

2012 IHS Green Champion Awards

Change Agents Award

Sustainability Audits

Awarded to:

Gary Hartz, Chief Sustainability Officer, Office of Environmental Health and Engineering
Gordon Delchamps, Energy and Water Manager, Office of Environmental Health and Engineering

David McMahon, EMS Coordinator, Office of Environmental Health and Engineering
Jeffrey Church, Senior Program Manager, Division of Environmental Health Services
Christopher Couture, Environmental Scientist, Office of Environmental Health and Engineering

In October 2011, the Indian Health Service (IHS) Office of Environmental Health and Engineering (OEHE) implemented a program to conduct comprehensive Sustainability Audits at all IHS-owned buildings. The program is designed to identify opportunities and strategies that will improve the environmental performance of IHS facilities in a fiscally responsible manner. Sustainability Audits consist of energy and water performance evaluations, greenhouse gas (GHG) emissions inventories, and Guiding Principles for Federal Leadership in High Performance Sustainable Buildings (Guiding Principles) conformance assessments. The program furthers the agency's sustainability objectives by identifying practical cost-saving opportunities in IHS facilities, while also helping the agency comply with federal environmental regulations.

With contractor support from Federal Occupational Health (FOH) and Hitachi Consulting, more than 650 IHS-owned buildings at 29 Installations were audited in FY 2012. The audits have resulted in hundreds of recommendations in areas such as: energy conservation; water conservation; renewable energy; GHG emission reductions; integrated planning; sustainable design; eco-friendly materials; indoor environmental quality; and waste management. The energy and water conservation measures recommended in FY 2012 are anticipated to save approximately \$2.55 million in annual energy costs. By the end of FY 2013, the remaining 1,700 IHS-owned buildings will also receive Sustainability Audits. The program has a high potential to be replicated in other Federal agencies.

Energy & Fleet Management Awards

Individual Award - Mike Henrie, Project Manager, Tucson Area Office

The Santa Rosa Solar Photo Voltaic project is a 57kW system designed to provide a majority of the electric power for a 6,000 sf health center located on the Tohono O'odham Nation. Santa Rosa Health Center was chosen for its small size and available land with the proper sun exposure. Mike Henrie, Tucson Area Facilities Program, Project Manager was given the project to complete. The system began construction in early 2012 and began producing power on August 24, 2012.

The solar system has produced 60,000 kWh of power as of January 28, 2013. That is an average of 12,000 kWh per month and represents about 60% of the total electric use for the facility. The CO2 offset as a result of the solar system has already equaled 1,076 trees or 42 tons. The power production is equivalent to \$1,560 per month or \$18,720 per year. The total cost of the system is \$429,000 and the payback is just under 23 years at the current power rate of \$0.13/kWh and without utility rebates. This project could easily be duplicated at other sites and would be a far better economic decision with utility rebates.

Small Group Award - Campus Lighting LED Upgrade

Awarded to:

Dale Mossefin, Director of Health Facilities, IHS/AANHS

Steven Rohrer, Maintenance Manager, Maniilaq Association

Dan Williams, Senior Manager, Statewide Health Facilities Engineering Alaska Native Tribal Health Consortium

Craig Wood, Health Facility Engineer, Alaska Native Tribal Health Consortium

This project upgraded the campus area lighting around the Maniilaq Health Center, a small remote hospital facility located in Kotzebue, Alaska. Forty-one (41) old high pressure sodium lighting fixtures were replaced with new energy efficient LED lighting technology. Ever increasing electric rates have prompted the Maniilaq Association to seek out and implement energy conservation opportunities. The Indian Health Service and the Alaska Native Tribal Health Consortium (ANTHC) partnered with the Maniilaq Association to create design documents and manage construction of the project. The outcome has been significantly improved area visibility and reduced electrical consumption for area lighting. The project will save approximately 32,985 kilowatt-hours annually. With overall electrical utility rates at \$0.46 per kilowatt-hour, this translates to estimated annual savings of \$13,099 in electricity costs.

Program Award - DEHE Energy Program

Awarded to:

Daniel Reitz, Manager, Energy Program

Kimberly Chancey, Health Facilities Energy Coordinator

Carl Remley, Energy Project Manager

John Warren, Engineering Director

Micheal Black, Director of Utility Management Services

Ed Lohr, Director, Tribal Utility Support

William Fraser, Sr. Health Facility Engineer

John Nichols, Rural Utilities Manager

Christopher Mercer, Utilities Support Engineer

Pierre Costello, Tribal Utility Support Manager

The ANTHC-DEHE Energy Initiative is an informal group within ANTHC-DEHE that was formed because of a recognized need in remote native Alaskan communities to reduce dependency on expensive imported fossil fuels while maintaining public health and quality of life. The group does everything from energy audits, to energy monitoring, to grant sourcing, to

design, to construction, to operation and maintenance. The energy initiative has been responsible for lifetime energy savings across the state exceeding millions of dollars while additionally reducing the environmental footprint of tribal communities, reducing the cost of healthcare and sanitation in those communities, and reducing dependency on fossil fuels. This is an ongoing initiative and it is expected that further savings will be realized going into the future.

Environmental Stewardship

Honorable Mention - Katana Jackson, Social Worker, Behavioral Health

May 2012 I noticed our pharmacy department was throwing away a lot of recyclable office paper (they have now gone digital). I decided to ask the Executive Committee team if I could put recycling boxes at various spots in the Kyle Health Center for employees to recycle appropriate paper, (documents that did not need to be shredded.) Our nearest recycling facility is in Rapid City, SD, which is 1.5 hours away, but it is our nearest big city too. I often travel there and so does our maintenance department. At the end of the month, I weigh all recycle boxes, keep a log, and then myself or maintenance department recycles the paper when we travel to Rapid City, SD. Living and working on a tribal reservation, respecting all living things is an acceptable cultural notation; recycling would naturally promote this belief.

Sustainable Design & Facilities Award

Honorable Mention - YKHC Roof Replacement

Awarded to:

Dale Mossefin, Director of Health Facilities, IHS/AANHS

Deanna Latham, Capital Projects Director, Yukon-Kuskokwim Health Corporation (YKHC)

Greg McIntyre, Vice President, Support Services, Yukon-Kuskokwim Health Corporation (YKHC)

Paul Morrison, Manager, Health Facilities Engineering, Alaska Native Tribal Health Consortium / Department of Environmental and Health Engineering (ANTHC/DEHE)

Dan Williams, Senior Manager, Health Facilities Engineering, Alaska Native Tribal Health Consortium / Department of Environmental and Health Engineering (ANTHC/DEHE)

This project completely replaced the existing roof at the Yukon-Kuskokwim Health Corporation (YKHC) hospital in Bethel, Alaska. The 95,000 gsf hospital was constructed in 1978 and is a primary care, general medical and surgical facility serving a population of over 25,000 residents among approximately 50 rural communities. Actual Benefits of the project include:

- Reduction in fuel usage from 80,000 gallons in FY2011 to 52,700 gallons in FY2012, a reduction of 19.8%
- Annual Reduction in Greenhouse Gases of 291 CO₂-3 Metric Tons, 8.6%
- Annual Energy Cost Savings of over \$151,000