

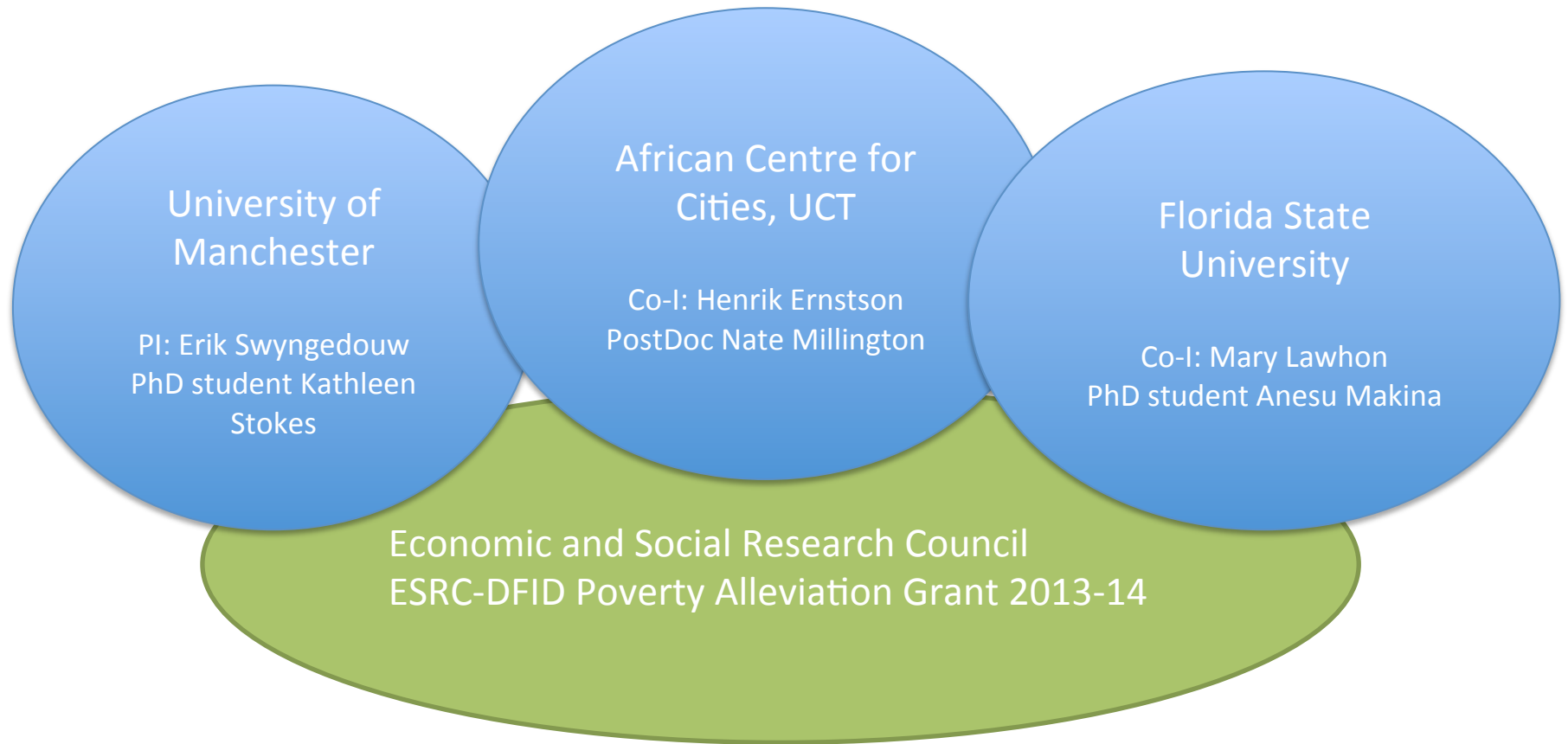


By the project team: Henrik Ernstson, Mary Lawhon, Anesu Makina, Nate Millington, Kathleen Stokes & Erik Swyngedouw (2017)

Turning Livelihoods to Rubbish?

