

Thank you for your interest in submitting an IUVA Task Force Proposal.

Please complete the questions on this page—note the sample below for guidance, and also the Appendix 1 check-list, that will be used to evaluate your proposal. Please send this completed page to info@iuva.org.

Please complete the following items to help IUVA evaluate the proposed Task Force.

Your name, affiliation and email address:

Nathan Moore, University of Toronto, nathan.moore@mail.utoronto.ca

Task Force name:

IUVA Sustainable Development Goals (SDG) Task Force

Task Force leader (if not you):

Nathan Moore, University of Toronto, nathan.moore@mail.utoronto.ca

Background. Describe the overall need/opportunity for establishing this task force in 1 or 2 paragraphs:

Access to clean water, sanitation, and a safe environment are essential to human health and well-being. Yet, billions of people still do not have access to these basic services: as of 2017, 1 in 3 people did not have access to safe drinking water [1], more than 80% of wastewater from human activities was discharged without any pollution control [2], 1 in 4 health care facilities lacked basic water services, and in 7 of the 21 countries with data fewer than three quarters of health care facilities had an environmental disinfectant available in outpatient exam rooms [3]. Further, millions more people are likely to be forced into extreme poverty by COVID-19, with the existing poor set to fall into even worse conditions [4]. The Sustainable Development Goals (SDGs) call for bold and transformative steps to address these issues.

In recent years, the science of UV light for low-cost and remote disinfection applications has steadily advanced. Today, UV technologies are being considered (if not used) in many of such contexts around the world [5]–[7]. As an organization with (1) considerable membership with UV expertise, (2) membership with an interest in the more widespread use of UV technologies, and (3) a trusted voice in the safe and effective use of UV technologies, the IUVA is uniquely positioned to support these projects. This Task Force will be the IUVA's systematic effort to do so.

Scope or objective of the task force. Note that a Task Force is intended to be a short-term effort to address a specific need, with a specific deliverable. A longer-term initiative to explore multiple aspects of an issue would be better addressed by a standing committee.

Objective: to provide measurable support to projects that include the use of UV technology to protect public health and the environment in low- and middle-income settings in alignment with the SDGs.

Strategic Goals for the IUVA:

- 1. To meaningfully contribute to the SDGs
- 2. To advance the use of UV technologies in low- and middle-income settings

Scope: The scope of the Task Force activities will be determined collectively by the Task Force; however, the Task Force is tentatively proposing to do the following.

The Task Force aims to understand the use of UV in low- and middle-income settings as well as how the IUVA can best support its implementation moving forward. While UV technologies are applicable to several SDG areas and contexts, the Task Force will initially focus on UV for improving clean water access in Morocco and Tanzania (where several Task Force members are currently operating) to keep its scope manageable. Specifically, the group will focus on SDG Targets 6.1, 6.3, 6.4, 6.5, 6.a, and 6.b¹. The work will follow 3 steps:

- 1. Understand the current state of water disinfection and the local UV industry
- 2. Investigate the challenges and barriers for UV
- 3. Determine how the IUVA can help and report findings

Activities will likely include literature review, surveying local contacts and households, and arranging meetings and webinars with stakeholders at the national, organization, and community/household level. **The specific deliverable** from the Task Force will be a final report or white paper with the findings on opportunities and challenges for UV in addressing the SDGs and a proposed path forward for the IUVA (possibly including a standing committee to drive its implementation). This review may be published in UV Solutions and a review journal.

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¹ https://sdgs.un.org/goals/goal6

Anticipated Process, Deliverables, and Timeline:

