



Fiscal Year 2021

Sustainability Scorecard Summary

NASA's Kennedy Space Center Sustainability Goal Scorecard provides a snapshot of the center's performance in meeting Kennedy's sustainability goals. It provides a status of functional areas spanning renewable energy, sustainable buildings, sustainable acquisition, water efficiency, fleet management, energy performance contracting, and waste management. Kennedy's Environmental Management Branch monitors the performance in each of these categories to achieve a "Go for Green" status and to identify opportunities for improvement.



GOAL 1

Energy Efficiency/Renewable Energy

Increase clean and renewable energy while maximizing energy efficiency in facilities.

- Identified various energy conservation measures that included replacement of LED retrofiting, cool-roof technologies, and upgrading HVAC control systems within 42 facilities. This fiscal year project has the potential for an annual energy savings of nearly \$300,000.
- Florida Power and Light's Discovery Solar Energy Center began operation in June 2021. The 74.5-megawatt ground-mounted solar array produced more than 60,000 megawatt-hours of clean renewable energy in FY21.

INTERESTING FACT: The FPL Discovery Solar Energy Center, which consists of approximately 300,000 solar panels, will be able to generate 74.5 megawatts of energy from the Sun -that's enough to power ~15,000 homes.



GOAL 2

Building Efficiency Measures/Performance Contracting

Use performance contracts for energy and water efficiency measures, modernizing buildings, and meeting infrastructure goals.

- Awarded a Utility Energy Service Contract (UESC) Phase 1 Design and Implementation of a \$21.9 million energy-efficient improvement project resulting in \$1.4 million in annual energy, water, and maintenance savings for NASA. This effort includes a two-megawatt solar farm, water fixtures, transformers, interior lighting, street and parking lot lighting, boilers, and HVAC improvements.

INTERESTING FACT: Exterior lights are designed to be sea turtle-friendly so as not to disturb their nesting activities.



GOAL 3

Water Efficiency

Implement energy conservation measures.

- Overall water reduction in FY21 was 35% (from 23% in FY20). Implemented a process that analyzed the KSC water distribution system to reduce water-system flushing at remote sites. Reduction in water-system flushing was a significant contributing factor. Also, a contributing factor was having many employees in telework status due to the COVID-19 pandemic.

INTERESTING FACT: This reduction saved approximately 33 million gallons of water!



GOAL 4

Sustainable Buildings

Meet or exceed the Silver Certification in Leadership in Energy and Environmental Design (LEED) for new construction and renovation projects.

- To date, 28.5% of Kennedy's goal-subject facilities gross square feet is certified as sustainable through the Leadership in Energy and Environmental Design (LEED) certification program.
- Completed replacement of three chillers at the Utility Annex, improving plant efficiency.
- Ongoing construction for the Converter Compressor Facility (CCF) with expected LEED Silver at completion.
- Portfolio includes nine LEED certified facilities, consisting of 540,690 square feet:
 - ✦ Two Platinum: Central Campus and Propellants North Facility
 - ✦ Three Gold: Electrical Maintenance Facility, Ordnance Operations Facility, and Fuel Storage Area 1
 - ✦ Four Silver: Life Support System Building, Neil Armstrong Operations and Checkout Building (North Wing), Space Shuttle Processing Facility Science Annex, and Kennedy Data Center

Note: In addition, the Kennedy Space Center Visitor Complex and our commercial partners have constructed, or are in the process of constructing, LEED facilities.



GOAL 5

Waste Management

Reducing waste going to landfills to less than 50% annually.

- Kennedy diverted more than 66 million pounds of waste from the landfill:
 - ✦ Dredged soil
 - ✦ Various metals (scrap, stainless steel and aluminum)
 - ✦ Concrete and cement
 - ✦ Used carpet
 - ✦ Green-waste compost
 - ✦ Office paper and cardboard
 - ✦ Used oil
- Waste to landfill rates are: construction and debris (CD) at 34.3% and non-CD at 34.8%.

INTERESTING FACT: Recycled more than 1,000 pounds of spent bullet casings and converted 250,520 pounds of old carpet into fuel cubes used in place of coal in cement kilns.



GOAL 6

Fleet Management

Improve fleet efficiency, reduce costs, and meet mission requirements.

- Added 14 new electric vehicles
- Reduced gas and diesel fleet by one vehicle
- Reduced fossil fuel equivalent usage by 2%



GOAL 7

Sustainable Acquisition

Acquire, use, and dispose of products and services in accordance with federal green purchasing requirements.

- In FY21, 94.6% of KSC contract actions had environmental language that required purchasing of green products and services and represents 97.1% of obligated dollars.