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# The Cliffs at Princeville

The Cliffs at Princeville (hereafter The Cliffs) is a self-managed, boutique resort on the north shore of Kaua'i in Princeville, situated on a 22 acre parcel with expansive open spaces and lush vegetation overlooking the Pacific

Ocean. It is comprised of nine residential buildings with 202 individual residential units (130 units used as timeshares and 72 privately-owned condominiums), an Administration Building (Front Desk, Concierge services, offices & laundry), Recreation Building, Maintenance Building, covered barbecues, several smaller storage battery buildings (to store excess electricity generated during the day for use in the evening hours), and multiple trash and recycling stations.



Residential buildings perched on the ocean bluff provide guests and residents with spectacular ocean vistas.

Fitness and recreation facilities are on-site to

encourage an active, healthy lifestyle: Facilities available include a fitness center, tennis courts, pickle ball court, basketball half court, shuffleboard, a children's playground, two swimming pools, a keiki pool, two hot tubs, a putting green, and a botanical walking path. Bicycles are available and can be used to explore the Princeville area. There is also a walking path that extends from the Princeville entrance and shopping center on Kuhio Highway, to the 1 Hotel Hanalei Bay (formerly the Princeville Resort). Several wellness programs are also offered at the resort. Guests can walk through the Resort's grounds and gardens, explore the Botanical Walking Trail, or enjoy the view from the many Adirondack chairs provided in the open spaces on the ocean bluff.

# Sustainability at The Cliffs

## **Overview**

To coordinate sustainability activities at The Cliffs, a Joint Sustainability Committee (hereafter the Committee) was formed with participation from all three Associations. The Committee is responsible for the development of the Sustainability Plan for The Cliffs with the following mission in mind.

## **Mission Statement:**

"At The Cliffs we strive to minimize our impact on the environment and to help protect and preserve the unique and natural beauty of Kauai for future generations."

The Committee updates the Sustainability Plan for The Cliffs and reviews progress in achieving the sustainability goals. The Committee also reviews both ongoing progress on key metrics and provides insight and guidance on future objectives and new initiatives to reduce the environmental footprint of The Cliffs.

Renewable energy production, by both the Administration Building system (which is a Cliffs-owned system) as well as energy purchased under the Valta Power Purchase Agreement, is an important aspect of our sustainability activities that falls within the scope of this committee and includes usage trends, billing and overall cost and system performance. Liaison and interface with Valta remain the responsibility of The Cliffs general manager. Other aspects in the Sustainability Plan which may have annual achievement goals include:

- Use of renewable energy and energy conservation
- Reducing the amount of water consumed
- Reducing the solid waste produced
- Increasing the quantity of waste recycled
- Development and updating emergency plans
- Consideration of land use features (tree canopy, reduction of invasive species, etc.).

The committee is involved in the identification of opportunities to participate in sustainability initiatives on the north shore, for all of Kaua'i and the Hawaiian Islands. The committee also considers sustainability recognition opportunities to highlight the performance of The Cliffs Sustainability Plan.

# The 2023 Sustainability Report

This is the first (1st) report of the current five-year plan (2023 – 2027), the objective of which is to establish baseline levels for renewable energy production, energy consumption, water use, solid waste and recycling volumes generated, and Scope 1 emission sources for the year. This information will be used to evaluate and communicate progress made over the coming years with respect to these baseline levels and track progress in achieving the established goals that were identified in the Sustainability Plan.

Graphic representations of renewable energy consumption, renewable energy demand vs production and water use will be provided with respect to timeshare occupancy levels (where appropriate), as well as the percentage of solid waste and recyclable materials (cardboard, paper, plastics, glass & aluminum) with respect to the total volume of solid waste and recyclable material generated during the year.

Renewable energy production, energy and water usage, solid waste volumes (trash and recyclables), and Scope 1 emission source volumes associated with these core metrics are presented in the following pages.

# 2023 Sustainability Report Summary & Highlights

Sustainability at The Cliffs is a priority. This 2023 Sustainability Report is the sixth year that The Cliffs has published the Annual Sustainability Report. The first Sustainability Plan was developed in 2018 with the first report issued for calendar year 2018. The Report is issued each April for the previous year and focuses on six Sustainable categories that encompass 32 metrics. These six categories align with nine of the United Nations Sustainable Development Goals (3, 6, 7, 8, 9, 11, 13, 14 & 15 - see Appendix 1) and include the following:

- o Energy Conservation and Renewable Energy Production and Use
- Water Use and Conservation
- Waste Management and Recycling
- Climate Change and Resiliency/Emergency Preparedness
- Land Use and Maintenance Practices
- Operations and Community Engagement

