliance with the sustainability guidelines of the Downtown Community Plan and the Sustainable City Plan and integration of sustainable design up front in the architectural and landscape concept design.



ENERGY PERFORMANCE

ESTIMATED 28.9% REDUCTION OF ENERGY USE

**NOTE: DESIGN HAS GREATER PROGRAM SQUARE FOOTAGE THAN EXISTING HOTEL*

WATER USE REDUCTION

ESTIMATED 35% REDUCTION OF WATER USE

**NOTE: DESIGN HAS GREATER PROGRAM SQUARE FOOTAGE THAN EXISTING HOTEL*

LEED

LEED V3 PROJECTED RATING: PLATINUM

ZINNER consultants

December 12, 2018

Mr. Dustin Peterson
Owner's Representative
Ocean Avenue, LLC
101 Wilshire Blvd., Suite 101
Santa Monica, CA 90401

Dear Mr. Peterson,

This letter outlines the preliminary sustainability/green building strategies incorporated into the Miramar Santa Monica's pursuit of Platinum Certification and a minimum of LEED Gold certification under Version 3 LEED-NC (New Construction) 2009. As we have discussed, the strategy is based on the current concept design and may be refined as the project progresses.

The LEED strategy starts with California Title 24 and City of Santa Monica code, LEED-NC 2009 prerequisites and LEED credits earned because of the project's urban location. Appropriate additional credits were then selected that represent design or operations commitments. A LEED-NC 2009 (V3) Checklist is attached.

The strategies described below are those with the greatest environmental or occupant benefit as well as others of particular note. They are listed in the order they appear in LEED-NC 2009 (V3).

Sustainable Sites

- SSc2, Development Density and Community Connectivity: This credit is earned because the Miramar Santa Monica is on a previously developed site in a dense location with substantial nearby services and residential uses.
- SSc4.1, Alternative Transportation, Public Transit Access: This credit is earned due to the substantial nearby transit services. Sufficient transit is available for the Miramar Santa Monica to earn an Innovation in Design (ID) Exemplary Performance credit.
- SSc4.2, Alternative Transportation: Bicycle Storage and Changing Room: This credit is earned because the Miramar Santa Monica as proposed goes beyond the code-required secured bicycle storage by adding staff showers.
- SSc4.3, Alternative Transportation: Low Emitting and Fuel-Efficient Vehicles: The Miramar Santa Monica as proposed will have both designated parking for fuel efficient vehicles and electric vehicle charging stations.

- SSc5.2, Site Development: Maximize Open Space: The Miramar Santa Monica as proposed will provide substantial new open space, enough to earn both the LEED credit and a Regional Priority Credit.
- SSc6.1, Stormwater Management, Quantity Control, & SSc6.2, Stormwater Management, Quality Control: The Miramar Santa Monica as proposed will capture, treat and reuse sufficient stormwater to earn both these credits.
- SSc7.1, Heat Island Effect-Non-roof: Close to 100% of the Miramar Santa Monica's parking is proposed to be underground.

Water Efficiency

- *Miramar Water Commitment:* The Miramar Santa Monica is projected to reduce water by approximately 35% compared to the existing hotel, despite the increase in square footage.
- WEc1, Water Efficient Landscaping: The landscape design proposes a low-water and drought-tolerant plant pallet and a water efficient irrigation system, and no potable water is proposed to be used for irrigation.
- WEc2 Innovative Wastewater Technologies & WEc3, Water Use Reduction: It is anticipated that bathrooms will utilize a combination of efficient water fixtures and reused water to reduce nonpotable water use from the LEED baseline a minimum of 50% and potable water use a minimum of 40% from the LEED baseline. The Title 24, Part 11, CALGreen baseline is 20%, using a somewhat different methodology than LEED. All possible WEc2 and WEc3 points are projected to be earned as well as two Regional Priority Credits.

Energy & Atmosphere

- *Miramar Energy Commitment:* The Miramar Santa Monica is projected to reduce energy use by approximately 29% compared to the existing hotel, despite the increase in square footage, and will achieve the City of Santa Monica requirement to be a minimum 10% more efficient than Title 24 2016.
- EAc1, Optimize Energy Performance & EAc2, On-Site Renewable Energy: The Miramar Santa Monica's proposed energy efficiency and on-site renewable energy commitments including rooftop photovoltaic panels are projected to earn a substantial number of LEED points.
- EAc3, Enhanced Commissioning: Enhanced Commissioning is proposed to be utilized, exceeding the LEED Fundamental Commissioning prerequisite by adding a design review, operational manuals and training, and a post-occupancy review of the operation of the building. The post occupancy review would exceed the Title 24 commissioning requirement.

