

# Open burning of waste webinar

**20 July 2021**  
**15:00 – 16:30 CEST**



Image © [Timothy Bouldry](#)

**Please register for the event at this link:**

<https://app.livestorm.co/iswa/environmental-and-public-impacts-of-open-burning?type=detailed>

## Title: The health and climate imperatives to address open burning of waste

### Session brief

Open burning of waste generates emissions that harm human health and contribute significantly to climate change. Despite this, awareness at all levels is low and policies and systems to address it are poor. Measurement methods and available data are insufficient for national governments to estimate impact, and as a consequence, institutions are failing to address the issue through NDCs. Ultimately, to prevent open burning, finance needs to be directed towards sustainable waste management in lower- and middle-income countries (LMICs) and the topic must be raised urgently on the global agenda.

### Target audience

Municipal authorities; climate, waste, and air quality experts; engineers; decision and policy makers; NGOs/CBOs; researchers; and investors.

### Session objective

Through this webinar we are hoping to shed light on a widely carried out but hardly talked about activity – the open burning of waste – at the household level as well as at dumpsites. The speakers will address the motivation for open burning of waste, the risks, and unintended consequences as well as potential solutions to address the practice.

Announce ISWA and Engineering X partnership on this issue and Engineering X funding programme launching in September 2021. Join us.

### Webinar flow

- 5 min introduction of the session and speakers
- 5 min presentation by each speaker to set the scene (30 min)
- 30 min facilitated discussion addressing challenges and potential solutions
- 20 min Q&A with participants
- 5 min concluding statements

### Description

The uncontrolled burning of waste takes place worldwide, particularly in LMICs where there are often either limitations in the effectiveness of the existing waste management systems or there are no systems present. The evidence around the prevalence of this issue and its harmful effects are generally poor.

Waste is burnt in residential areas and within industrial or commercial premises due to the lack of availability, the unreliability, or sometimes the complete absence of waste collection and disposal systems. It can lead to a number of public and environmental health concerns. For example, there can often be direct health impacts for those undertaking burning in confined spaces (for example, in factories), and for waste workers who burn electronic waste to extract the metals. In addition, these e-wastes contain hazardous materials such as lead and arsenic. There are also risks posed to the communities where the waste is burnt, especially to the most vulnerable people, such as children, older people, pregnant women, and those with comorbidities. The waste can also directly lead to contamination of the land and water (surface and ground water), leading to more wide-spread risks.

Open burning of waste also produces a wide range of atmospheric pollutants including greenhouse gases, reactive trace gases, toxic compounds, and black carbon (BC). In particular, BC emissions are a major source of fine particulate matter (PM<sub>2.5</sub>), a leading cause of poor health and premature deaths, and with a climate change impact up to 5,000 times greater than CO<sub>2</sub>, and of a scale equivalent to 2-10% of global CO<sub>2</sub>eq emissions: potentially double the impact of aviation but attracting a fraction of the finance. However, emissions from open waste burning are challenging to characterize and are therefore commonly excluded from inventories.

Despite being a widespread global practice and with global consequences for the climate and public health, open burning of waste is considered a local issue and receives no global, regional, or international attention. ISWA, Engineering X, CCAC, IGES and WasteAid look to raise awareness of the issue at all levels to bring together a global movement to address this critical issue.

## Speakers

- Sandra Mazo-Nix, Climate and Clean Air Coalition
- Zoë Lenkiewicz, WasteAid
- Mayor Talib Bensouda of Kanifing Municipal Council, The Gambia
- Hazel Ingham, Engineering X of the Royal Academy of Engineering
- Dr Johannes Paul, GIZ
- Premakumara Jagath Dickella Gamaralalage, IGES
- Aditi Ramola, ISWA (moderator)

## Speaker bios



### **Sandra Mazo-Nix**

*Coordinator, Municipal Solid Waste Initiative, Climate and Clean Air Coalition, UNEP*

Sandra Mazo-Nix has a Bachelor of Science in Engineering Management from the National University of Colombia, and a Master of Science in Environmental Science and Policy from George Mason University (Virginia, United States). As part of her graduating thesis for her bachelor's degree, Ms. Mazo-Nix conducted a research project to evaluate the feasibility of a recycling program at a bottling plant in Medellín, Colombia. Ms. Mazo-Nix joined Climate and Clean Coalition (CCAC) as the Municipal Solid Waste (MSW) Initiative coordinator in January 2016. Ms. Mazo-Nix has over 13 years of experience focusing on environmental policy issues, solid waste management, and the mitigation of climate change. She has also worked on projects related to landfill gas generation and recovery modeling and reporting, landfill gas utilization cost analyses and electricity market research. The Solid Waste Association of North America (SWANA) has certified her as Recycling Systems Manager and Composting Programs Manager.