## **Report Summary & Highlights:**

- Renewable Energy produced at The Cliffs in 2023 totaled 1,005,975 kWh of electricity which was equivalent to 74% of the overall electric demand (1,367,263 kWh) at The Cliffs for the year, and offset the need for 592 barrels of imported oil.
- ❖ Water use in 2023 was 13,579,000 gallons.
- Continued to encourage Owners and Guests to use one of the two FloWater stations (installed September 2019) for filling re-usable containers rather than buying single-use plastic water bottles; these stations offset 127,626 plastic 12 oz bottles in 2023 (almost 10,635 bottles per month) that otherwise would have been purchased and used at the resort by our Owners & Guests, and ultimately been recycled or land-filled. The FloWater stations have offset more than 500,000 plastic 12 oz bottles since being installed in 2019.
- Solid waste volume in 2023 was 1,618 cubic yards:
  - Extra yardage volumes (overfilling of collection bins) was 34 cu yds.
  - There is an opportunity for more solid waste reduction, consolidation actions, collection volume or more frequent servicing.
- Cardboard recycling volume in 2023 was 171.40 cubic yards:
  - o Extra yardage volumes (overfilling of collection bins) was 13 cu yds.
  - There is an opportunity and need for increased collection capacity, improved segregation of cardboard collected, or more frequent servicing of the cardboard bin.
- The total material recycled in 2023 was 1,232.2 cubic yards which represents 43% of the solid waste generated during the year.
- Scope 1 emissions (CO<sub>2</sub>) generated in 2023 (based on the annual fuel purchase volumes for gasoline, diesel & propane), were 95.75 metric tons.
- ❖ Issued annual update to the Cliffs' Emergency/Resiliency Plan.

- The Cliffs maintained the highest ratings available from RCI and Interval International (II) organizations as well as earned the following notable honors:
  - "2023 Na Po'e Pa'ahana" Leader in Sustainability Hawaii Lodging & Tourism Association
  - 1st place USA Today's Reader's Choice Top 10 "Best Eco-friendly Resort" Poll
  - o "The Best Vacation Timeshare" on Kaua'i Hawaii Magazine Reader's Choice
  - Hawaii Green Business Program Recognition
  - o 2<sup>nd</sup> place for "Commitment to Green Award" Pacific Edge Magazine
  - o Co-winner of "Hospitality Executive of the Year" (Jim Braman General Manager) Pacific Edge Magazine
  - o "Premier Resort" Interval International
  - RCI Green Award 2022 runner up (out of 3,035 resorts worldwide)
- The online Guest Survey, **Momentive** provides Guests with an opportunity to rate various aspects of The Cliffs. The scores (1=poor, 5=excellent) for the 12 month reporting period from 9/01/2022 to 8/31/2023 were as follows:

Number of Responses: 1,068
 Overall Score: 4.56
 How Likely to Recommend The Cliffs: 4.60

- The Employee "Sunshine Fund" (established in 2018) continued to assist employees during times of difficulty; The Sunshine Fund is a voluntary contribution program supported by donations from Cliffs management and Association Board members.
- The Cliffs continued to participate in the following Community activities: Hawaii Visitors and Convention Bureau, Hawaii Lodging and Tourism Association of Kaua'i, Kauai Visitors Bureau, Kaua'i Tourism Strategic Plan, Society of Human Resource Management of Kaua'i, Boys and Girls Club of Kaua'i, Kaua'i Community College Hospitality School, Anaina Hou Community Park, Kaua'i Chamber of Commerce, and a supporter of the Kaua'i Rotary activities.
- The Cliffs partnership with Surfrider Kaua'i Ocean Friendly Visitor Program (initiated in 2021) continued into 2023. The program informs visitors on ways they can help protect and preserve local beaches, reefs and sea life. Artwork created from ocean debris collected as part of the program by local artist Monika Mira is on display in the Rec Building.
- The Hawaii Lodging Association's Charity Walk is The Cliffs' charity of choice (all monies raised stay on Kauai and support the non-profit organizations listed below). Several employees participated in various charitable activities in 2023: Over 260 volunteer hours and donating over \$18,900 (goods, services and financial contributions) for Kaua'i non-profits.





# **Energy Conservation and Renewable Energy Production and Use**

Hawaii has a statewide goal to produce 100% of its energy from renewable sources by 2045. The island of Kaua'i established a goal to produce 100% of its energy demand from renewable sources by 2033. In 2022 (the last data available) over 60% of the electricity provided by Kaua'i Island Utility Cooperative (KIUC) was from renewable sources.

The Cliffs has two independent solar energy systems. The Administrative Building system (installed in 2009) operates on a net metering basis with KIUC; with excess electricity exported during the day when production exceeds demand. The Valta Solar system (operational in 2017) provides electricity to the facility under a 20-year power purchase agreement. Valta invested the capital and knowledge to install a large-scale solar energy system on the nine residential buildings (3,000 solar panels, 198 Inverters and 142 storage batteries).

The electricity produced by the Valta system and consumed at The Cliffs during daylight hours is billed at \$0.20/kWh. Electricity from storage batteries, consumed during evening hours, is billed at \$0.04 below the prevailing KIUC (2023 average was \$0.36/kWh). Surplus



Roof-mounted solar panels generated 74% of the total electricity demand for the property in 2023

electricity generated during daylight hours (once batteries are fully charged) is sold to KIUC at wholesale rate of \$0.18/kWh. The weighted renewable energy rate for electricity generated and consumed on the property by the Valta system in 2023 was \$0.25/kWh.