Materials & Resources

- MRc2, Construction Waste Management: A minimum of 75% of all demolition and construction waste is anticipated to be recycled, exceeding the Santa Monica required 70%.
- MRc4, Recycled Content: Project materials are proposed to contain at least 10% post-consumer and post-industrial recycled content.
- MRc5, Regional Materials: Project materials are proposed to contain at least 10% regional content.

Indoor Environmental Quality

- IEQc1, Outdoor Air Delivery Monitoring: The Miramar Santa Monica's indoor air is proposed to be monitored for excessive CO_2 concentration.
- IEQc2, Increased Ventilation: Outside air ventilation is projected to exceed the LEED standard by a minimum of 30%.
- IEQc4, Low-Emitting Materials: As required by Title 24, low-emitting interior materials will be utilized for 100% of adhesives and sealants; paints and coatings; flooring systems; and composite wood and agrifiber materials.
- IEQc8.2, Daylight and Views, Views: A minimum of 90% of all regularly occupied spaces are anticipated to achieve direct line of site views to the outdoors.

Innovation & Design Process

- IDc1.2, Education: The Miramar Santa Monica proposes to educate visitors and staff about the project's green strategies through signage, a webpage, tours or other strategies.
- IDc1.3, Green Cleaning: Low and nontoxic green cleaning strategies are proposed to be utilized.
- IDc1.4, Integrated Pest Management: Low and nontoxic pest management strategies are proposed to be utilized.
- IDc1.5, Low Mercury Lighting: LED lighting, which doesn't contain mercury, is proposed to be installed.

Please let us know if we can answer any questions or provide additional information.

Sincerely yours

John S. Zinner, LEED Fellow

cc: Ellis O'Connor

Attachment

LEED 2009 for New Construction and Major Renovation

Project Checklist

Fairmont Miramar

12/12/2018

Sustainable Sites — Possible Points: 26

Y	N	?			
22	3	1			
Y			Prereq 1	Construction Activity Pollution Prevention	
1			Credit 1	Site Selection	1
5			Credit 2	Development Density and Community Connectivity	5
1			Credit 3	Brownfield Redevelopment	1
6			Credit 4.1	Alternative Transportation—Public Transportation Access	6
1			Credit 4.2	Alternative Transportation—Bicycle Storage and Changing Rooms	1
3			Credit 4.3	Alternative Transportation—Low-Emitting and Fuel-Efficient Vehicles	3
	2		Credit 4.4	Alternative Transportation—Parking Capacity	2
	1		Credit 5.1	Site Development—Protect or Restore Habitat	1
1			Credit 5.2	Site Development—Maximize Open Space	1
1			Credit 6.1	Stormwater Design—Quantity Control	1
1			Credit 6.2	Stormwater Design—Quality Control	1
1			Credit 7.1	Heat Island Effect—Non-roof	1
1			Credit 7.2	Heat Island Effect—Roof	1
		1	Credit 8	Light Pollution Reduction	1

Water Efficiency — Possible Points: 10

Y	N	?			
10					
Y			Prereq 1	Water Use Reduction—20% Reduction	
4			Credit 1	Water Efficient Landscaping	2 to 4
2			Credit 2	Innovative Wastewater Technologies	2
4			Credit 3	Water Use Reduction	2 to 4

Energy and Atmosphere — Possible Points: 35

Y	N	?			
20	9	6			
Y			Prereq 1	Fundamental Commissioning of Building Energy Systems	
Y			Prereq 2	Minimum Energy Performance	
Y			Prereq 3	Fundamental Refrigerant Management	
10	6	3	Credit 1	Optimize Energy Performance	1 to 19
3	3	1	Credit 2	On-Site Renewable Energy	1 to 7
2			Credit 3	Enhanced Commissioning	2
2			Credit 4	Enhanced Refrigerant Management	2
1		2	Credit 5	Measurement and Verification	3
2			Credit 6	Green Power	2

Materials and Resources — Possible Points: 14

Y	N	?			
6	8				
Y			Prereq 1	Storage and Collection of Recyclables	
	3		Credit 1.1	Building Reuse—Maintain Existing Walls, Floors, and Roof	1 to 3
	1		Credit 1.2	Building Reuse—Maintain 50% of Interior Non-Structural Elements	1
2			Credit 2	Construction Waste Management	1 to 2
	2		Credit 3	Materials Reuse	1 to 2

