



School Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

School and District's Certifications

The signatures of the school principal and district superintendent (or equivalents) on the next page certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of their knowledge. *In no case is a private school required to make any certification with regard to the public school district in which it is located.*

1. The school has some configuration that includes grades Pre-K-12.
2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
4. OCR has not issued a violation letter of findings to the public school district concluding that the nominated public school or the public school district as a whole has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools 2015-2018

☒ Public ☐ Charter ☐ Title I ☐ Magnet ☐ Private ☐ Independent ☐ Rural

Name of Principal: Mr. Kent Matsumura

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)

Official School Name: Honowai Elementary School

(As it should appear on an award)

Official School Name Mailing Address: 94-600 Honowai Street, Waipahu, HI 96797

County: Honolulu **State School Code Number *:** 276



Telephone: (808) 307-7100 **Fax:**

Web site/URL: www.honowai.org

E-mail: kent_matsumura@notes.k12.hi.us

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.



Date: 03/20/2018

(Principal's Signature)



Name of Superintendent: Mr. Dann Carlson

(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in official records)

District Name: Hawaii Department of Education

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

A handwritten signature in blue ink, appearing to read "Dann Carlson", written over a horizontal line.

Date: 22 MAR 18

(Superintendent's Signature)

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the school's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The school has some configuration that includes grades Pre-K-12.
2. The school is one of those overseen by the Nominating Authority which is highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. The school meets all applicable federal civil rights and federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: Ka Hei / Engie U.S. Inc.

Name of Nominating Authority: Ms. Victoria Suarez

(Specify: Ms., Miss, Mrs., Dr., Mr., Other)

I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.

A handwritten signature in black ink, appearing to read "Victoria Suarez", written over a horizontal line.

Date: 27 March 2018

(Nominating Authority's Signature)



The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509

Expiration Date: March 31, 2018

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.



ED-GRS Nominating Authority Application for Schools

Thank you for your interest in completing the Hawaii Department of Application for nomination to U.S. Department of Education Green Ribbon Schools (ED-GRS). In order to complete this application, you will need to collect data about your school's facility, health, physical education and safety policies; food service; and environmental and sustainability curriculum. You will need to document efforts in all of these areas equally, not just one.

ED-GRS recognizes schools taking a comprehensive approach to greening their school. A comprehensive approach incorporates environmental learning with improving environmental and health impacts. Becoming a U.S. Department of Education Green Ribbon School is a two-step process. The first step is to complete and submit this form to be selected as a nominee by an eligible nominating authority. Once selected as a nominee by your state or eligible nominating authority, the second step of the process requires signatures for the Nominee Presentation Form that will be sent to the U.S. Department of Education (ED) along with your application.

ED selects honorees from those presented by eligible nominating authorities nationwide. Selection will be based on documentation of the applicant's high achievement in the three ED-GRS Pillars:

Pillar I: Reduce environmental impact and costs.

Pillar II: Improve the health and wellness of students and staff.

Pillar III: Provide effective environmental and sustainability education, incorporating STEM, civic skills and green career pathways.

Schools demonstrating progress in all three Pillars will receive highest rankings. It is important to document concrete achievement. It will help you to assemble a team to complete the application. This team might include: a facilities manager, physical education director, food services director, curriculum director, finance department representatives, teachers, and students. You should consult the ED-GRS [Green Strides Resources](#) Page and [Webinar Series](#) for standards, programs and grants related to each Pillar, Element, and question. This is an excellent clearinghouse of information for all schools, not only those who apply.

The questions in this application will help you demonstrate your progress in these Pillars as well as provide space for you to include pertinent documentation. **Applications are due by March 1, 2018.** We will select nominees and submit them to the U.S. Department of Education by March 31, 2018.

Note that if selected for nomination to ED-GRS, the school principal and district superintendent must be prepared to certify that each of the statements below concerning the school's eligibility and compliance with the following requirements is true; however, in no case is a private school required to make any certification with regard to the public school district in which it is located.

1. The school has some configuration that includes one or more of grades Pre-K-12.



2. The school has been evaluated and selected from among schools within the Nominating Authority's jurisdiction as highest achieving in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
3. Neither the nominated public school nor its public school district is refusing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a district wide compliance review. The Department of Defense Education Activity (DoDEA) is not subject to the jurisdiction of OCR. The nominated DoDEA schools, however, are subject to and in compliance with statutory and regulatory requirements to comply with Federal civil rights laws.
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5. The U.S. Department of Justice does not have a pending suit alleging that the public school or the public school district as a whole has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
6. There are no findings of violations of the Individuals with Disabilities Education Act in a U.S. Department of Education monitoring report that apply to the public school or public school district in question; or if there are such findings, the state or public school district has corrected, or agreed to correct, the findings.
7. The school meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