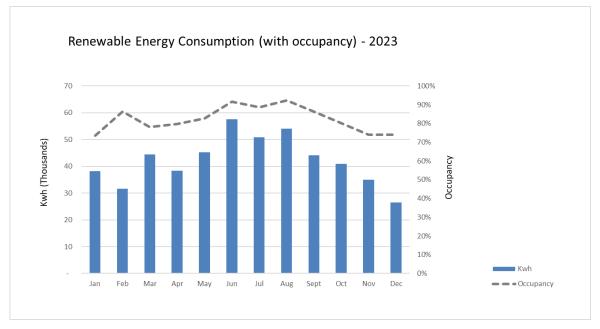
## **Results:**

- The common areas (Rec Center, Fitness Center, Pool, exterior lights) required 274,367 kWh of electricity; 30% of the required electricity (81,432 kWh) was generated and used by the Common area (Valta) system during daylight hours.
  - o 2023 Common area solar energy system production: 112,785 kWh
- The Administration offices and the laundry room required 134,168 kWh of electricity; 33% of the required electricity (44,275 kWh) was generated and used by the Admin Building solar system during daylight hours.
  - o 2023 Admin solar energy system production: 56,110 kWh
- The combined renewable energy (Valta system plus Admin Building system) were as follows:

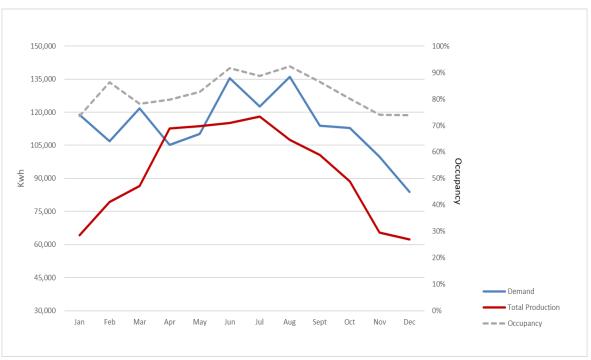
<u>Year</u> <u>Total Electricity Demand (kWh)</u> <u>Renewable Energy Produced (kWh)</u>

2023: 1,367,263 1,005,975

- o Renewable energy produced was equal to 74% of the overall electricity demand for the year
- Electricity production during daylight hours exceeded demand: excess energy was exported to KIUC
- o Renewable energy production offset the need to import 592 barrels of oil
- Electricity generated during daylight hours exceeded demand during the day. Even after fully charging the batteries, 499,646 kWh were exported to the KIUC grid, further reducing Kaua'i's dependency on imported fuel by an additional 294 barrels of oil.
- Whole Unit Owners received 42% of their electricity from the renewable energy system indicating a concerted effort to better align supply of renewable energy with demand activities.
- Timeshare and common areas received 35% of their electricity from the renewable energy system, with 65% of their needed electricity purchased from KIUC.
- The estimated cost savings from using the renewable energy generated on the property (instead of purchasing 100% from KIUC) was \$50,300.



Renewable Energy Consumption (with occupancy) 2023



**2023 Electrical Demand vs Renewable Energy Production** 

- Encourage Owners and Guests to use high energy consuming appliances responsibly <u>and</u> during daylight hours to the extent possible.
- Encourage Owners and Guests to turn off lights and ceiling fans when leaving their units.
- LED bulbs installed in all parking lot lights and timeshare apartments; common area lighting fixtures are systematically being replaced with new energy efficient fixtures with LED bulbs.



## Water Use and Conservation

Due to its unique climate and the amount of rainfall it receives each year Kaua'i is regarded as the Garden Island. Its highest point, Mt. Waialeale, is considered one of the 'wettest places on earth', 2023 saw near average rainfall with Mt. Waialeale recording 384 inches. Rainfall in Princeville was 85 inches or about 110% of the annual average.

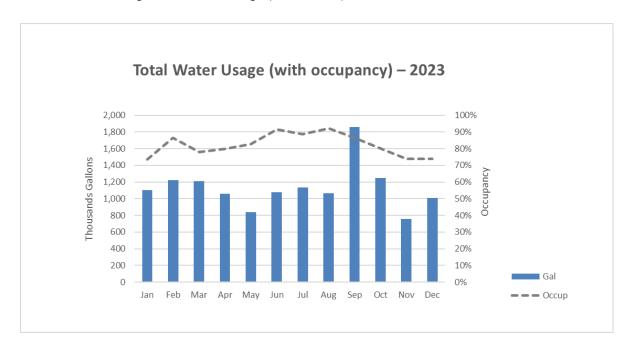
The pumping and distribution of water for drinking and irrigation requires a significant amount of energy. The cost for this delivery system is reflected in the water bills, which are based upon the amount of water consumed. These costs, combined with the potential for prolonged or re-occurring drought conditions make the optimization of the use of water on the property a priority.

The Cliffs strives to reduce water usage through its ongoing efforts. Owners and guests are encouraged to conserve water during their stay. Older plumbing fixtures and water-use appliances are replaced with more efficient low-flow plumbing fixtures and appliances in timeshare apartments. Whole unit owners are encouraged to replace older plumbing fixtures and appliances in their units with more efficient plumbing fixtures and appliances. The irrigation systems for landscaping are continuously monitored and maintained by staff to ensure they are functioning at their optimal levels. Sprinklers systems are controlled by automatic timers that are adjusted to align with seasonal weather demands and are manually turned off during periods of rain.

## **Results:**

Water usage across the property is monitored monthly and reported on annually. Performance metrics (gallons of water consumed) is listed below for 2023:

2023 Water usage: 13,579,000 gal (51,402,107 L)



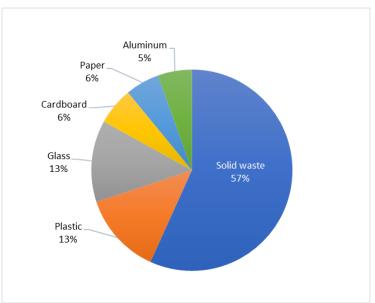
- Encourage Owners and Guests to conserve water.
- Use only low-flow toilets in the common areas of the property.