STEP	Process	TIMELINE
1.	Identify stakeholders and finalize Task Force membership Deliverable: Updated list of Task Force members	2 months
2.	Conduct Situation Analysis and Assessment Determine appropriate methods for collecting information Understand the current state of disinfection and UV – how is water traditionally disinfected, how common is UV, how effective is it? Important Factors for Task Force? Potential pitfalls for Task Force?	3 months
3.	Understand the Challenges and Barriers to effective use of UV technologies Will focus on 2 types of challenges: (1) low implementation or UV not being used, (2) poor success or UV not effective when used. Aim is to understand why both challenges exist, if they do. Activities for Steps 2 and 3 may include a Webinar and participation in IUVA Conferences	3 months
4.	Determine Mechanisms for IUVA to Support Investigate the best way for the IUVA to aid in addressing the identified challenges and barriers. For example, funding, capacity building (webinars), market/supply chain development, or research. Establish an action plan, targets, roadmap, and system for reviewing IUVA performance towards achieving its objectives.	2 months
5.	Summarize Findings Draft report on challenges and opportunities for UV and the SDGs. Outline potential path forward for IUVA and IUVA members.	3 months
6.	Deliverable : Report findings and proposed path forward to IUVA Board, potentially UV Solutions and other journal publication.	1 month

Initial participating members/affiliations (this list may be amended as the group develops):

NAME	AFFILIATION	ROLE (IF APPLICABLE)
Hadas Mamane	Tel-Aviv University	Task Force Chair
Nathan Moore	University of Toronto	Task Force Leader
Karl Linden	University of Colorado	
Gary Cohen	IUVA	
Karlye Wong	WaterAid	
Ron Hofmann	University of Toronto	
Dana Pousty	Tel-Aviv University	
Kumiko Oguma	University of Tokyo	

Resource requirements:

- 1. Meeting time: to be included in program of relevant IUVA meetings
- 2. Videoconferencing software: for meetings with stakeholders, partners, etc.
- 3. Occasional space in UV Solutions: for project updates of interest to IUVA membership

References:

- [1] UNICEF and World Health Organization, *Progress on household drinking water, sanitation and hygiene 2000-2017. Special focus on inequalities.* New York, 2019.
- [2] WWAP (United Nations World Water Assessment Programme), *The United Nations world water development report, 2017: Wastewater: the untapped resource.* Paris: UNESCO, 2017.
- [3] World Health Organization and UNICEF, WASH in health care facilities: Global Baseline Report 2019. Geneva: WHO and UNICEF, 2019.
- [4] A. van Trotsenburg, "A strong COVID-19 response, and a road to recovery," *World Bank Blogs*, 2020. https://blogs.worldbank.org/voices/strong-covid-19-response-and-road-recovery.
- [5] T. Telgenhof, "Ten Years of Water Treatment in Africa," *The Source*, 2018.
- [6] The Associated Press, "Jaden Smith's foundation bringing clean water to Flint," *The Seattle Times*, 2019. https://www.seattletimes.com/entertainment/jaden-smiths-foundation-bringing-clean-water-to-flint/.
- [7] E. Kamukama, "Providing safe drinking water solutions at scale," *The Daily Monitor*, *Uganda*, 2017. https://www.monitor.co.ug/SpecialReports/Providing-safe-drinking-water-solutions-at-scale/688342-3984898-sd7co4/index.html.

Appendix 1

New Task Force / Project Board Member Evaluation Checklist—Please email completed form to info@iuva.org

Criteria		No	Comments
Does the Project align with the IUVA Mission?	~		
Is there a carefully defined problem to guide the project?	~		
Does the project have specifically stated and achievable goals?	~		
Are the elements of the problem specified and prioritized?	~		
Is there a specified work plan that aligns with the goals?	~		
Does the work plan incorporate existing best practices, if any?	~		
Are the proposed solutions achievable and significant?	~		
Does the solution hold promise for new IUVA Membership?	~		
Are there existing resources to support project?	~		
Do the proposed Task Force members reflect an inclusive industry cross-section?	~		
Is there reasonable expectation for new resource development?	~		
Is specified project infrastructure sufficient to support project?	~		
Is there a strong leader and membership to achieve project goals?	~		
Are roles and responsibilities of implementation team specified?	~		
Are the expectations for IUVA involvement reasonable?	~		
Are there stated reasonable and measurable outcomes?	~		
Is the timeline appropriate for scope of project?	~		
Does the project have potential to "achieve best practice" status?	~		
Will project have regional, national, global impact, if successful?	~		
Is there a communication strategy for sharing results?	~		