School Contact Information

School Name: *Honowai Elementary School*

Street Address: *94-600 Honowai Street*

City: *Waipahu* **State:** *HI* **Zip:** *96797*

Website: *<http://honowai.org>*

Facebook page: *<https://www.facebook.com/honowaielementary>*

Principal Name: *Kent Matsumura*

Principal Email Address: *kent_matsumura@notes.k12.hi.us* **Phone Number:** *(808) 307-7100*

Lead Applicant Name (if different): *Victoria Suarez*



Lead Applicant Email: victoria.suarez@engie.com **Phone Number:** (808) 600-9444

Level: *Elementary (PK - 5 or 6)*

School type: *Public, Suburban*

District name: *Hawaii State Department of Education – Leeward*

One of the largest 50 districts in the nation: *Yes*

Total enrolled: *660*

40% or more from disadvantaged households: *Yes*

% receiving FRPL: *66%*

% limited English proficient: *23%*

Attendance rate: *95.8%*

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Always seeking opportunities for advancement of the community as a whole, Honowai Elementary is at the helm of Waipahu, Hawai'i's success. Honowai Elementary was established in 1968 to serve the community consisting of single-family homes, and low-income housing. Waipahu is 14,000 square miles along the northern shore of Middle Loch and West Loch of Pearl Harbor and includes the areas of Waipahu, Waipio, Village Park, Royal Kunia and Waikele. Waipahu is the Hawaiian name for gushing spring and was considered the capital of O'ahu to Native Hawaiians because of the congregation of people to the natural spring that provided restoration and relaxation.

Honowai Elementary, home of the Na Ali'i, is in west Waipahu with the Ho'ae'ae stream running alongside. The area in which Honowai Elementary falls has historically been productive and heavily populated. This continued through the plantation era and holds true today. Honowai Elementary is in a heavily populated community and is continuously improving to produce lifelong learners and proud Waipahu graduates (Waipahu Complex Accreditation, 2018).

The population of the Waipahu community is approximated to be 38,216 (2010 Census). Homes include multiple families and/or multiple generational dwellings. Approximately 54.45% of students in Waipahu schools are low socio-economic status and 5 of the 7 Waipahu schools meet the criteria for Title I support and one elementary school qualifies for free meals to 100% of their students through the Community Eligibility Provision Program (Waipahu Complex Accreditation, 2018).

Pillar I: *Reduced environmental impact and costs to the Hawai'i Department of Education are achieved in partnership with a state-wide, multidimensional program, Ka Hei. In 2016, Honowai Elementary was selected as an ideal site to carry out many facility transformations. The state program, Ka Hei, seeks to facilitate energy efficiency, the generation of*



clean power, energy savings and community impact on campus. The Ka Hei program has been instrumental in the development and implementation phases of modernization for Honowai Elementary. Additionally, classroom temperatures were high enough to warrant the school site as a school in the Heat Abatement with a goal of reducing classroom temperature through accumulate improvements. Through the Ka Hei program's efficiency pillar paired with behavioral modifications, the use of energy was significantly reduced which allowed for the additional load of air conditioning and ceiling fans to be installed in each classroom. It should be noted that the efficiency of energy at Honowai Elementary, with air conditioning units in every classroom, is below the typical energy use prior to the facility transformations of the Ka Hei program. With the installation of air conditioning in the classrooms with set temperatures, the moisture control has increased and, in turn, created a lower probability for mold growth. Typically the installation of air conditioning helps individuals with asthma because the doors and windows are kept shut thus keeping out pollens and outdoor irritants. Additionally, the thermal comfort in the classrooms has improved the learning environment for all Honowai students. The condition and comfort of the classrooms has been greatly improved through the environmental health upgrades.

Furthermore, Honowai Elementary has 492 solar PV modules that generate 100 kWdc of clean power, minimizing the campus' carbon footprint. The data that is collected on the PV provides real-world data for students to learn about solar science though an online site called UtilityVision. Efficiency and conservation are addressed through behavioral modifications as part of the R.E.A.C.H. program, which stands for Reducing Energy And Changing Habits. The REACH program was highlighted at a Honowai Elementary Professional Development where teachers were tasked with keeping efficient; the initial installation of air conditioning units at the school was 23 out of 27 classrooms and the goal was to keep the electricity use below the threshold in order for the final 4 classrooms to receive cooling measures – this was accomplished quickly. The community at Honowai Elementary fully supports and embraces the positive facility transformations that have been a benefit to the school's leadership in the Waipahu area. Students at Honowai Elementary are already stepping into the sustainability model of the school as over 75% of students walk to school regularly, there is a deep-seated sense of living efficiently.

