



ASHRAE
&
United Nations Environment Programme



2021-2023 Work Plan of ASHRAE-UNEP Cooperation Agreement

1. ASHRAE and UNEP, through its OzonAction Programme, signed a cooperation agreement in 2007 aiming to achieve several global environmental and technical goals within the mandate of both organizations including, but not limited to, the goals of reducing refrigerants emissions; maximizing climate benefits in selecting alternative refrigerants, building the capacities of different HVAC&R stakeholders and facilitate the transfer and adoption of suitable technologies in developing countries.
2. The agreement calls for establishing a biennial work plan to address the specific technical priorities and emerging issues. This work plan is the fifth biennial joint work plan, under ASHRAE-UNEP Cooperation Agreement, and is developed through the joint Liaison Working Group established by both sides to manage the implementation of the cooperation between both parties. A mutual decision was made to develop this three-year Work Plan.
3. **The 2021-2023 Work Plan** is thematically designed under the theme of “**Refrigerant Management for Developing Economies**” where the joint program will emphasis on deploying all the developed tools and programs for sound management of refrigerants and make them available and accessible to different stakeholders in developing countries.
4. Two Main Tracks will be the basis of the 2021-2023 workplan which are:
 - Track-A: Efficient outreach and deployment of ASHRAE-UNEP Services**
 - Track-B: Support emerging needs of developing countries**
5. The above goals will be implemented through multi-track programs that offers different types of activities and allow extended engagement amongst relevant stakeholders in developing countries.
6. Details of 2021-2023 workplan including the specific planned activities and products for each track are as follows:

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

1. Promotion of products and tools

- ACTIVITIES:

- a. **University Course:** Promotional campaign for universities including outreach tools including train-the-trainers
- b. **E-Courses:**
 - i. Promotional campaign for the e-Learning courses
 - ii. Connect the e-learning courses with the University course, adjust the activity sheets in the university course to include completion of the e-learning courses
- c. **ASHRAE-UNEP Award:**
 - i. Design and conduct a promotion campaign for the next cycles through ASHRAE chapters and National Ozone Units
 - ii. Review the structure of the Award, criteria, and list of judges after completing the ongoing cycle
- d. **Refrigerant Factsheet:** Continue the regular update of the factsheet after each ASHRAE conference (every 6 months)
- e. **RAC Assessment Guide:**
 - i. Organize international event to present the new guide once completed
 - ii. Pilot the guide with 2-3 countries in cooperation with local ASHRAE chapters and NOUs (National Ozone Units)

2. Feedback and Evaluation

- ACTIVITIES:

- a. **Client satisfaction surveys:** to conduct regular client satisfaction survey collecting feedback about all products and tools being offered openly for individuals or institutions.
- b. **Follow-up campaigns:** to conduct communication campaign with all registrants to the e-courses to ensure successful course completion and provide technical backstopping in case of problems faced in accessing and completing the courses
- c. **Feedback events:** organize special sessions for the ASHRAE Chapters and NOUs and Energy Officers to solicit feedback about the usefulness and relevance of ASHRAE-UNEP tools.

3. Update & Upgrade

- ACTIVITIES:

- a. **Update:** review and update all courses at least once every three years to ensure reflection of the dynamics of global policies and industry and technology.
- b. **Upgrade:**
 - i. Convert the e-courses into F-2-F versions and make them accessible to ASHRAE chapters and NOUs with a “how-to-use” short guide as well as suggested list of lecturers.
 - ii. Develop a pre-recorded version of the lectures for the university course to encourage its offering

Track-B: Support emerging needs of developing countries

1. International Events/Services

- ACTIVITIES

- a. **International Conference:** Starting 2022, jointly organize an International Conference every other year (Themes to be decided based on global agenda and emerging issues)
- b. **High-Ambient Temperature (HAT) Symposium:** organize the 6th International Symposium about Alternative Refrigerants for HAT Countries” in cooperation with several partners
- c. **Technical Documents:** Jointly design technical briefs for professionals and policymakers about emerging issues of concerns to developing countries
- d. **Support each other’s presence in different international events and meetings**

2. Special Thematic Areas (Women in RACHP)

- ACTIVITIES

- a. ASHRAE to support the global initiative of Women in RACHP Network through active participation and outreach
- b. Promoting HVAC&R relevant education amongst young women through ASHRAE student branches and connect with UNEP events
- c. Offer opportunities to women in RAC to take part of ASHRAE-UNEP activities, functions, and groups.

3. Special Thematic Areas (Flammability and Safety)

- ACTIVITIES

- a. Briefings and factsheets about the ASHRAE-AHRI flammability research projects.
- b. Assist countries to develop safety guides to help transitioning to low GWP refrigerants
- c. Conduct jointly workshops to address flammability and safety issues


4. Special Thematic Areas (COVID-19 Consideration)

- ACTIVITIES

- a. Briefings for governments and policymakers about operation and management of facilities with COVID-19 in mind.
- b. Joint work to assess needs of healthcare sectors in managing vaccination campaigns for COVID-19 while observing deployment of sustainable technologies.

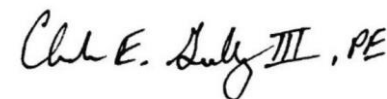
7. The above detailed matrix of suggested products and services shall be implemented within the existing programs and workplan of both partners i.e. ASHRAE and UNEP-OzonAction without entailing unplanned fiscal impact to any partner unless mutually agreed and contracted through specific legal instrument.
8. The ASHRAE-UNEP Liaison Working Group will work in developing the operational and detailed implantation plan for each goal under this work-plan including stipulating the following elements for each goal/product:
 - a) Scope of work and ultimate outputs
 - b) Target groups and stakeholders
 - c) Final format and accessibility
 - d) Specific deliverables
 - e) Fiscal impact and source of funding
 - f) Timeline of implementation and expected date of launch
 - g) Role of ASHRAE (committees/staff) vs. UNEP (team/experts)
 - h) Other partners and supporting entities
9. The official channels of communications between ASHRAE and UNEP shall be maintained through the instated ASHRAE-UNEP Liaison Working Group which shall coordinate and liaise relevant communications, collect feedback and send updates to different ASHRAE or UNEP regional teams in relation to all type of activities within this workplan
10. This workplan can be modified or amended by written agreement between both parties and as needed during the implementation period of 2021-2023 notwithstanding any internal clearance or review process of each partner.

For UNEP



James S. Curlin
Acting Head of UNEP OzonAction

For ASHRAE



Charles E. Gullledge III
ASHRAE President