### Talib Bensouda

*Mayor, Kanifing Municipal Council, The Gambia*

Lord Mayor Talib Ahmed Bensouda of Kanifing Municipal Council is the youngest Mayor in the history of The Gambia. In 2018, he was elected at the age of 31 years. The University of Toronto Economics graduate has made significant impact in under two years as Mayor, including his most notable project, 'Mbalit', which re-introduced residential and commercial waste collection throughout the municipality with a brand-new fleet of 24 garbage trucks. Other achievements include: (i) Introducing 500 street bins; (ii) Employing 200 personnel in new projects; (iii) Boosting the image of the Council through various street cleaning exercises and flood preventions clean-ups; (iv) Leading staff restructuring exercises and improving the financial health of the Council; (v) Improving market infrastructure and sanitation; and (vi) D100m small business loan package for women and D20million loan package for the youth. Additionally, Talib is a businessman and a family man with a beautiful wife and two children.



### Johannes Paul

*Advisor, Sector Project "Concepts for sustainable solid waste management and circular economy", Member of Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ); Vice Chair of the ISWA Working Group on Climate change and waste management*

Johannes Paul currently works at the Department of Climate, Environment, and Infrastructure at GIZ in Germany. He is involved in several advisory, research and development projects that relate to circular economy with focus on waste management, climate mitigation and marine litter, related SDGs and capacity building. Since 2020 he is the Vice-Chair of the Working Group on Waste Management and Climate Change for the International Solid Waste Association (ISWA).



### Zoë Lenkiewicz

*WasteAid Senior Technical Advisor and Head of Communications*

Zoë has 20+ years' experience developing and implementing circular economy initiatives within government, business and non-profit organisations. Her cross-sector experience and business development skills enable diverse stakeholders to develop successful long-term partnerships and impactful programmes. At WasteAid, Zoë has produced groundbreaking advocacy on the importance of waste management in lower-income countries. She designs and delivers interventions with communities worldwide to turn waste into a resource and prevent open dumping and burning.



### **Premakumara Jagath Dickella Gamaralalage**

*Director - IGES Center Collaborating with UNEP on Environmental Technologies (CCET), IGES, Japan*

Dr. Premakumara is a development planner involves in developing integrated/holistic waste management strategies at national and local levels, application of participatory learning and action methods to promote 3Rs (reduce, reuse and recycling) and circular economy/ resource efficiency societies, integration of informal sector and citizen participation in waste management, and linkages between waste and climate change as well as sustainable development goals (SDGs).



### **Hazel Ingham**

*Engineering X Safer End of Engineered Life Programme Manager*

Hazel leads the design and implementation of this multifaceted, global programme that seeks to understand and apply practical interventions to unsafe end of life practices, build diverse international communities and partnerships to share evidence, knowledge, and good practice, and raise awareness of the global challenges of dealing safely and ethically with the billions of tonnes of end-of-life materials, artefacts and structures that humanity produces each year.



### **Aditi Ramola (moderator)**

*Technical Director, ISWA*

Aditi is the Technical Director at the International Solid Waste Association (ISWA) where she manages international projects and partnerships with the UN, provides assistance to ISWA's Working Groups and helps develop innovative projects globally to further strengthen cooperation with ISWA's partners and international organizations. Her skills are particularly focused on solid waste management and environmental issues. Aditi holds a master's in Environmental Technology and International Affairs from the Vienna University of Technology. She has several years of experience in the private sector including at Caterpillar Inc. before joining the United Nations Industrial Development Organization (UNIDO) in the Climate Policy and Networks unit. Aditi is also passionate about science education and was the founding member and lead of the ISWA Young Professionals Group (YPG) initiative on Education and is the past Chair of the ISWA YPG.

## Additional resources

Here are some resources as references for webinar participants.

- Video introduction to the Global Review with Dr Costas Velis and Ed Cook, University of Leeds: <https://www.youtube.com/watch?v=htvIRDFVhHE&t=1s>
- Global Review on Safer End of Engineered Life: <https://www.raeng.org.uk/global-review-on-safer-end-of-engineered-life>
- Open burning workshop participant report: <https://www.raeng.org.uk/publications/reports/eng-x-burning-of-waste-workshop-participant-report>
- Participatory Waste Management Approach for Climate Change Mitigation: [The Case of Battambang City | CCET](#)

## Organizers

Please find below some information about each organization.



**The International Solid Waste Association (ISWA)** is a global, independent, and non-profit making association, working in the public interest to promote and develop sustainable waste management. ISWA's objective is the worldwide exchange of information and experience on all aspects of waste management.



**The Climate and Clean Air Coalition** is a voluntary partnership of governments, intergovernmental organizations, businesses, scientific institutions, and civil society organizations committed to protecting the climate and improving air quality through actions to reduce short-lived climate pollutants.



**WasteAid** is an independent UK charity (non-profit), set up by waste management professionals to share practical and low-cost waste management know-how with communities in low-income countries.



**Engineering X** is an international collaboration founded by the Royal Academy of Engineering and Lloyd's Register Foundation that brings global experts together to engineer change.



**The Institute for Global Environmental Strategies (IGES)** is a collaborative research and outreach organisation working to accelerate the transition to a sustainable, resilient, shared and inclusive Asia-Pacific region, both across borders and within the world at large.



**wasteaid**

**Engineering X**

Founded by the Royal Academy of Engineering and Lloyd's Register Foundation

