



**KENYATTA UNIVERSITY**  
**OFFICE OF THE DEPUTY VICE CHANCELLOR**  
**RESEARCH, INNOVATION AND OUTREACH**

**Research Stay Report**

**By**

**Dr. Christine Majale**

## RESEARCH STAY REPORT

**Attendee Name:** Dr. Christine Majale

**Attendee Designation and Department:** Lecturer

**Title of Research:** Governing Solar electronic waste recycling in Kenya

**Research Project URL:** <https://wind.dtu.dk/projects/research-projects/governing-solar-electronic-waste-recycling-in-kenya>

**Project Summary:** *Brief description, project, venue and duration of research stay*

The research project focuses on governance of electronic solar e-waste in Kenya and seeks to address the following questions.

- How are the leading suppliers of OGS devices in Kenya currently involved in the collection and recycling of SEW?
- How are OGS products and SEW materials transformed and processed at the end-of life stage by end-users and in the local recycling economies?
- Which SEW pathways are most likely to develop and which regulatory mechanisms are necessary to incentivize a higher degree of SEW recycling?

**The research stay:**

Venue; Denmark- Technical University of Denmark -Roskilde

Duration; 5 days from 6<sup>th</sup> to 11<sup>th</sup> February 2023

**Research Stay Objective(s):** *Describe research stay objectives*

This research stay allowed the Kenyan team to meet the Danish counterparts and get to:

- Discuss progress made on the research
- Learn about comparable issues on solar e-waste governance as they function in Denmark
- Discuss areas for further research and collaboration, given that the current research is coming to an end
- Work on proposed paper publications

**Lessons learnt:** *Identify specifically what you are bringing back from the research stay/visit that relates to your departmental/school/University objectives.*

This research stay enabled me to learn more and practically so on:

-Treating electronic waste, batteries and end of life vehicles. Including the different types of plastics therein  
 -Developing and implementing Extended Producer Responsibility as a policy regulation that could facilitate waste management.  
 These we teach in some of the units within the Department

**Title of Presentations done during the visit:**

We were privileged to visit and have thematic presentations from the following organizations.

- Agar recycling center: presentation on waste management within Roskilde municipality
- Danish Chamber of Commerce: EPR for solar e-waste & Data on solar cells in Denmark
- Stena Recycling Center, Hamstad, Sweden: Recycling of waste in European Union
- Danish Producer responsibility organization: Implementation of Extended Producer Responsibility in Denmark- Challenges and opportunities
- European Energy Agency (Danish Solar Association): The silicon Module- Procurement, Establishment, management and decommissioning of solar PV farms in Denmark. Environmental and social considerations in the value chain (How is recycling undertaken/ perceived?)

Project meeting:

The researchers shared their findings across the work packages and agreed on the next steps.

**Partnership/Collaborations/Funding Opportunities/Networks Developed:** *List new contacts developed that may be useful for collaborations and funding*

**Networks developed:**

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Senior consultant

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CEO

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### Additional Comments.

This Research Stay provided an important opportunity for us (the Kenyan Team) to experience Waste Management and Waste treatment in Denmark. We got to meet key stakeholders within the waste management value chain. We learnt about the regulations and their implementation with specific focus on the Extended Producer Responsibility.

The project on Solar E-waste governance is coming to an end. This visit enabled us to strategize on what we should focus on hereafter.

### Appendix 1: Programme of the research Stay/ Visit

Mon 6	Tue 7	Wed 8	Thur 9	Fri 10
Arrival in Denmark of Kenyan team	-10:00-11:30, Visit and tour at Roskilde Genbrugsplads (Roskilde Recycling centre)	13:00-15:00, Visit at Stena Recycling center, Halmstad, Sweden	10:00-11:00, Presentation at Risø from Dansk Producentansvar (Danish producer responsibility organization), Roskilde	11:00-12:00, Visit at European Energy/Dansk solcelle forening (Danish solar association), Søborg/Copenhagen
-Taxi pick up at 15:00	-13:30-14:30, Visit and presentation at Genvindingsindustrien (Recycling Industry, Denmark), Copenhagen  Kenyan team visit to Copenhagen afternoon/evening		13:00-16:00 -WP meetings..	13:00-16:00, Project team meeting (slightly modified programme, WP-focus, knowledge sharing, data management, etc.)

### Appendix 2: Photos



Plate 1: Research team Members with Senior Consultant of Danish Chamber of Commerce (3<sup>rd</sup> from left) during a visit at the chamber of commerce offices





Plate 2: Ongoing Project meeting at DTU -Riso Campus



Plate 3: Visit at Roskilde waste collection center



Plate 4: Presentation by project team members at DTU - Riso Campus



Plate 5: Stena recyclers in Sweden Plate 6: Meet up with Colleagues from MOE Kenya