



University of Stuttgart
Germany

Universität
Rostock



Traditio et Innovatio

Master Class on Waste Electrical and Electronic Equipment (WEEE) Management

Date: 6th December 2024

Time: 12 to 2 pm (CET)

Location: Online (Teams)

Summary:

The master class on WEEE Management aims to provide participants a holistic understanding of global e-waste management, highlighting challenges and opportunities in the field. Through this course, participants will explore effective strategies for managing e-waste, including innovative approaches in Europe, regulatory frameworks, digital solutions like the Digital Product Passport (DPP), and case studies from both developing and developed economies.

Background:

The global increase in e-waste—over 62 billion kilograms generated in 2022—represents one of the most significant waste management challenges of our time. WEEE contains hazardous materials (like lead, mercury, and cadmium) which, if mishandled, pose severe health and environmental risks. However, WEEE also contains critical metals and materials that can be reclaimed, supporting recycling initiatives and resource conservation. Proper e-waste management aligns with circular economy objectives and EU climate targets, underscoring the importance of this topic.

The International Solid Waste Association (ISWA)'s Young Professionals Group (YPG) is pleased to present this master class as an online training opportunity to explore the complexities of Waste Electrical and Electronic Equipment (WEEE) management. This session aims to empower professionals and researchers with the essential knowledge and practical strategies needed for effective e-waste management.

Expected Learning Outcomes:

Participants of this training course can expect to gain the following benefits and learnings:

- Comprehensive introduction to e-waste management
- Knowledge of the challenges in e-waste management
- Understanding of regulatory frameworks and best practices globally
- Awareness of Critical Raw Materials (CRM) and Europe's challenges with CRM scarcity
- Familiarity with the Digital Product Passport (DPP) for e-waste tracking
- Insights into career opportunities for youth within the e-waste sector

Agenda:

Friday, 6 December 2024		
Time (CET)	Speaker	Session Focus
12:00 pm – 12:10 pm	Cinthy Lara	Welcome and Introduction
12:10 pm – 12:15 pm	Haniyeh Jalalipour	Introduction to ISWA YPG
12:15 pm – 12:40 pm	Karoline Owusu Sekyere, PhD student, University of Stuttgart	The E-Waste Challenge: A Global Overview • Introduction to E-Waste • Challenges for management • Valuable materials in e-waste
12:40 pm – 13:05 pm	André Rückert, Project developer, ECOLOGICAL GmbH	• CRM Scarcity and Challenges in Europe • Product Lifecycle • Digital Product Passport (DPP) • Case study
13:05 pm – 13:40 pm	Mark Williams-Wynn, Chief Technology Officer, EWaste Africa	Opportunities in WEEE • Upgrading the value of WEEE • Opportunities for youth in the WEEE sector • Case studies from Africa
13:40 pm – 13:55 pm	Q/A	Q&A Moderator: Dr. Sara Bottausci Individual Contractor, UNITAR
13:55 pm – 14:00 pm	Cinthy Lara	Closing

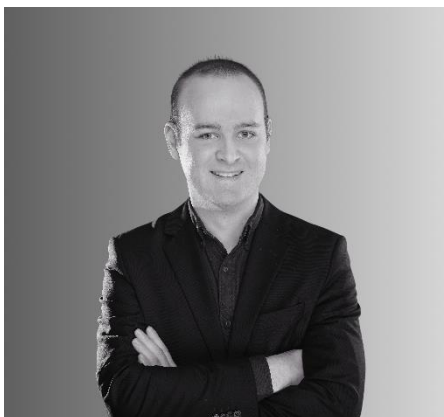
Introduction to Trainers



Karoline Owusu-Sekyere is a final year doctoral candidate in Environmental Engineering at the University of Stuttgart at the Institute for Sanitary Engineering, Water Quality and Waste Management, specializing in the quantification and environmental impacts of informal e-waste recycling in Ghana. She holds an M.Sc. in Air Quality Control, Solid Waste, and Wastewater Process Engineering from the same institution. Her expertise lies in environmental process engineering, circular economy, resource management, and sustainability assessment. Karoline has worked on various international projects, including a GIZ initiative focused on environmentally responsible e-waste disposal in Ghana and has conducted field research on informal e-waste recycling. She is a scholarship holder of the Hans Böckler Foundations PhD scholarship.



Dr Mark Williams-Wynn is the Chief Technology Officer at EWaste Africa, a multi-award winning, legally compliant and environmentally ethical electronic and lighting waste (e-waste) recycler from South Africa. Dr Williams-Wynn holds a PhD in Chemical Engineering and has 13 years of experience in the waste industry. He is passionate about implementing sound waste management activities to create jobs and generate value while protecting the environment



André Rückert has been a project manager at ECOLOGICON for just over 1.5 years. He is responsible for the three funded projects ReSoCart-ED project in Ghana, the BATTPRO project in Cambodia and Thailand and the CE-RISE project in Europe. Previously, he worked for 6 years as a research assistant at the Institute for Waste and Recycling Management at the TU Dresden under Prof. Dornack, where he also completed his MSc. The main focus of his work lies in the development and research on waste management strategies and concepts in Germany and abroad.