Materials and Resources, Continued

Y	N	?			
2			Credit 4	Recycled Content	1 to 2
2			Credit 5	Regional Materials	1 to 2
	1		Credit 6	Rapidly Renewable Materials	1
	1		Credit 7	Certified Wood	1

Indoor Environmental Quality — Possible Points: 15

Y	N	?			
13	1	1			
Y			Prereq 1	Minimum Indoor Air Quality Performance	
Y			Prereq 2	Environmental Tobacco Smoke (ETS) Control	
1			Credit 1	Outdoor Air Delivery Monitoring	1
1			Credit 2	Increased Ventilation	1
1			Credit 3.1	Construction IAQ Management Plan—During Construction	1
1			Credit 3.2	Construction IAQ Management Plan—Before Occupancy	1
1			Credit 4.1	Low-Emitting Materials—Adhesives and Sealants	1
1			Credit 4.2	Low-Emitting Materials—Paints and Coatings	1
1			Credit 4.3	Low-Emitting Materials—Flooring Systems	1
1			Credit 4.4	Low-Emitting Materials—Composite Wood and Agrifiber Products	1
	1		Credit 5	Indoor Chemical and Pollutant Source Control	1
1			Credit 6.1	Controllability of Systems—Lighting	1
1			Credit 6.2	Controllability of Systems—Thermal Comfort	1
1			Credit 7.1	Thermal Comfort—Design	1
1			Credit 7.2	Thermal Comfort—Verification	1
		1	Credit 8.1	Daylight and Views—Daylight	1
1			Credit 8.2	Daylight and Views—Views	1

Innovation and Design Process — Possible Points: 6

Y	N	?			
6					
1			Credit 1.1	Innovation in Design: SSc4.1 Exemplary Performance	1
1			Credit 1.2	Innovation in Design: Education	1
1			Credit 1.3	Innovation in Design: Green Cleaning	1
1			Credit 1.4	Innovation in Design: Integrated Pest Management	1
1			Credit 1.5	Innovation in Design: Low Mercury Lighting	1
1			Credit 2	LEED Accredited Professional	1

Regional Priority Credits — Possible Points: 4

Y	N	?			
4					
1			Credit 1.1	Regional Priority: SSc5.2	1
1			Credit 1.2	Regional Priority: WEc2	1
1			Credit 1.3	Regional Priority: WEc3 (40%)	1
1			Credit 1.4	Regional Priority: EAc2 (1%)	1