Project Workshop

17 February 2017



(DFID – Development agency of the UK)

Sponsors, institutions, and roles

Aim

- To develop improved understandings of the impact of specific interventions on the ability of the urban poor to extract value from waste in South Africa.
- Translate these findings to Southern Africa and low-income country contexts.

Questions

- What factors shape *pathways into and out of poverty*?
- How can policy create *sustained routes* out of extreme poverty in ways that can be replicated and scaled up?
- What political and institutional conditions are associated with effective poverty reduction and development, and what can *domestic and external actors* do to promote these conditions?



Waste to value

Waste is the post-life of materials in our commodity-based market economy.

“Landfills can [...] be seen as commodity cemeteries.” (Melanie Samson 2015: 817)

To ***turn waste to value*** means...

... to create set of social and material relations that can move around, re-purpose, rework and change the character of “waste” so it can circulate again in the economy, in any form.

Four trends in waste management

- 1. Technologization of waste management**
(the use of technology and replacement of manual labour)
- 2. Institutionalization of waste management**
(‘formalization’; changing rules, property regimes etc. around waste; including the criminalization of reclaimers as in ‘world city syndrome’)
- 3. Internationalization of waste finance**
(Clean Development Mechanism, CDM, etc.).
- 4. Community responsibility for waste management**
(“cooperative governance”; e.g., enrolling residents in sorting, recycling; nurturing co-operatives with reclaimers; community-led projects etc.)