Pillar II: *Honowai Elementary holds high standards for school and community health including collaboration with the Parent Community Network. Schools in Waipahu continue to encourage students to take pride in their community and attending Waipahu schools to graduate as a proud Marauder. With the coordinated efforts of the complex to rally together and meet the needs of all students to continue the legacy of community building, helping each other, and working together without bias and judgment. The leaders of Waipahu schools are always aware of the needs of their students, families and school communities. These needs continue to bind the Waipahu schools to work together and help each other out to grow as Waipahu Complex and Waipahu Community (Waipahu Complex Accreditation, 2018). Connecting students to the origin of the land they live, the importance of oral history is stressed and native Hawaiian storytellers are brought in to support students in creating relationship with their history. The health of culturally responsible education in geographically diverse areas, such as Hawai'i, is essential to the health of the community and ecology of the relationships that thrive within a school setting.*

A school-wide program that has offered an abundance of student success is the 'Gotcha' program, where students are awarded slips for unsolicited good/positive behaviors around campus. Teachers can only administer the 'gotcha' slips to students who are not in their classroom and to entire classes if deserved. This has been a positive behavior support that encourages the student community to act in a constructive and helpful mode. Students are acknowledged for their positive behaviors through the media club that provides announcements daily.



Further, the health of the community is bolstered through the Physical Education program that is driven by Honowai's coordination of the quarterly tournaments that take place in the entire Waipahu complex. Students are provided with a structured recess with team sports and grade-level activities; these opportunities create the space for students to join in these complex-wide tournaments that are organized through Honowai Elementary's Physical Education department. Within this department there are also adaptive physical education classes for the medically fragile and those requiring special care; all of the individuals in the Waipahu complex are provided these adaptive classes through the management of Honowai Elementary.

Each year Honowai Elementary alternates between a May Day celebration and Field Day. These festivals are open to parents and guardians of Honowai students to join in on the activities of the yearly celebration. At Field Day, families are encouraged to play – baton relay races, target games and Zumba all during a round-robin style affair.

Parent Community Network (PCN) organizes and supports programs for the community of Honowai Elementary parents and guardians. In previous years, the PCN hosts Parent Project which is the cooperation of the parent community and key stakeholders in Waipahu. Most recently, an offering for parents in partnership with PCN and the Honolulu Police Department created strategy sessions aimed at assisting parents with trying children. This offering required parents and guardians to attend all 12 sessions, approximately 3 hours each, at the start of the program. Parents and guardians walked away with a wealth of knowledge and a binder on strategies to support their children through elementary, intermediate and high school. Honowai Elementary provided teachers to assist with childcare services for the parents who were attending the sessions. Through the provisions of improved health and wellness, the Waipahu community is supported with abundance by Honowai Elementary.

In terms of the occupant health at Honowai Elementary, this has been briefly mentioned as part of Pilar I, the improvement of the facility came as part of the energy program, Ka Hei. Support for occupant health comes by way of increased cooling measures in the classrooms. The condition of the classrooms was greatly enhanced with the installation of air conditioning units in all classrooms as well as ceiling fans. This improvement has been frequently noted by faculty. As part of the efficiency modifications at Honowai Elementary, the refrigeration of school foods in the walk-in coolers has been greatly improved through real-time digital temperature data logging; food safety has been amplified. Improved ventilation in the library has been noted as part of the program and, in fact, all of the classrooms benefit from the reduced probability of mold growth due to air conditioning and ventilation. The classrooms and buildings that hold the PV all have new roofs, reducing the chance for roof leaks and heat in the buildings due to added insulation.

Pillar III: *During the cane harvest, one of the hardest jobs at the time was to "hapai-ko" (carrying cane). Similar to this arduous job of carrying up to 150 pounds of cane, today's Waipahu schools carry the load of providing an education to students that will enable them to be college, career and citizenship ready. Waipahu schools are dedicated to doing the tough job and earning their status as those that have earned the badge of honor of being able to "hapai-ko" (Waipahu Complex Accreditation, 2018).*

The effective environmental and sustainability education exists at Honowai Elementary through connection to the land. Students are provided with education that highlights place-based learning; solar energy; computer science; Kapakahi stream; oral history and more. Providing students with opportunities to become well-versed in the key relationships that exist in Waipahu builds a more robust community.



The science, technology, engineering, art and math (STEAM) content knowledge is integrated into lessons for students at Honowai Elementary in many ways. The most specific example of connecting STEAM to content knowledge and thinking skills is the career-based resource, Defined STEM, which allows the students to step into the role of an individual in a STEM career and carry out a performance task that correlates to the Hawaii Content and Performance Standards as well as the newer, Next Generation Science Standards. Students performing lessons in Defined STEM are connected to a career, such as Energy Management Consultant, and can recreate the role of an individual who they saw on campus conducting data collection from the Ka Hei program.