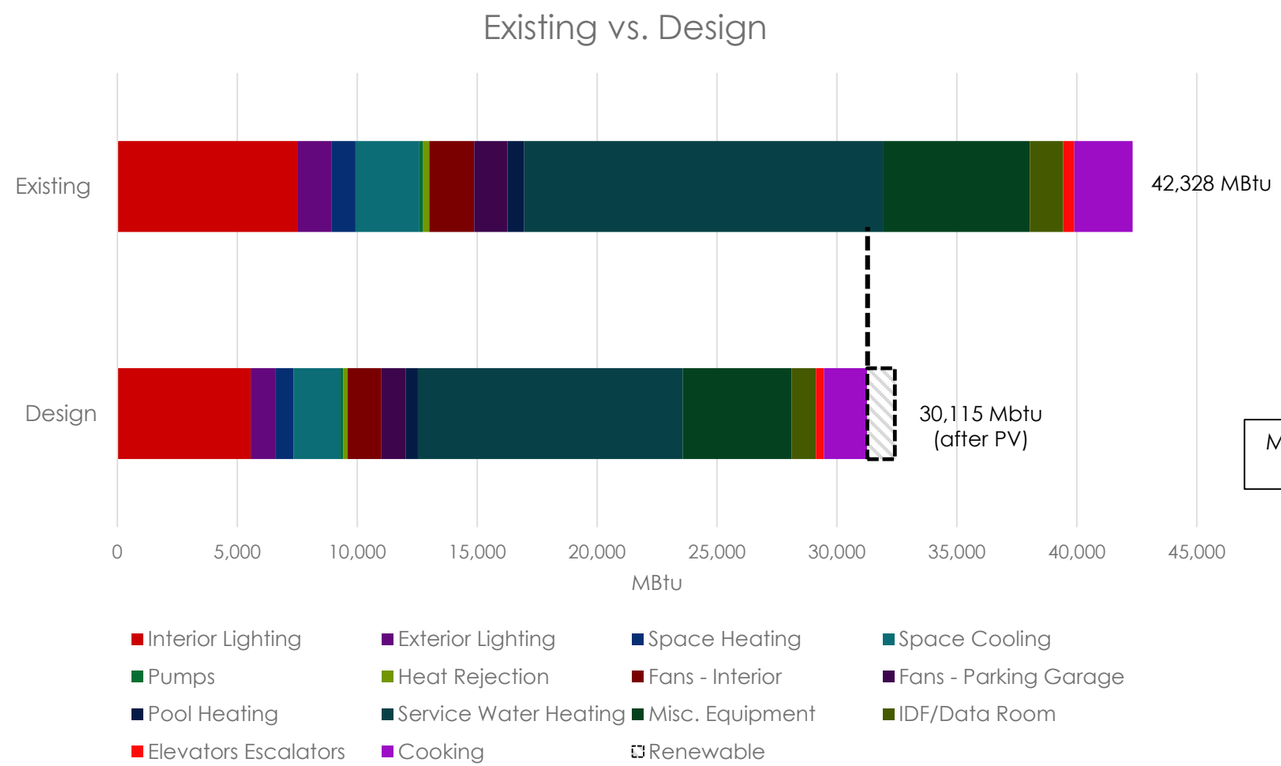
Total — Possible Points: 110

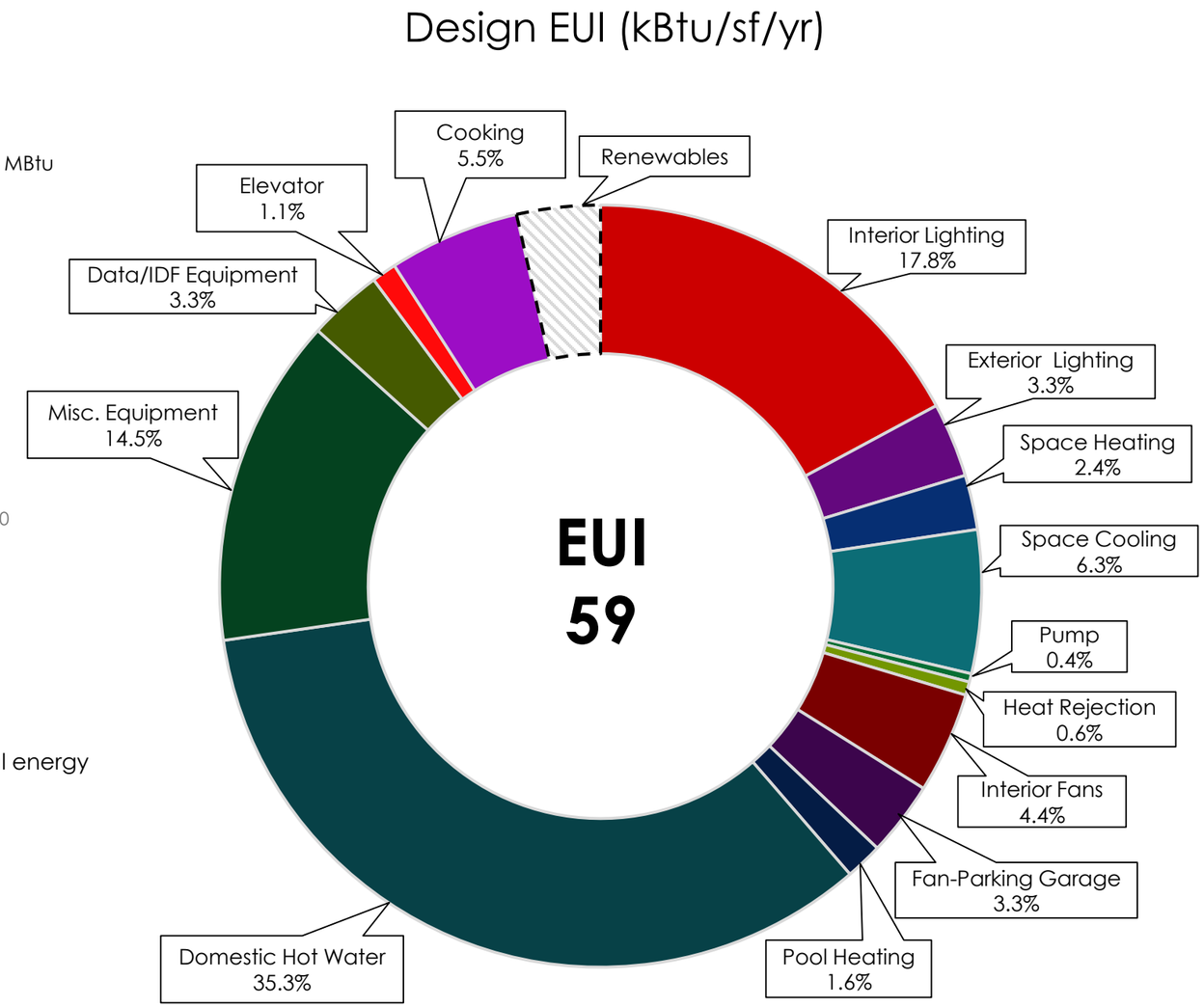
Y	N	?			
81	21	8			

Certified 40 to 49 points Silver 50 to 59 points Gold 60 to 79 points Platinum 80 to 110

Miramar Hotel Santa Monica Energy Performance

Existing vs. Design





Existing hotel consumes 42,328 MBtu energy annually; The new hotel has a simulated 30,115 MBtu annual energy consumption after PV generation. The new hotel is 28.9% more energy efficient than the existing hotel.