# **Waste Management and Recycling**

The Cliffs has an ongoing waste management program that encourages owners, guests and staff to reduce the amount of solid waste (garbage) landfilled through the increased recycling of cardboard, plastic, paper, glass, and aluminum. Owners and guests are encouraged to use several recycling collection facilities conveniently located throughout the property. Efforts to reduce solid waste volumes and improve recycling continued in 2023 included the following:

- More frequent servicing of the cardboard recycling bin located at the Maintenance Building.
- More frequent servicing of the recycling stations by Building 4, Building 7 parking area and the Maintenance Building.
- All timeshare units have separate collection bins for solid waste and recyclables.
- Public events are designed to be 'zero waste' by using recyclable or reusable materials.
- Encourage Owners and Guests to use the two
  FloWater dispensing stations to fill re-usable
  containers rather than buy single-use plastic water
  bottles; these stations offset 127,626 12 oz single-use
  plastic bottles in 2023 (approximately 10,635 bottles
  per month). Since being installed in September of
  2019 the two FloWater stations have offset 500,000
  12 oz single-use plastic bottles that otherwise would
  have been purchased by Owners and Guests and
  recycled or deposited in a landfill.
- Informational material is in the compendium in all timeshare units that highlight Sustainability efforts at The Cliffs and provide tips on how Guests can help (see Appendix 3).



2023 Solid Waste & Recycled Material Volumes by % of Total Volume

## **Results:**

- **❖** Volume of solid waste produced in 2023:
  - Solid waste disposal at landfill: 1,618 cubic yards.

Overage charges on solid waste indicate more disposal space is needed:

- o Extra yardage volume for 2023 was 34 cu yds.
- Area for continued improvement in 2024.
- The volumes of recycled materials in 2023 were:

| Material (cubic yards)                 | 2023    |  |
|--|---------|--|
| Aluminum:                              | 156.0   |  |
| Plastic:                               | 374.4   |  |
| Glass containers:                      | 374.4   |  |
| Paper:                                 | 156.0   |  |
| Cardboard:                             | 171.4   |  |
| Total material recycled (cubic yards): | 1,232.2 |  |

- Overage charges on cardboard indicate more disposal space is needed:
  - Extra yardage volume for 2023 was 13 cu yds.
  - o Area for continued improvement in 2024.

Recycled materials represented 43% of total waste generated at the Cliffs in 2023

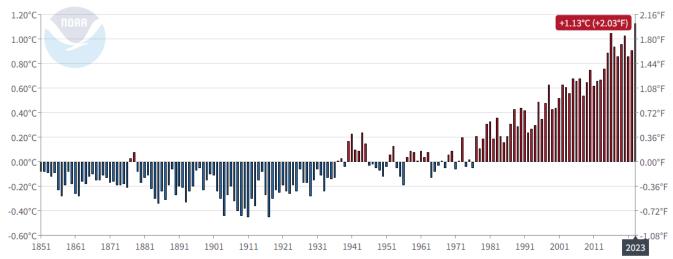


# **Climate Change and Resiliency**

According to the National Centers for Environmental Information (part of NOAA), 2023 ranked as the warmest year since record keeping began in 1850 at 1.18°C (2.12°F) above the 20th century average of 13.9°C (57.0°F).

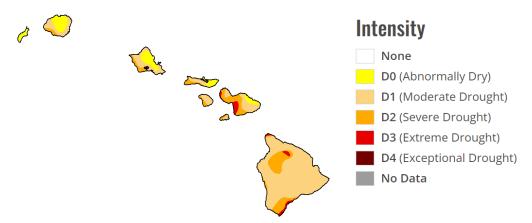
### **Global Land and Ocean**

December-November Temperature Anomalies



Climate data shows a direct correlation between increases in global temperatures and sea levels, with changes in weather patterns. The Hawaiian Islands have unfortunately experienced climate related effects, where drought conditions in conjunction with winds from hurricane Dora were significant contributors to the Maui wildfires, resulting in tragic loss of life and billions of dollars in damages. Drought expanded in coverage and intensity across the islands into October and by October 24, drought covered 94.8% of the state—the greatest extent of drought in the 2000-2023 period of record for the U.S. Drought Monitor.

The following image depicts the levels of drought for the period Oct 17, 2023 through Jan 17, 2024



### **Results:**

- While 2023 droughts have been intense on other islands, preparing for brief periods of significant rainfall and the associated flooding remains a top concern. The Cliffs supports the Princeville community preparing for and managing flood events. This includes annual assessments of infrastructure and associated action plans.
- Updates are made to the Emergency/Resiliency Plan at the Annual meeting each year.
- 1. https://www.ncei.noaa.gov/access/monitoring/monthly-report/global/2023/supplemental/page-1

# 2023 Scope 1 Emissions at The Cliffs

The three types of fossil fuel used on a regular basis at the Cliffs contribute to our Scope 1 emissions. These are; gasoline (Maintenance Dept. vehicles and equipment), propane (Laundry, Tiki-torches, Barbeque grills), and diesel (Maintenance Dept. lift and Emergency generator). As these fuels are burned, greenhouse gasses (GHGs) are released into the atmosphere. CO2 makes up roughly 76% of the total volume of the seven recognized GHGs in the atmosphere (see Special Report: Greenhouse Gas Emissions and the Greenhouse Effect).