Place-based learning is heavily influenced by the different backgrounds of each ahupua'a. In Waipahu, the sugar cane plantation and the wetland surrounding inspires the education of students in these dynamic environmental and human systems. In particular, the study of the Pouhala Marsh and the endemic species of Hawai'i that are sustained by the salt marsh and the water the flows from the Kapakahi stream bolsters the human connection to the 'Ewa Watersheds. Students in the 5th grade were afforded a trip to the Hōkūle'a, a culturally significant double-hull sail that has brought the concept of Mālama Honua around the world. Students at the younger grade levels have the opportunity to learn from the lo'i patch on campus and once ready for harvest, the students will pound the taro into poi. There are also hydroponics and aquaponics systems on campus, again allowing for students to learn from the school's garden efforts. Students who engage with any of the food that grows on campus are embedded with a sense of the important and dynamic systems at play.

Honowai Elementary engages students in collective actions that identify issues of public concern. In civic engagement, students from the Gifted and Talented program set out to create a safe pedestrian area around Honowai Elementary. The students in this track were able to acknowledge and asses the issue of speeding. Responding to the needs of students who walk to school, the Gifted and Talented track was able to create a solution that was recognized by both the Neighborhood Board and City Hall.

The connection for Honowai Elementary students to the land is reinforced at the classroom level to reiterate the key relationships of sustainability by way of environmental, energy and human systems.

1. Is your school participating in a local, state or national school program, such as EPA ENERGY STAR Portfolio Manager, EcoSchools, Project Learning Tree, or others, which asks you to benchmark progress in some fashion in any or all of the Pillars?

☒ Yes () No Program(s) and level(s) achieved:

Energy Star (2015) Rating 96;

Ka Hei Program (State) education and facilities modifications

2. Has your school, staff or student body received any awards for facilities, health or environment?

☒ Yes () No Award(s) and year(s):



Honowai Principal, Kent Matsumura, received the 2018 Outstanding Educator award from Waipahu Community in Schools;

Honowai Head Custodian, Lowell Spencer, recognized as HDOE and State Employee of the Year 2017;

Ka Hei Sustainable Cooling Pilot School in 2017.

Pillar I: Reduced Environmental Impact and Costs

Energy

1. Can your school demonstrate a reduction in Greenhouse Gas emissions?

(X) Yes () No Percentage reduction: *58%* Over (m/yy - m/yy): *12/17-01/18*

Initial GHG emissions rate (MT eCO₂/person): *21.89*

Final GHG emissions rate (MT eCO₂/person): *12.6*

Offsets: *Solar PV, kitchen appliance upgrades* How did you calculate the reduction? *ENGIE UtilityVision*

2. Do you track resource use in EPA ENERGY STAR Portfolio Manager? (X) Yes () No

If yes, what is your score? *96*

If score is above a 75, have you applied for and received ENERGY STAR certification? (X) Yes () No

Year: *2015*

3. Has your school reduced its total non-transportation energy use from an initial baseline? (X) Yes () No

Current energy usage (kBtu/student/year): *1592.8*

Current energy usage (kBtu/sq. ft./year): *18.3*

Percentage reduction: *42%* over (m/yy - mm/yy): *03/17-02/18*

How did you document this reduction? *ENGIE UtilityVision*

4. What percentage of your school's energy is obtained from:

On-site renewable energy generation: *100 kWdc (492 solar PV modules)*

Clean power production: *Solar*

Participation in USDA Fuel for Schools, DOE Wind for Schools or other federal or state school energy program:

State School Energy program – Ka Hei



5. What other energy efficiency measures have been taken at your school:

Interior/Exterior LED retrofits, refrigeration system and electric motor upgrades, ventilation controls, roofing insulation, and retro-commissioning of existing HVAC equipment.

6. In what year was your school originally constructed? *1967*

What is the total building area of your school? *67,242 ft²*

7. Has your school constructed or renovated building(s) in the past ten years? (*X*) Yes () No

8. Our school's drinking water comes from: (*X*) Municipal water source

9. Describe how the water source is protected from potential contaminants.

All water served by the BWS is tested by the Hawaii State DOH in accordance with NPDWR. In addition, the BWS also conducts routine examinations of water at Honowai Elementary for salt water contamination. This program manages Oahu's natural drinking water resources by protecting from over-pumping.

10. Describe the program you have in place to control lead in drinking water.

The BWS, in accordance with Federal and State regulations, tests for lead in water samples taken from consumers' taps.

Waste

12. What percentage of solid waste is diverted from landfilling or incinerating due to reduction, recycling and/or composting? Complete all the calculations below to receive points.

