



***The Governance of Energy Transitions in
Cities: a non-institutionalist perspective
from Kampala City in Uganda***

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Governance of Energy Transitions in Cities

- Two broad dimensions: statist and non-statist
- Contexts: sometimes these two broad dimensions **co-exist or conflict** with each other, and other times **co-produce** each other
- Non-statist/non-institutionalist has gained less attention - perceiving it as informal, grassroots, social movement (**ant-government**) and therefore outside the realm of **formal governance structures**
- Emerging concept of **transgressive/non-institutionalist governance** - transcending rational calculations of how organisations/policies should form and function, to networks of actors that derive their authority from interdependencies that create 'social labs' for producing, sharing and using knowledge on sustainability

Focus of the paper

- How do non-hierarchical and unregulated networks of social actors diffuse alternative energy solutions that stem from local innovations?
- Much of the available knowledge on governing energy transitions focuses on the functionality of state and non-state organisations (**smart urban governance, corporatist mode, Pluralist modes, entrepreneurial mode**).
- But sometimes transitions to sustainability usually happens in the shadow of statist and formalized forms of authority and institutional set-ups.

The Governance-Energy Landscape in Kampala City Uganda

- Although urban governance and energy systems are intertwined, it is common in the city's administrative structures to have designated offices for energy separate from that for the environment sector and with limited influence on the National Energy Policy (2002)
- Policies and institutions that govern energy use in the city are delinked from the paradigm of relying on cities as the foci for transitioning to economically and environmentally viable energy production and consumption, thus precluding the possibility of upscaling locally based alternative energy solutions

- Despite the shortcomings in the institutionalist nature of the governance-energy landscape in the Kampala city, adaptation strategies have been devised at neighbourhood scale including:
 1. Self-generation (use of generators and solar panels),
 2. Improved energy technologies (energy-saving bulbs and cooking stoves),
 3. Adjustments in energy-use practices (abandoning boiling of water and foregoing hot water baths),
 4. Adjustments in sleeping schedules,
 5. Forsaking foods that require long hours of preparation alongside illegal theft and tapping of electricity
- It is along these coping mechanisms that relational diffusion makes possible the exchange of ideas and experiences about alternative energy that stems from the actions and ingenuity of non-hierarchical and unregulated networks of social actors: **waste vendors and green charcoal producers**

Methods and Materials

- Data was collected through unstructured interviews with low-income waste vendors and green charcoal producers in Kasubi-Kawaala, Makerere II and Bwaise III parishes, located in the north western part of Kampala
- Many of the vendors and producers in this neighborhood had to be contacted from their market places, at home and from urban traffic, thus purposive non-probability sampling
- Data from individual interviews was triangulated with twelve (12) focused-group discussions.

Results

Organization	Activities	Products	Market
CLEDC	Collection of plastics and banana peelings for sale, making of briquettes	Charcoal, briquettes, animal feeds	Kasubi and Namungona
KISENSU	Brick making, drawing sand from Kiwunya drainage channel	Bricks, sand	Bwaise community
KALOCODE	Making charcoal, briquettes, crafts	Charcoal, briquettes, crafts	Kasubi and KACODA
KACODA	Making charcoal, briquettes, compost	charcoal, briquettes, compost	Kasubi, Kampala
MYC	Poultry and banana planting	Compost, chicken litter	Makerere II
MAWUDA	Poultry, Mushroom growing	Chicken litter, lint	Makerere II and Wandegeya
Aggali Awamu	Poultry	Chicken litter	Makerere II and Bwaise



This demonstrates how transitions from traditional biomass fuels for household energy needs to improved charcoal production technologies, can lead to relational dynamics for diffusing knowledge while contributing to poverty reduction and sustainable land management.

Use of Retort and Casamance Kilns (technology) to generate good quality charcoal using less wood, while cutting down fewer trees. The green charcoal producers also promote the growing of woodlots in the peripheral parts of the city, so that their member groups are able to cut their own trees and save the naturally occurring forests.



Garbage briquettes burning on a locally-made charcoal stove in a family kitchen

Energy briquettes are not only a waste-energy technology but also a social learning object that facilitates collective action, experimentation and learning, thus developing joint visions and solutions for leapfrogging their neighbourhoods towards sustainable energy transitions

- **Non-formalized waste vendors and green charcoal producers in Kampala city, have built a network for incremental up-take of alternative energy solutions in their neighbourhoods, using relational dynamics that contrast with those found in hierarchical organisations**
- **These networks and relationship dynamics represent ‘energy transition labs’ in which real life trajectories of sustainable energy can be observed and replicated**
- **If the activities of these groups are replicated, through deepened dialogue, solutions design, solutions validation and promotion for scaling up, their innovations and knowledge sharing networks can shift behaviors and lifestyles in a more sustainable direction whilst improving livelihood prospects.**

Conclusion

1. The uneven diffusion of knowledge and practices amongst waste vendors and green charcoal producers in Kampala reveals that multilevel interactions and interdependencies beyond the purview of the state can create laboratories of innovative practices for sustainable energy transitions
2. Therefore besides the policy and technological shifts that have dominated much of Africa's discourse around transitions to sustainable energy in cities, there are cases of non-statist intervention through which non-hierarchical groups of actors use simple and incremental actions, to shape energy futures in cities.

Next step

- Adopt network analysis software to enable visualization of the networks, contexts and relational dynamics of waste vendors and green charcoal producers in the city

References

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