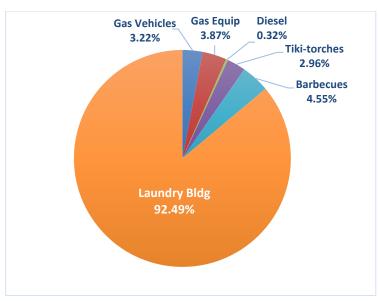
The estimated volume of the annual CO<sub>2</sub> emissions at The Cliffs is based on the total volume of each fuel purchased during the year, and the carbon content of each fuel (the amount of carbon in a gallon of each type of fuel varies). The ratios of carbon/gallon of fuel used in determining our CO<sub>2</sub> emissions were:

Propane: 12.61 lbs of carbon/gallon Gasoline: 19.36 lbs of carbon/gallon Diesel: 22.38 lbs of carbon/gallon

The fuel volumes and estimated CO<sub>2</sub> emissions are shown in the following table.

| SCOPE 1 EMISSION SOURCES & VOLUMES |           |         |             |         |  |
|------------------------------------|-----------|---------|-------------|---------|--|
| SOURCE                             | GALLONS   | LBS CO2 | METRIC TONS | % TOTAL |  |
| Gas Vehicles                       | 327.02    | 6,334   | 2.87        | 3.22    |  |
| Gas Equipment                      | 393.04    | 7,613   | 3.45        | 3.87    |  |
| Diesel                             | 28.38     | 635     | 0.29        | 0.32    |  |
| Tiki-torches                       | 461.40    | 5,818   | 2.64        | 2.96    |  |
| Barbecue Grills                    | 708.70    | 8,937   | 4.05        | 4.55    |  |
| Laundry Bldg                       | 14,413.80 | 181,758 | 82.44       | 92.49   |  |
| -                                  |           | ΤΩΤΔΙ   | 95.75       |         |  |

The laundry operation on the property accounts for 92.49% of the total Scope 1 emissions on the property. The percentage of CO2 emissions on the property (by each source) is shown in the pie chart below.



2023 SCOPE 1 CO<sub>2</sub> EMISSIONS % OF TOTAL BY SOURCE



## **Land Use and Maintenance Practices**

The Cliffs is situated in a beautiful natural setting with an abundance of trees, shrubs and plants. The conservation of the natural topography, views, drainage patterns, and existing native and non-invasive vegetation is a priority. As such, all new development on the property is carefully planned and designed to limit the impact on the natural surroundings while providing necessary improvements to meet the needs of our Owners and Guests. Landscaping efforts at The Cliffs focus on the removal of invasive species of trees and shrubs with replacement of native vegetation. Ongoing activities include further enhancement of the grounds with an assortment of native trees and shrubs. Ongoing practices include the following:

- Open space areas have been maintained to restrict development and preserve and protect the natural environment and enhance the view;
- Given natural rainfall, special attention has been taken to maintain natural drainage patterns to avoid flooding and prevent erosion;
- Taking steps to control and eliminate invasive plant species in natural areas across the property;
- Ongoing development of landscaping on the property to improve privacy for ground floor units and enhance the overall appearance of the property;
- Continued development of the Botanical Walking Trail;
- Floral arrangements in common areas are created by staff using plants and flowers grown on the property;
- An on-site greenhouse allows for the propagation and cultivation of plants to be used on the property;
- Cultivate and maintain several varieties of fruit-producing trees on the property (apple banana, avocado, coconut, lime, guava, papaya, passion fruit) that provide Owners and Guests with freshly harvested fruit that they can pick and sample;



Native and non-invasive plant species are being grown in the on-site greenhouse for use on the property.

- Vegetation that is cut down is recycled as compost on the property (green waste);
- Biodegradable fertilizers are used on the property;
- Pesticide and herbicide use are strictly restricted and limited, Glyphosate-containing products are not used on the property (i.e., Roundup);
- Following the closure of the Cliffs Management Group (CMG) in 2023, the CMG made a generous contribution of funds, placed in a special account, to be used for landscaping improvements on the property. The cost of landscape improvements around Building 3 and the new Maintenance Building were paid for from these "Legacy Funds".

### **Results:**

- Landscaping is designed and maintained to enhance and complement the overall appearance of the property. The estimated number of hours per month dedicated to landscape maintenance is 800 hours.
- On-site cultivation of various plant species for use on the property saves money and reduces the need for transporting plant species from around the island.
- In-house tree trimming, using Kaleo's Tree Service and Hana Hou tree service, to control growth, reduce hazards (falling coconuts) and maintain overall tree health.
- Maintain the open spaces accessible to Owners and Guests.
- ♦ Inform Guest and Owners of nearby trails to hike.
- Continue to encourage Owners and Guests to harvest local fruits grown on property.
- Replacement of old sidewalk light fixtures with down-facing light fixtures that reduce light pollution.



# **Operations and Community Engagement**

Daily operations at The Cliffs emphasize sustainable considerations in the conduct of routine maintenance activities. One example area of sustainable practices: The Cliffs ground maintenance team built and maintains a greenhouse, growing new plants (from seed or property cuttings), and replanting where needed on the property. This sustainable activity saves thousands of dollars we would otherwise spend on nursery grown plants.