A - Monthly garbage service in cubic yards (garbage dumpster size(s) x number of collections per month x percentage full when emptied or collected): *8x20= 160yd³*

B - Monthly recycling volume in cubic yards (recycling dumpster sizes(s) x number of collections per month x percentage full when emptied or collected): *4x8= 32yd³*

C - Monthly compostable materials volume(s) in cubic yards (food scrap/food soiled paper dumpster size(s) x number of collections per month x percentage full when emptied or collected): *N/A*

Recycling Rate = ((B + C) ÷ (A + B + C) x 100): *((32+0) ÷ (160+32+0) x100) = 16*

Monthly waste generated per person = (A/number of students and staff): *160/700*

13. List the types and amounts of hazardous waste generated at your school:

Gas (less than 5 gal)

Describe other measures taken to reduce solid waste and eliminate hazardous waste.



Practices from the Hawaii Department of Education Memo request schools to check and removed storage and classrooms for un-labeled or hazmat-type waste for pick-up from a vendor for proper disposal. Minimal amounts of hazardous waste is generated at Honowai Elementary School; this begins with not bringing or using hazardous materials on campus. Honowai Elementary has passed annual inspections by Hawaii Fire Department which includes hazardous storages/cabinets.

14. Which green cleaning custodial standard is used?

Honowai Elementary uses less than 50% green cleaning custodial supplies though opts for green supplies when available. There is no standard set for green cleaning.

What specific third party certified green cleaning product standard does your school use?

Green products are being used if and where viable and available; MSDS on products used on file and available; in the process of working with Vendors for options of green products that can be incorporated into existing Custodial practices.

Alternative Transportation

15. What percentage of your students walk, bike, bus, or carpool (2 + student in the car) to/from school? (Note if your school does not use school buses)

~75% of students walk to school; ~<1% bike to school; ~25% carpool to school

How is this data calculated?

Visual Estimate

16. Has your school implemented?

☒ **a well-publicized no idling policy that applies to all delivery vehicles**

☒ **Vehicle loading/unloading areas are at least 25 feet from building air intakes, doors, and windows.**

☒ **Safe Pedestrian Routes to school or Safe Routes to School**

Students in the Gifted and Talented track sought to reduce speeding around Honowai Elementary before and during school hours to create Safe Pedestrian Routes to school. This will be discussed further in Pillar III.

17. Describe how your school transportation use is efficient and has reduced its environmental impact.

No bus service serves Honowai Elementary School, therefore less exhaust/emission while idling.



18. Describe any other efforts toward reducing environmental impact, focusing on innovative or unique practices and partnerships.

Honowai Elementary School has been working with Engie Services since 2015 as part of the Ka Hei program to reduce the school's utility bill through on-site renewable energy generation via solar panels. In total, Honowai Elementary School has 492 solar PV modules that can generate 100kWdc of clean power, minimizing the campus' carbon footprint. Energy conservation measures to improve the learning environment and reduce campus energy loads include LED retrofits, sustainable cooling, ventilation controls, roofing insulation, retro-commissioning existing HVAC equipment as well as bringing sustainable cooling to the school through high-efficiency AC systems and EnergyStar ceiling fans. As part of the Ka Hei program, educators from each grade level at Honowai Elementary School received a Professional Development (PD) on science, technology, engineering, and math (STEM). In the PD, teachers received professional instruction and resources to conduct lessons in the classroom to aid in connecting the physical changes of the facility to hands-on, inquiry based learning for students. The customized PD training session empowered Honowai Elementary School teachers to continue sustainable and positive change with the students.

Pillar 2: Improve the health and wellness of students and staff

Environmental Health

1. Describe how your school controls and manages chemicals routinely used in the school to minimize student and staff exposure.

The Hawaii Department of Education has provided a memo to follow for management of chemicals and hazardous waste; unlabeled and hazmat waste is to be collected by a HIDEOE vendor for disposal at a pre-set date.

Minimal amounts of hazardous waste is generated at Honowai Elementary, beginning with a general practice of not bringing/using hazardous waste on the campus.

Biohazard waste disposal is managed by a vendor and is disposed of at a pre-set date.

2. Describe actions your school takes to prevent exposure to asthma triggers in and around the school.

Regular education of both students and faculty regarding precautionary measures to take and preventative steps for asthma triggers are presented.

Nutrition and Fitness

11. Which practices does your school employ to promote nutrition, physical activity and overall school health? Provide specific examples of actions taken for each checked practice, focusing on innovative or unique practices and partnerships.

☒ Our school has an on-site food garden.



Students at Honowai Elementary participate in a Hydroponics as well as an Aquaponics system on campus. Students use the systems to collect data and participate in sustainability lessons throughout the year. The students that primarily work with the systems are 5th and 6th grades.

[X] Our school garden supplies food for our students in a cooking or garden class or to the community.

At Honowai Elementary, a lo'i (kalo) patch exists on campus that serves as one of many sustainability lessons that are aligned with the Nā Hopena A'o (HĀ) initiative from the DOE. The lo'i provides a traditional, pre-Captain Cook, sustainable source of food. The lessons that are provided alongside the lo'i tap into the set of six outcomes that are firmly rooted in Hawai'i as part of the HĀ framework. The six outcomes that are taught are the universal values within each culture; bringing a sense of value and strength to each person that engages in the learning experience. Students and educators who engage with the loi patch have the opportunity, once ready for harvest, to pound the stem of the taro plant into a traditional Hawaiian food, poi.