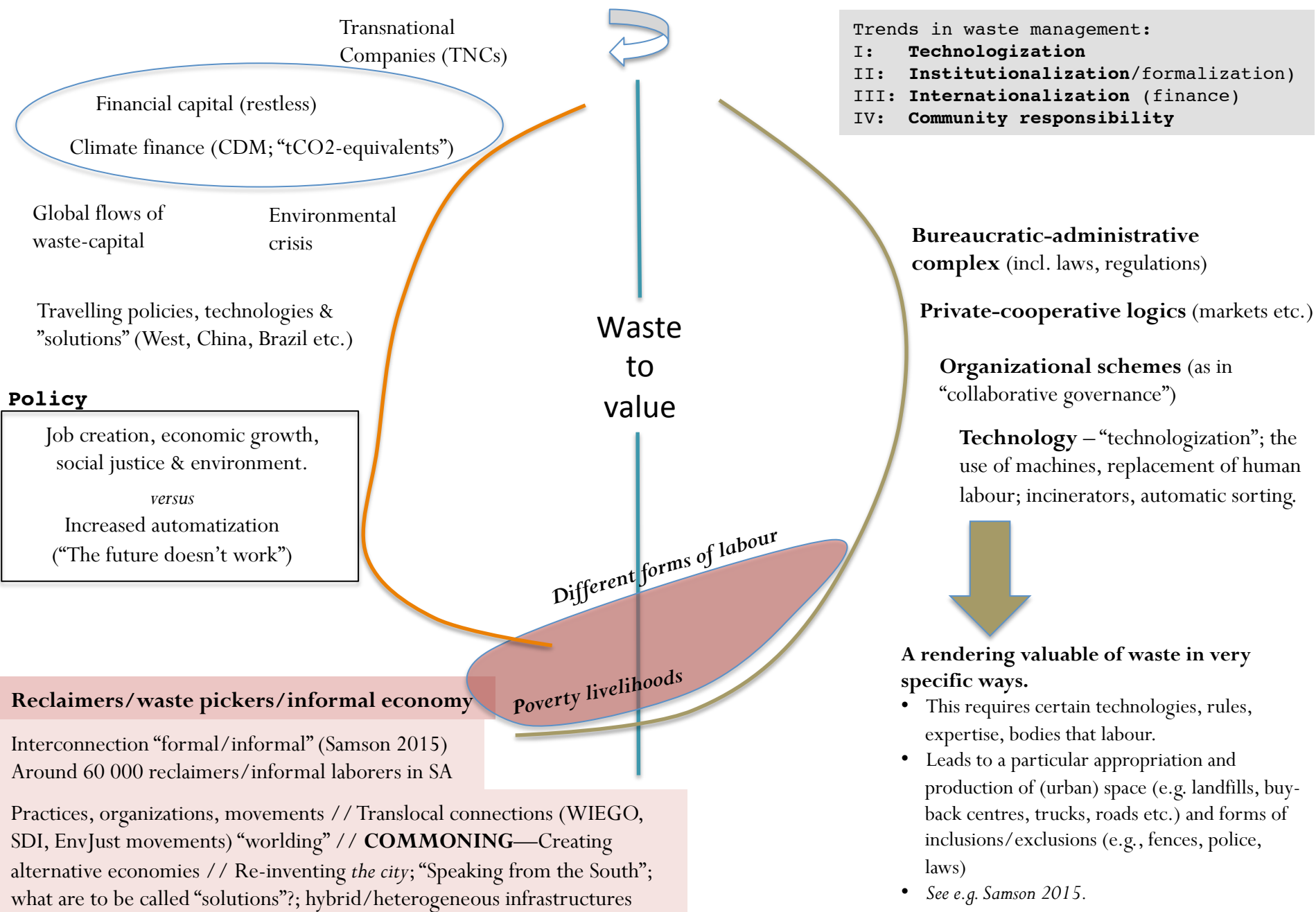


Waste
to
value

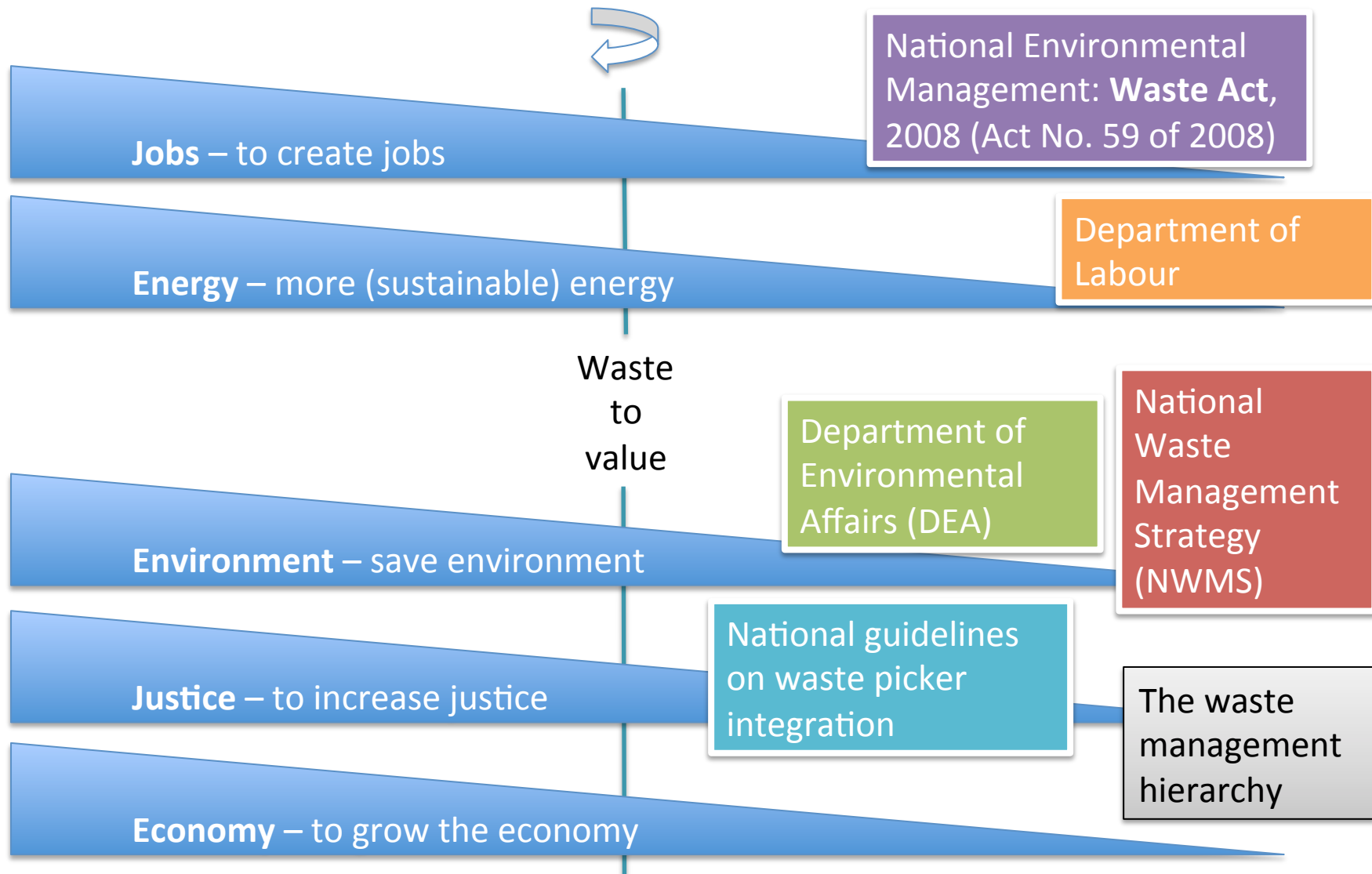
Vinay Gidwani (2013):