Social cohesion and connectivity to the local community is important to the resort. The Cliffs puts a premium on community engagement locally, on the island of Kaua'i, and across the Hawaiian Islands. The Cliffs' commitment to maintaining a level of excellence in all areas of operations is affirmed by various awards and recognition, community involvement and the achievement of timeshare industry quality ratings, including being recognized as a Sustainability Leader.

#### **Results:**

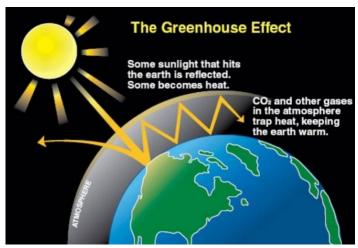
- Received recognition for sustainability achievements:
  - o 1st place winner in USA Today's Reader's Choice Top 10 "Best Eco-friendly Resort"
  - o 3<sup>rd</sup> place winner (out of 4200+ resorts) of RCI's 2022 Green Program Award
  - o Hawaii Green Business Certification (award presented by Governor Josh Green)
  - o Earned certifications in energy and environmental design US Green Building Council
  - o 1<sup>st</sup> place runner up in Pacific Edge Magazine's award for Sustainability & Conservation
  - o 2023 Na Po'e Pa'ahana Leader in Sustainability, Hawaii Lodging and Tourism Association
- Awarded RCI "Gold Crown" for 21st year in a row, and Interval International "Premier".
- TripAdvisor awarded the Cliffs their Certificate of Excellence, based on guest reviews.
- Pacific Edge Magazine recognized Jim Braman as a co-winner of Hospitality Executive of the Year!
- ♦ Voted #1 Vacation Timeshare (5th year in in a row!!) and the Best Hotel or Resort for Romance ♥ by Hawaii Magazine's 2023 Readers Choice Awards.
- Partnered with More Responsible Living, Surfrider Foundation and Kauai Society of Artists, supporting "Washed Up North" a marine debris art installation at The Cliffs.
- Participate in several community engagement associations and activities:
  - Participated in Princeville at Hanalei Community Association Sustainability activities
  - Hawaii Lodging and Tourism Association of Kaua'i (island chapter): Jim Braman (GM) Executive Committee member
  - Hawaii Lodging and Tourism Association of Hawaii (state chapter): Jim Braman (GM) board member
  - Kauai Visitors Bureau Jim Braman (GM) chair of the BOD
  - Hawaii Visitors and Convention Bureau Jim Braman (GM) BOD Exec Committee
  - Society of Human Resource Management of Kauai: Hasina Mitchell (HR Manager) active member
  - o Boys and Girls Club of Kaua'i: Jim Braman (GM) Board President
  - Kaua'i Community College Hospitality School: Jim Braman (GM) curriculum advisor, student mentor, and Host Sector Partnership participant (a state-wide panel of hospitality and education communities)
  - Kauai High School Academy of Hospitality Advisory Board: Jim Braman (GM) is a curriculum advisor and student mentor
  - O Kaua'i Tourism Strategic Plan: Jim Braman (GM) panel member
  - O Anaina Hou Community Park: Jim Braman (GM) Board President
  - Kaua'i Rotary Club: The Cliffs hosts monthly Rotary meetings and supports Rotary Club activities
  - o Kaua'i Chamber of Commerce: Association of Apartment Owners (AOAO) is a member
- Staff volunteered 260 hrs and donated a total of \$18,900 (goods, services and financial contributions) to a variety of charity events, including Hawaii Lodging Association's Kauai Charity Walk, Charity Golf and Charity Bowling events.
- Continued to fund and support employee "Sunshine Fund" to assist employees in time of need.
- Conducted quarterly sustainability training and reporting to The Cliffs' staff.
- Exclusive utilization of battery-operated utility service carts.
- Promote Kauai Sunshine Market Activities



# **Greenhouse Gas Emissions and The Greenhouse Effect**

Over the last 150 years human activities have contributed to the increase in greenhouse gases (GHG) released into the atmosphere. As these greenhouse gases accumulate in the Earth's atmosphere they trap and reflect some sunlight, heating the planet – known as The Greenhouse Effect. In the United States, the largest source of greenhouse gas emissions is from activities associated with the burning of fossil fuels for electricity, heat, and transportation. Fossil fuels – coal, oil and gas account for over 75% of GHG emissions and nearly 90% of all carbon dioxide (CO<sub>2</sub>) emissions in the atmosphere.

The best way for companies and businesses to minimize their carbon footprint is to reduce their GHG



emissions in the first place. But to reduce GHG emissions it's important to first understand them, because you can't manage what you don't measure. With a deeper understanding of carbon emissions and how to reduce them, one of the next challenges for us is how can we address the currently unavoidable emissions?

## **Identifying GHG Emissions**

GHG emissions fall into one of three distinct categories, based upon where they are generated:

**Scope 1:** Includes direct emissions generated from sources that a company or business has direct control over. At The Cliffs this would include the use of fossil fuels in: Maintenance Department vehicles and equipment, powering the emergency generator, gas barbecue grills, tiki-torches, etc.