[X] Our students spent at least 120 minutes per week over the past year in school supervised physical education.

[X] At least 50% of our students' annual physical education takes place outdoors.

Students at Honowai Elementary spend a majority of their physical education courses outside. Hawaii has year-round sun and when students are outside for physical education, there are reminders for being safe and healthy while outside under the sub-tropical sun.

[X] Health measures are integrated into assessments.

Within the Hawaii DOE, there are Content & Performance standards for physical education (HCPs). The four content standards for physical education are:

- 1. Movement Forms: Use motor skills and movement patterns to perform a variety of physical activities*
- 2. Cognitive Concepts: Understand movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities*
- 3. Active Lifestyle: Participate regularly in physical activity*
- 4. Physical Fitness: Know ways to achieve and maintain a health-enhancing level of physical fitness*

When assessing students in physical education, Honowai Elementary provides experiences for each child to have an equal opportunity to meet all the content standards. There is emphasis is on developing the mature forms of locomotor, non-locomotor, and manipulative skills and the application of combinations of movement forms into a variety of basic games and physical activity settings. Students also learn about the basic benefits of physical activity and are encouraged to choose health-enhancing pursuits both inside and outside of the school setting.



12. Describe the type of outdoor education, exercise and recreation available.

Students at Honowai Elementary participate in structured recess where team sports and grade-level activities are organized as part of each student's time outside. Physical Education (PE), Recess, Intramurals (Track & Field, Basketball, Volleyball), Jump Rope for Heart are other offerings at Honowai Elementary.

An outdoor field trip opportunity for students, primarily the 4th grade, is to Pouhala Marsh, a 70-acre tidal wetland in Waipahu. This field trip is offered in partnership with students at Waipahu High School to integrate interdisciplinary learning for students learning about the spring-fed Kapakahi Stream that flows from the Hawaii Plantation Village to the West Loch of Pearl Harbor. The Kapakahi Stream is part of the Kapahahi Watershed that exists in the backyard of students who live in Waipahu. It is critical for students to recognize as the stream feeds into the Pouhala Marsh that is a crucial habitat for native plant and animal species, including the endangered Hawaiian Stilt. Students on the field trip collect data, observe plants and animals and with the High School to determine the need of conservation for Pouhala Marsh. For the 5th grade, the outdoor field trip is to the Hōkūle'a, where students learn the basics of sailing a canoe. All grade levels participate in the Crazy Olympics where students and teachers compete in a series of relay races.

13. Describe any other efforts to improve nutrition and fitness, highlighting innovative or unique practices and partnerships.

Participation in Fresh Fruit and Vegetable (FFVP) to promote healthy eating and nutrition as well as awareness of different varieties of fruits and vegetables. Teachers integrate lessons as part of the program to students in classrooms where the FFVP is used.

Providing a lo'i patch on campus improves nutrition as well as increases the cultural relevance of food in Waipahu. Students are granted the opportunity to pound the taro into poi when ready for harvest.

Additionally, Honowai Elementary is the site for all adaptive physical education for the entire Waipahu Complex, serving the spectrum of medically fragile students. Skilled nursing and coordinated health efforts are provided as part of the school's offerings to the community.

Coordinated School Health, Mental Health, School Climate, and Safety

14. Does your school use a Coordinated School Health approach or other health-related initiatives to address overall school health issues? (X) Yes () No

If yes, describe the health-related initiatives or approaches used by the school:

One of the health-related initiatives that Honowai Elementary has been able to shift the community view on is head lice, or ukus in Hawaiian. Honowai Elementary uses a "no nit policy," which is a school-led initiative to help reduce the spread of ukus and through strong efforts has created a supportive community that understands the importance of a healthy school site. Honowai Elementary utilizes a once-per-quarter screening for the students as well as when necessary to keep the school uku-free.



15. Does your school partner with any postsecondary institutions, businesses, nonprofit organizations, or community groups to support student health and/or safety? (X) Yes () No

If yes, describe these partnerships:

Honowai Elementary participates in:

- 1) Leeward Lions Club Vision & Hearing Screening*
- 2) DOH – Student Flu Vaccination*
- 3) Time Super Market – Staff Vaccinations*
- 4) American Lung Association for Open Airways*
- 5) Epilepsy Foundation’s Epilepsy Training*

16. Does your school have a school nurse and/or a school-based health center? () Yes (X) No

Honowai Elementary has a CNA that acts as the school health aide.