“Modernisation has inevitably meant transfer of waste management functions to private corporations, a process that has caused untold harm to the livelihoods of groups such as the *zabbaleen* of Cairo, the ‘reclaimers’ of Johannesburg, and the *kabaris* of Delhi: urban commoners who have fabricated intricate and ingenious circuits of waste recycling for incomes.”

From: Vinay Gidwani (2013: Loc 3845, e-book; citing Assad 1996; Chaturvedi and Gidwani 2010)



Sketch of project discussions



**POLICY PROCESSES that
“waste to value”
intersect with**

Our Project's FOCUS & CONTRIBUTION

- In SA most studies have been on informal waste reclaimers and informal sector integration.

Our contribution will be:

- Less on general livelihood issues...
- ... and more on the livelihood implications of ***new technologies and new administrative schemes*** devised by State and private actors.
- In relation to literature and in consultation with researchers this is where more knowledge is needed.



Waste
to
value

Literature Overview (selection)

- Informal Waste Reclaimers & Informal Sector Integration
 - Benson & Vanqa-Mgijima, 2010; Hügel (SLF), 2015; Komane, 2014; Langenhoven & Dyssel, 2007; Miraftab, 2004; Samson, Reclaiming Livelihoods (groundWork); Schenk, Blaauw,, & Viljoen, 2012; Schenck & Blaauw, 2011; Skinner, 2002; Theron, 2010; Tischler, 2013; Viljoen, Blaauw, & Schenck, 2015; Visser & Theron, 2009; Sustainable Livelihoods Foundation
- Waste into Resource
 - Larney & van Arndt, 2009; Samson, 2010, 2015.
- Waste Policy
 - Benjamin, 2007
- Environmental Justice
 - Chari, 2013; Hallowes & Munik, 2008; groundWork, Sustainable Livelihoods Foundation