**Scope 2:** Includes indirect emissions that come from the production of energy that is purchased. For The Cliffs this would be the emissions created when KIUC generates electricity (from non-renewable sources) used on the property, as well as the emissions from the production of fuel (gasoline, diesel and propane) used on the property.

**Scope 3:** Includes all other indirect emissions that are generated to meet the needs of owners and guests coming to the property from sources not within the Scope 1 and 2 categories. Examples of this would be emissions caused by vendors within The Cliffs supply chain (upstream & downstream), travel and transportation (air and sea travel, non-electric vehicle use), employee commuting, outsourced activities and services, food and consumer goods (production, processing, shipping, retailing), garbage collection, etc.

## **Reporting on and Reducing Emissions**

Scope 1 and 2 emissions are somewhat easier to quantify and are mandatory for many businesses to report on around the world. They're also what many businesses aim their carbon reduction targets toward, and are most often within an organization's control. However, Scope 3 emissions account for the highest proportion of total emissions (as much as 70%), and unfortunately are also the hardest to track and harder to reduce.

With respect to scope 1 & 2 emissions, we can make choices at The Cliffs regarding: the use of gas-powered vehicles and landscape maintenance equipment, LPG use (barbecue grills and tiki torches), energy use (better scheduling of high-demand electric appliance usage to take advantage of renewable energy production, LED lighting, turning off lights/fans when not in use, etc.). By making improvements (where they can be made) and adjusting our behavior based on an increased awareness of our usage patterns, we can make progress in reducing the Scope 1 and 2 emissions levels associated with The Cliffs.

### What now?

In 2023 we have established the baseline levels for the Scope 1 emission sources on the property for the new 5-year reporting period (gasoline, diesel & LPG). This information will be used to establish reduction goals for subsequent years, and in measuring our progress towards reducing our carbon emissions on the property in the coming years.

1. The seven gasses identified in the Kyoto Protocol (1997) as contributing to the Greenhouse Effect are: Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Nitrous oxide (N<sub>2</sub>O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur hexafluoride (SF<sub>6</sub>), Nitrogen trifluoride (NF<sub>3</sub>)



# **Looking Ahead**

Sustainability at The Cliffs is a journey with continuous consideration of social, environmental and economic effects of development and the daily operations at the resort. The first five-year plan was completed in 2022, and a second five-year plan was established which included additional metrics and initiatives. The Sustainability Committee has developed a Sustainability Plan for 2023 – 2027 which focuses on the four interconnected domains of ecology, economics, politics and culture. This plan establishes sustainability goals across the six dimensions of; Energy Conservation & Renewable Energy Production & Consumption; Water Use & Conservation; Waste Management & Recycling (cardboard, paper plastic, glass and aluminum); Climate Change & Resiliency (including Scope 1 CO<sub>2</sub> emission sources and emergency preparedness); Land Use & Maintenance; Operations & Community Engagement based on current environmental challenges and opportunities.

The Committee reviews both ongoing progress on the above key metrics and provides insight and guidance on future objectives and new initiatives to reduce the environmental footprint of The Cliffs. The Committee is also involved in the identification of opportunities to participate in sustainability initiatives with the Northshore communities, the island of Kaua'i and the Hawaiian Islands as a whole.

## The 2023 Goals and Objectives:

- Develop and approve Sustainability Plan for the next five-year cycle (2023 2027).
- Develop newsletter articles to educate and inform owners and guests to ongoing sustainability efforts and provide tips on how they can help achieve our sustainability goals.
- Increase owner/guest awareness of the importance of using high demand energy appliances (ranges, dryers, hot water heaters, etc.) during daylight hours.
- Increase owner/guest awareness of the recycling opportunities through improved signage at recycling stations and with in-room information in timeshare units.
- Develop partnerships with other Northshore businesses and organizations to improve sustainable efforts.
- Promote hourly rental of Envoy electric vehicles on the property.
- Install EV vehicle charging capability at the Administration Building.
- Identify Scope 1 & Scope 2 emissions for the property; Set scope 1 & 2 emissions reduction goals.
- Identify available financial grants, incentives and/or rebates for sustainability infrastructure improvements.
- Identify new sustainability awards and recognition programs to help further our exposure of the sustainability efforts at The Cliffs.



Aerial view of several of The Cliffs' residential buildings and the open spaces along the ocean bluff

# **APPENDICIES**

# **Appendix 1: The Cliffs at Princeville Sustainability Alignment to UN Sustainable Goals**

Sustainability is defined as per the United Nations World Commission on the Environment and Development, as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." The three pillars of sustainability are economic, environmental and social elements which embrace the natural environment and human resources. With increasing urbanization sustainability concerns have increased in the last two decades. To this point the United Nations issued 17 Global Sustainable Development Goals (SDG) and 169 targets in 2015:





































# **Appendix 2: 2023 Core Sustainable Metrics and Goals**

# **Energy Conservation & Renewable Energy Production & Consumption:**

Record kWh produced from renewable energy systems

Record kWh consumed on the property (all sources)

Review consumption vs demand cycles to determine where we can optimize use of renewables

Implement energy conservation measures to reduce consumption

Encourage use of high-demand electrical appliances during daylight hours

### Water Use & Conservation:

Record water used on property

Reduce quantity of water consumed on the property

Adjust and/or turn off irrigation system automatic timers to align with changing seasonal weather condition demands