17. Describe your school’s efforts to support student mental health and school climate (e.g. anti-bullying programs, peer counseling, etc.):

Honowai Elementary is included in a complex-wide K-12 Positive Behavioral Interventions and Supports (PBIS) effort to address student support; focusing on common core values with emphasis on building robust Response to Intervention Response to Instruction and Intervention-Behavior supports. The Multi-tiered System of Supports (MTSS) is throughout the Waipahu Complex. The PBIS element of the MTSS was developed around community values. Every student within the Waipahu Complex, regardless of school, is supported by the same PBIS.

The Waipahu schools and community rally around the four core values of Responsibility, Respect, Honesty and Caring. Virtues that the schools believe every student should be taught and reinforced. The Waipahu Complex Positive Behavioral Interventions and Supports (PBIS) have been a K-12 area of focus for the past 14 years as a need to have consistent high behavior expectations of Waipahu students in schools, as well as in the community. Waipahu businesses and community agencies support the PBIS efforts by posting the four core value posters where students frequent, reinforce the behavior expectations and contribute to the complex PBIS activities and events. Waipahu Complex will continue its efforts to ensure that school wide PBIS (SWPBIS) is systematized from Kindergarten to High School to result in students who demonstrate "Right Mind, Right Action" and the four core values that enable them to be college, career and citizenship ready. And with the recent passing of the Nā Hopena A'o (HA) Department of Education policy (HI BOE Policy E-3), Waipahu Complex sees the work started with the Waipahu PBIS four core values as embedded within and reinforced by HA to have a shared language amongst all schools, families, community and businesses to build upon the four core values that we want all students in Waipahu to embrace, live and model. Waipahu Complex has sent representatives from all schools to the National PBIS conference in 2016 and 2017. Learning from the conference has influenced the development of an enhanced monitoring system for the implementation of SWPBIS in all complex schools. The complex will be using the SWPBIS Tiered Fidelity Inventory (TFI), Version 2.1 as a formative assessment, progress monitoring and



self-assessment. The intent for the use of the TFI by Waipahu Complex is to determine the current SWPBIS practices in place, to self-assess and guide implementation and to assess annual progress and facilitate sustained implementation of SWPBIS. The Complex Area supports this effort by serving as the external facilitator and reviewer that works with each schools' PB IS/Response to Intervention - Behavior (RTI-B) committee/team to conduct the assessment and inventory. The appealing aspect of the TFI is its utility and application to support schools to implement SWPBIS and identify areas of challenge for improvement efforts and inform implementation plans. By monitoring implementation of SWPBIS efforts at all schools, the complex is able to identify patterns in needs or challenges that can be supported and addressed with targeted training or assistance (Waipahu Complex Accreditation, 2018).

Pillar 3: Effective Environmental and Sustainability Education

1. Which practices does your school employ to help ensure effective environmental and sustainability education? Provide specific examples of actions taken for each checked practice, highlighting innovative or unique practices and partnerships.

[X] Environmental and sustainability concepts are integrated throughout the curriculum and are integrated into assessments.

As part of Honowai Elementary's collaboration with the Ka Hei program, energy education is brought in to students and educators with a hope of integrating each subject to energy. The provisions of the collaboration begin to gear teachers toward Next Generation Science Standards, creating a space in the classroom for facilitation in these concepts with tools to carry out the lessons.

[X] Professional development in environmental and sustainability education are provided to all teachers.

Professional Development offerings for Hawaii Department of Education (DOE) PDE3 credit, or 3-credit hours per session including delivery of environmental and sustainability lessons and portfolio dissertation can be received by any teacher within the DOE through the Ka Hei program at no cost to the teachers.

2. How does your school use sustainability and the environment as a context for learning science, technology, engineering and mathematics thinking skills and content knowledge?

Honowai Elementary School is a living laboratory of science, technology, engineering and math – the school has a centrally located computer with data on the solar PV installation. Through the energy education PDs, teachers have gained skills to encourage students to create small learning communities to identify what they already know, what they need to know, and how/where they will access the information necessary to solve the task at hand.

3. How does your school use sustainability and the environment as a context for learning green technologies and career pathways?

At Honowai Elementary sustainability is an on-going conversation through the Ka Hei Long Term Engagement, as an island it is essential to incorporate place-based learning to drive the concepts of mālama honua (to take care of the earth). As part of the Ka Hei program, an online career-based resource – Defined STEM is used to connect real-world issues with student created solutions. Honowai Elementary uses Defined STEM as part of the Ka Hei



Long Term STEM Engagement. The concepts of caring for our island earth is distinctly connected to many of the Nā Hopena A'o. The framework is described on the Hawaii DOE website as a “department-wide and seeks to develop the skills, behaviors and dispositions that are reminiscent of Hawai‘i’s unique context, and to honor the qualities and values of the indigenous language and culture of Hawai‘i.” standards of the department-wide framework that are integrated to lessons in Defined STEM. The framework is a concept that is taught throughout the grade levels at Honowai Elementary.

