



2021-2023 Work Plan ASHRAE-UNEP Cooperation Agreement

Work Plan Outcomes

"Refrigerant Management for Developing Economies"

Track-A: Efficient outreach and deployment of ASHRAE-UNEP Services













1. Promotion of products and tools

Completed:

- A. ASHRAE UNEP Portal redesigned to provide direct access to and easier enrollment for ASHRAE products and tools.
- B. Update to Refrigerants Update fact sheet.
- C. Developed and approved all content for posters and guidance manual providing RAC plant assessment.
- D. Tested university course inclusion of eLearning in prototype.
- E. Due to the pandemic, the Innovation Award was placed in hibernation. This past year it was brought it out of hibernation, reinstituted the application process, received new applications along with incorporating previously submitted applications, implemented a judging process, and have identified four winning projects. Innovative concepts from selected projects will be promoted through ASHRAE and UNEP networks.

2. Feedback and Evaluation

Completed:

- A. Completed the review of eLearning classes on Refrigerant Literacy and Energy Efficiency Literacy and found both to still be relevant and needed. Minor changes to Energy Efficiency Literacy were made and Refrigerants Literacy user feedback will continue to be collected and analyzed for a future revision. Corrective measures were taken to streamline the enrollment process, new marketing materials were produced and the courses were connected to the ASHRAE Presidential Award of Excellence process to encourage registration.
- B. Developed plan for reviewing and revising other learning products with completion schedules part of next Work Plan.
- C. Instituted user data collection processes and developed analysis schedule to enable ongoing on evaluation of product value and justification for continued investment.
- D. Tabulated enrollment statistics since launch through March 2023 for eLearning courses:
 - Refrigerant Literacy English: 1089 enrollments, 440 passing completions
 - Refrigerant Literacy Spanish: 610 enrollments, 48 passing completions
 - Refrigerant Literacy French: 22 enrollments, 5 passing completions
 - Sound Management of Refrigerants English: 498, 183 passing completions
 - Energy Efficiency Literacy English: 191 enrollments, 74 passing completions

Track-B: Support emerging needs of developing countries







1. International Events/Services

Completed:

- A. Assisted in identifying global workforce development needs at ASHRAE Global Summit.
- B. Identified developing country needs for Sustainable RAC Plant Operations at REFCOLD international exposition.
- C. Implemented NextGen Cooling Technology Options and Workforce Options through NOUs and ASHRAE network in developing countries in conjunction with World Refrigeration Day.
- D. Briefed ASHRAE and UNEP leaderships on respective strategic direction and activities at each other's events.

2. Special Thematic Areas (Women in RACHP)

Completed:

- A. ASHRAE supported International Network for Women in Cooling through Board member participation and mentorship program development guidance.
- B. Promotion of HVAC&R relevant education amongst young women through ASHRAE student branches an chapters and UNEP.
- C. News coverage of INWIC activity in ASHRAE publications.

2. Special Thematic Areas

Completed:

Developed process to develop tools and participate in events in next Work Plan. Topics will be Fact Sheets on How to Handle Flammable Alternative Refrigerants, Energy Use in Cooling, and Joint Research Project potential.