Install water flow restrictors in timeshare units and common areas

Procure low water use appliances and fixtures

Encourage Owners to install low water use appliances and fixtures

Encourage use of tap water and FloWater systems instead of purchasing single-use bottled water

# Appendix 2: 2023 Core Sustainable Metrics and Goals - Continued

## **Waste Management & Recycling:**

Conduct solid waste audit to identify areas for improvement

Reduce amount of solid waste produced

Increase amount of cardboard recycled

Increase amount of paper, plastic, glass and aluminum recycled

Reduce the use of single-use plastic water bottles on the property

Promote recycling of used household batteries at recycling station by Building 4

Strive to make public events "zero solid waste" events with use of recyclable or reusable materials

Support proper disposal of household hazardous waste, pharmaceutical, electronic, and personal care product waste by working with Kaua'i County to advertise options for proper disposal

# **Climate Change & Resiliency:**

Issue annual update to the Emergency Plan

Conduct property assessment to improve resiliency as part of QC audits

Identify Scope 1 emission (CO<sub>2</sub>) sources and establish baseline emission levels

### Land Use & Maintenance:

Restrict/eliminate use of pesticides/herbicides

Use biodegradable fertilizers

Reduce use of gas-powered equipment to reduce GHG emissions

Continue enhancement of Botanical Walk and Grounds with native plants and trees

Reduce/eliminate invasive species onsite

Maximize use of on-site greenhouse for propagation/growing plants for use on the property

Utilize green waste composting

Inform guests of nearby walking trails

## **Operations & Community Engagement:**

Process guest survey data: "Overall Score" & "How Likely to Recommend The Cliffs" Scores

Process RCI/II Guest Surveys: Gold/Premier

Establish cross functional team for sustainability

Provide quarterly employee sustainability training program

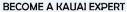
Use battery-operated carts and battery powered equipment

Participate in Community Events: Charity Walk

Offer wellness & activity programs to Guests and Employees

Partner with local government, businesses and organizations on sustainability efforts and activities

# **Appendix 3: Apartment Greening Tri-Fold Flyer**



Research customs, appropriate dress and the Island culture

#### **BUY LOCAL**

Support our local vendors and suppliers

#### REUSE

Use re-fillable water bottles And re-usable grocery bags

#### REDUCE & RECYCLE

Use electricity and water sparingly. Minimize solid waste by recycling as much as possible

## RESPECT WILDLIFE

Keep your distance, and do not feed the local wildlife (Yes, even the chickens)



# OUR SUSTAINABILITY MISSION

At The Cliffs we strive to minimize our impact on the environment and protect the unique and natural beauty that is our Island home.

We are proud of our ongoing sustainability efforts and ask for your help in protecting and preserving Kauai for future generations by assisting us with a few simple steps you can take during your stay.



Recognized as a leader in sustainability by Hawaii Lodging & Tourism Association

For more information on our Sustainability Program and our ongoing efforts please go to: www.cliffsatprinceville.com/sustainability-reports



A Sustainable Approach To Your Vacation



This is what a green resort looks like



Recognized for outstanding ccomplishment, dedication and innovation

## Information provided on outside of Tri-flyer

### WHAT WE ARE DOING

- Optimizing renewable energy production and battery storage
- Minimizing energy use by installing energy star appliances and LED lighting
- Reducing water usage across the property
- Reducing solid waste produced
- Increasing the quantity of recycled materials
- · Increasing cardboard recycling
- Maintaining open spaces and views
- Replacing invasive species with native species
- Construction of a greenhouse for the propagation and growing of plants to be used on the property
- Promoting local Farmer's Markets
- On-site Food Truck service during the week (see Concierge for weekly schedule)
- On-site wellness activities (see Concierge for available activities)
- On-site Fitness Center, Tennis, Pickle Ball, Basketball half court, Shuffleboard, Botanical Walking Trail

### HOW YOU CAN HELP

- Turn off lights and fans when not in
- Use energy intensive appliances during daylight hours when solar panels are producing electricity (between 10:00 am – 4:00 pm)
- Use re-fillable water bottles at the FloWater stations located by the Fitness Center and in the Pool Area avoiding single-use bottled water
- Separate and recycle your paper, aluminum, glass and plastic containers at the Recycling Stations located around the property
- Deposit used household batteries in the receptacle box at the Recycling Station at Building 4
- Recycle your cardboard at the Maintenance Building (please break down cardboard boxes prior to disposal)
- Turn off the gas to the barbeque when you're done cooking (please clean the barbeque grill too)
- Support local Farmer's Markets and on-site Food Truck vendors (see Concierge for locations and schedules)

# PROTECT KAUAI'S BEACHES AND REEFS

- Use only reef friendly sunscreen
- Do not touch or stand on the reefs
- Keep your distance from local sea
- Do not feed the fish when snorkeling
- Pack out everything you take to the beach
- Pick up trash that others may have left behind

For more information go to: https://kauai.surfrider.org

## REDUCE YOUR EMISSIONS

- Plan your stay to minimize the amount of driving each day
- Explore the nearby walking and hiking trails
- Rent bicycles at the Front Desk
- Use the Kauai Bus (Bus stop located at the Princeville Shopping Center)
- Rent a Tesla by the hour/day using the Envoy app (vehicles are located outside the Front Desk Lobby) download the app at:

www.envoythere.com/mobility-app

Information and tips provided on the inside of Tri-fold Flyer