4. Describe how outdoor learning is used to teach an array of subjects in context, engage the broader community, and develop civic skills.

Gifted and Talented students from Honowai Elementary set out to organize a safe pedestrian zone near and around the school based on the high speed of motor vehicles that they felt was impeding student and community safety. The Gifted and Talented track used the Design Thinking model to create a solution for pedestrian safety. The students’ solution for safety was brought to the Neighborhood Board and was eventually honored at City Hall. The speed measures that the students addressed is now a visual reminder when anyone is walking or driving around Honowai Elementary School.

5. Describe your partnerships to help your school and other schools achieve in the 3 Pillars. Include both the scope and impact of these partnerships.

Honowai Elementary works cooperatively with the 8 schools in the Waipahu complex. Honowai is particularly directed at achieving reduced environmental impact and costs through the state-wide, Ka Hei program and the behavioral modifications of REACH. The improved health and wellness of Honowai Elementary serves the greater community and supports the success of students by way of offering family-fun and counseling. The effective environmental and sustainability education is attained in several ways, though more broadly through the place-based lessons and connection to the values of Waipahu, Hawai‘i. Specifically tapping into the pillar of environment, taking students to visit the salt marsh that collects Kapakahi Stream water is a value-add that reinforces the place-based teachings of Honowai Elementary. The Waipahu complex is a partnership of 8 schools and is backed by Honowai elementary through many collaborative efforts, the longest-standing alliance is the fulfilment of the PBIS supports to offer students in the complex core values of Responsibility, Respect, Honesty and Caring.

6. Describe any other ways that your school integrates core environment, sustainability, STEM, green technology and civics into curricula to provide effective environmental and sustainability education, highlighting on innovative or unique practices and partnerships.

In weekly after school offerings, students in both lower and upper elementary have beginning and intermediate coding that also taps into the importance of computer and internet safety. Students are informed of safe searching, sharing of information, and partner work. Students also use a career-based website, DefinedSTEM, to validate the Next Generation Science Standards with performance expectations of a qualified and capable 21st century individual who is able to think three dimensionally. Honowai Elementary has benefited from all of the three E’s of Ka Hei—efficiency, electricity generation, and education. There is also a visible change to the facility with the solar photovoltaic system installation, students and staff are able to monitor the energy production through UtilityVision. Student comprehension of the environment, sustainability and STEAM partnership allowed

for revelatory comments, “I didn’t know we used so much fossil fuel to do ... everyday stuff. We gotta do something ... Now I know why so many houses have PV and why we see wind turbines. It’s all good stuff for the ‘aina [the Hawaiian word for land]”. In the 5th grade, students who had the opportunity to visit the Hōkūle‘a, learned about traditional wayfinding – this is without the use of technology. The Hōkūle‘a field trip offers a unique way of identifying and combining STEM content knowledge with traditional methods of sailing using the stars, wave patterns and awareness of place as a guide. Honowai Elementary’s partnerships with the many programs that reinforce student and community success has yielded results beyond the classroom walls – students have become stewards of the land.

8. Submit 3-5 number of photos (with appropriate permissions) or up to 3 minutes of video content, as suits your competition.



Teacher Justin Turner-Rivera and student Anyiss Spencer at the school-wide Crazy Olympics where relay races with grade level teams compete against one another.



5th Grade students, Mayleina Fa‘aituala, Nichelle Corpuz, Isaiah Edralin, Jaylah Longboy, Camille Tacadena, Harabella Savedra aboard the Hōkūle‘a.



Justin Trimner and Shelee Ranada (no longer at Honowai) at the Honowai Elementary Ka Hei Professional Development learning about Energy. The teachers are playing Energy BINGO.



Teachers Lauren Abe, Kaleena Scoville (no longer at Honowai), Lindsay Bugarin, Chelsie Sato and Yng Yng Chiu learning together at the Honowai Elementary Ka Hei Professional Development, held in partnership with Hawaii Energy. In this photo, teachers are learning about the multi-step process to get energy.



Student leadership performing a song as a 'thank you' to OpTerra (now Engie) for the efficiency upgrades at Honowai Elementary. This photo is from the student assembly presenting students who completed a home energy audit with home energy kits.



Student winners, Shannon Hegarty and Reannah Fines, for home energy audits at the energy assembly. From left to right and front row to back row, Victoria Suarez of ENGIE, Shannon Hegarty, Reannah Fines, Principal Kent Matsumura, (back row) Brian Kealoha of Hawaii Energy, Rep Ty Cullen (House District 39), Henry Aquino (House District 38) and Brandon Hayashi of ENGIE.

See more photos in the attachments of the GreenStrides portal.

Honowai Elementary School Drone Footage: <http://honowai.org/apps/video/watch.jsp?v=10022659>