

Work Package 1



Paper 2

Post-Consumption in Global Value Chains: Lead Firms Involvement in E-Waste Management in the Off-Grid Solar Market in Kenya

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Work Package 1 – Objectives and Deliverables

Specific outcome:

- Private actors in the OGS value chain are actively engaged in the collection, management and recycling of SEW from OGS devices

Main RQ:

- How, why and to what extent are the leading suppliers of OGS devices in Kenya currently involved in the collection and recycling of SEW?

Deliverables:

- 2 papers submitted for publication in journals (Paper 2 – Involvement of Lead Suppliers in Solar E-Waste Management)
- 2 presentations given at international research conferences
- 1 dissemination workshop with public sector stakeholders in Kenya
- 1 research in denmark for younger researcher
- Project findings incorporated into courses at the involved universities

Paper 2

- Grid connectivity in Kenya is relatively low (Rural areas are disadvantaged)
- Rural Areas – Off-grid Solar PV Systems are on the rise in the last 10 years
- Solar PV Systems have short life span – mostly about 5 years
- What happens when their life end?
- Waste crisis; Hazardous substances –metals; human health; environmental damage

GVC and SEW Management – Concerns

- GVC mainly focuses on design, production and consumption of commodities
- GVC hardly extends to after consumption management (waste management)
- Need to understand how lead suppliers can or are involved in SEW management
- Lead suppliers are profit motivated
- Need to investigate the 'after-life' of off-grid solar PV devices in Kenya and involvement of private lead suppliers

Research Issues

- GVC Approach – Beyond consumption
- GVC literature generally overlooks post-consumption practices and waste generation management
- Actors, nodes, governance and value addition – SEW
- Need to improve the understanding of the factors influencing lead firms' engagement with environmental upgrading in GVCs
- The notion of governance involves the activities and practices of lead firms, who are powerful actors that control the flows of information and resources, and the functional division of labour throughout the entire SEW value chain

Objectives of Paper 2

1. Examine the nature of the GVC in SEW market in Kenya
2. Assess how lead suppliers are involved in SEW management – Drivers and barriers
3. Suggest policies for enhanced involvement of lead suppliers in SEW management

Methodology

- Secondary data - the value and quantity of Solar PV systems in Kenya – KRA
- Mapping of the sector – lead suppliers in the market and actors (15 Leading suppliers)
- Key informant interviews and Case studies to understand the structure of SEW management – February 2022 - Date

Mapping of the sector

1. SunnyMoney Kenya
2. Ecozoom
3. One Acre Fund – Sun King Pro solar light
4. Raj Ushanga
5. Barefoot Power (Africa) Ltd
6. Apple Logistics
7. S3C Kenya Ltd
8. Total Kenya Ltd
9. Shankan Enterprises
10. Enviro Hub Holdings
11. Light UP (East African) Foundation
12. Pawame Kenya Ltd
13. Thrive Energy Technologies (EA)
14. Krystalline Salt Ltd
15. We Care Solar
16. Kingfisher Consultants Ltd
17. Cook n' Lite Ltd
18. Philips EA Ltd
19. Mibawa Suppliers Ltd
20. Orb Energy Ltd
21. Solataa Ltd
22. Fides Kenya Ltd
23. Suntransfer Kenya Investment Ltd
24. Biolite Holdings Kenya Ltd
25. StarTimes Kenya Ltd.

The lead firms

1. M-KOPA Solar
2. Greenlight – SunKing
3. D. light
4. Mobisol
5. Azuri Technologies
7. Bbox Limited
8. Solar Panda
9. Solibrium Solar

Bbox Limited

Solibrium Solar

Solar Panda

Engie Energy Access

Sollatek Electronics Kenya

Enviroserve Kenya

MKOPA

WeTu

Davis & Shirliff

Data Collection so far

	COMPANY
1.	Bbox Limited
2.	Solibrium Solar
3.	Solar Panda
4.	Engie Energy Access
5.	Sollatek Electronics Kenya
6.	Enviroserve Kenya
7.	MKOPA
8.	WeTu
9.	Davis & Shirtliff
	ORGANISATION
10.	GOGLA
11.	KEREA

Status of the Paper

1. Collection of secondary data (OGS) – imports is underway
2. Identification of lead OGS companies in Kenya on-going
3. Data collection on going – 10 Companies & 2 KII
4. Draft paper on GVC in progress

Preliminary Findings

1. GVC is international – Design, production and consumption
2. Post consumption on SEW is minimal
3. Drivers
4. Barriers

Thank you very much