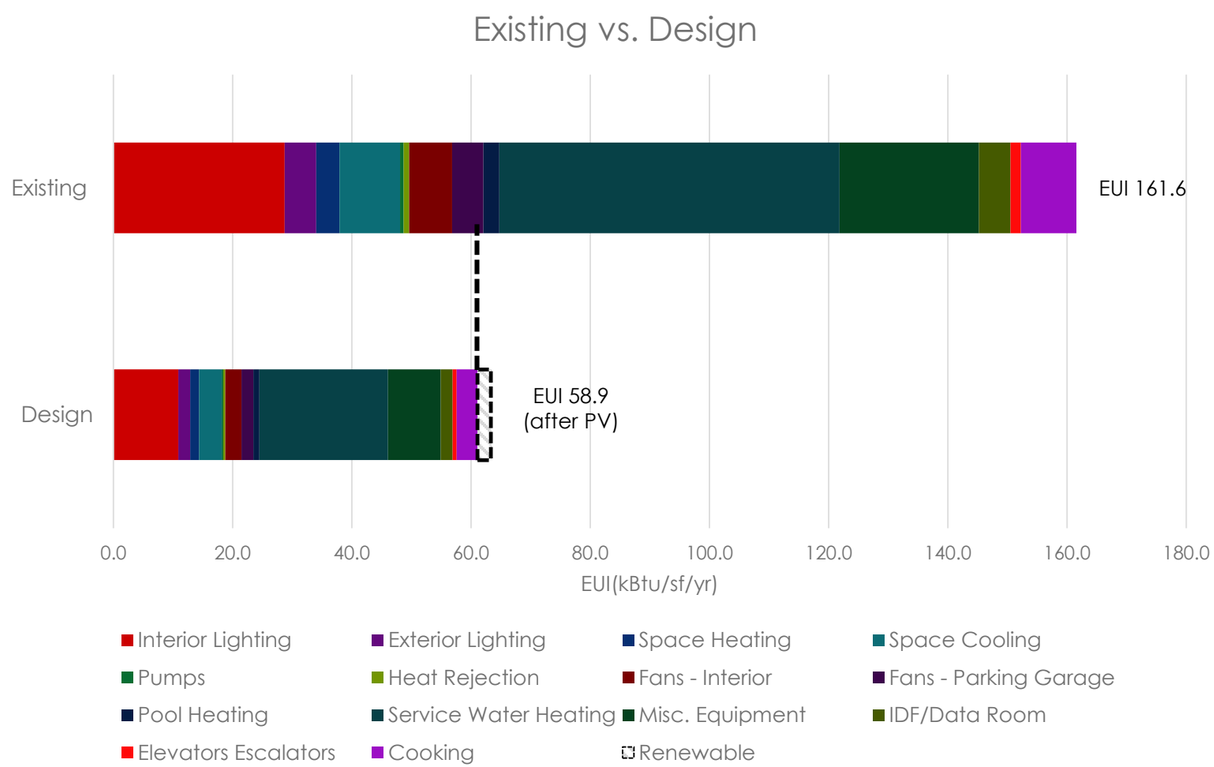
Energy Efficiency Design Features

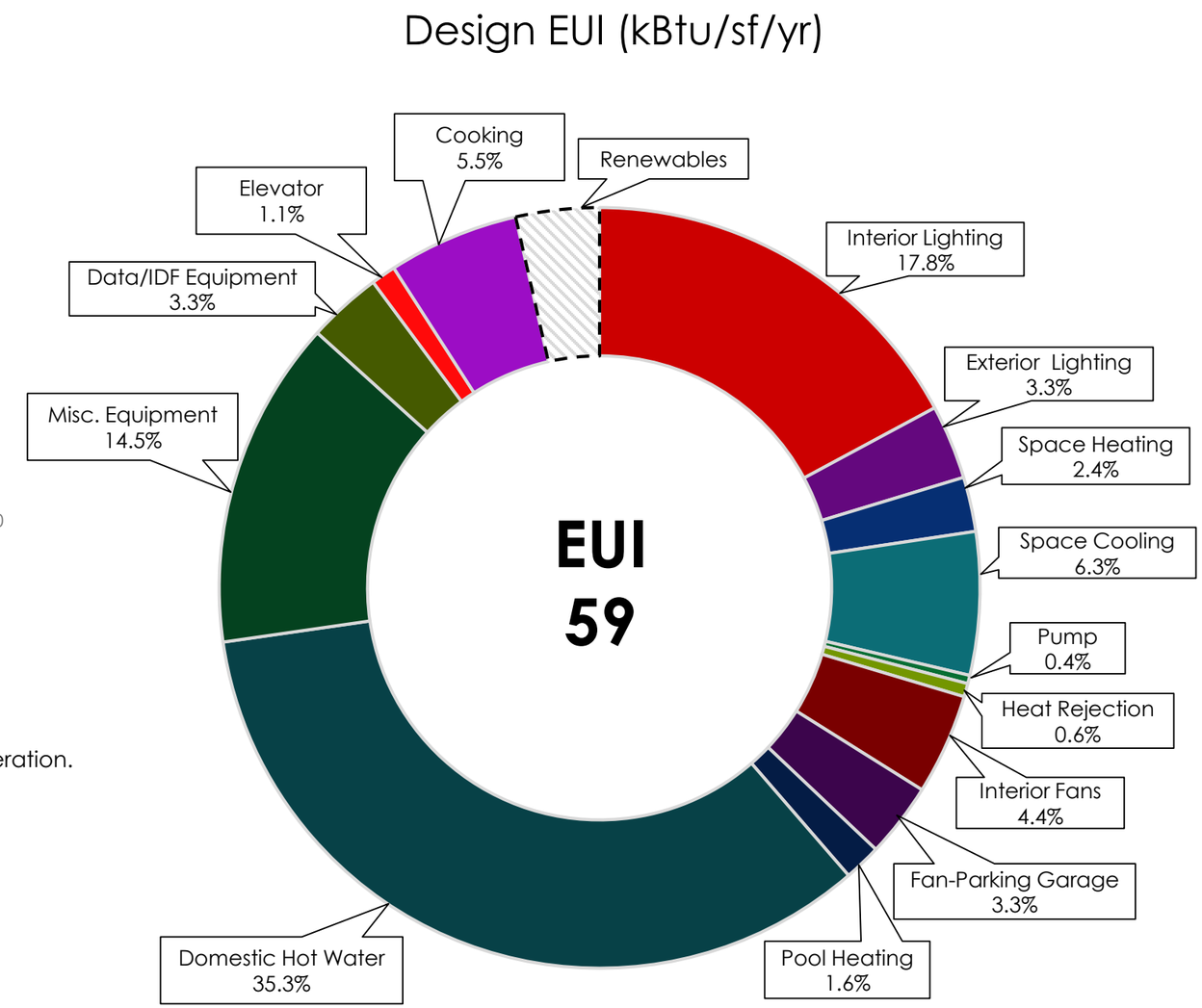
- High performance glazing system
- Passive shading system
- Energy-efficient lighting system
- Heat recovery chiller
- VRF HVAC system
- Renewable energy

Note: The energy end-uses for existing hotel are interpolated based on the given utility info and the simulation results for design case

Miramar Hotel Santa Monica Energy Performance

Existing vs. Design





Existing hotel has EUI of 161.6 kBtu/sf/yr; The new hotel has a simulated EUI of 58.9 kBtu/sf/yr after PV generation. The new hotel is 63.4% more energy efficient than the existing hotel.

Energy Efficiency Design Features

- High performance glazing system
- Passive shading system
- Energy-efficient lighting system
- Heat recovery chiller
- VRF HVAC system
- Renewable energy

Note: The energy end-uses for existing hotel are interpolated based on the given utility info and the simulation results for design case