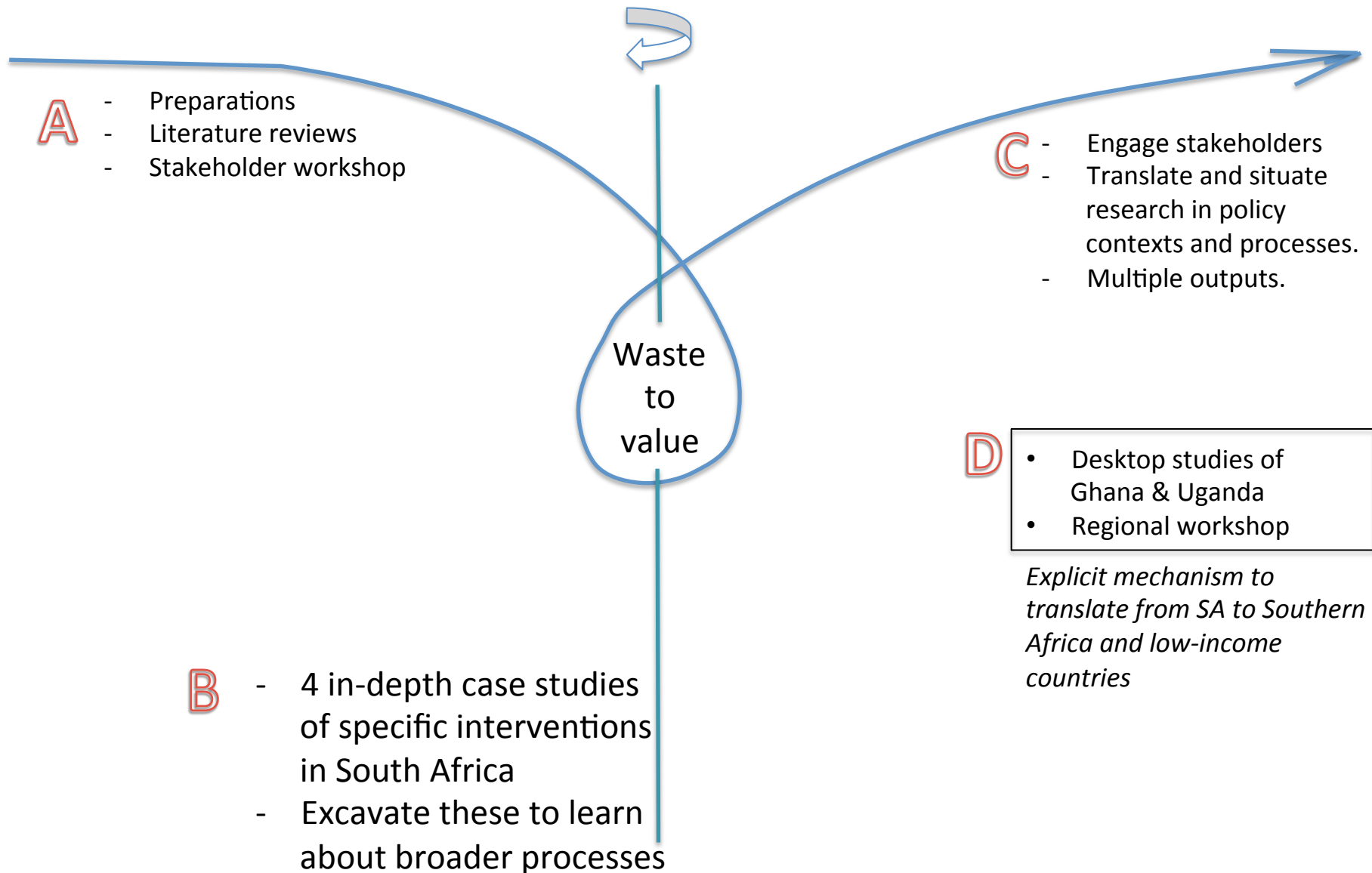
Our more specific team research questions are:

- How do **specific waste interventions** promote new practices to extract value from waste?
- What are the social, political, and institutional effects of these interventions?*

Waste
to
value

- What benefits are associated with different interventions for different categories of the urban poor?

** Of course we are also interested in accounting for environmental effects, but in only through drawing on secondary data (we are not doing any primary data gathering as in ecological or biological measurements).*



Community responsibility and labourers' livelihoods

Lead:
Kathleen Stokes

Technologization and formalization of recycling

Lead:
Nate Millington

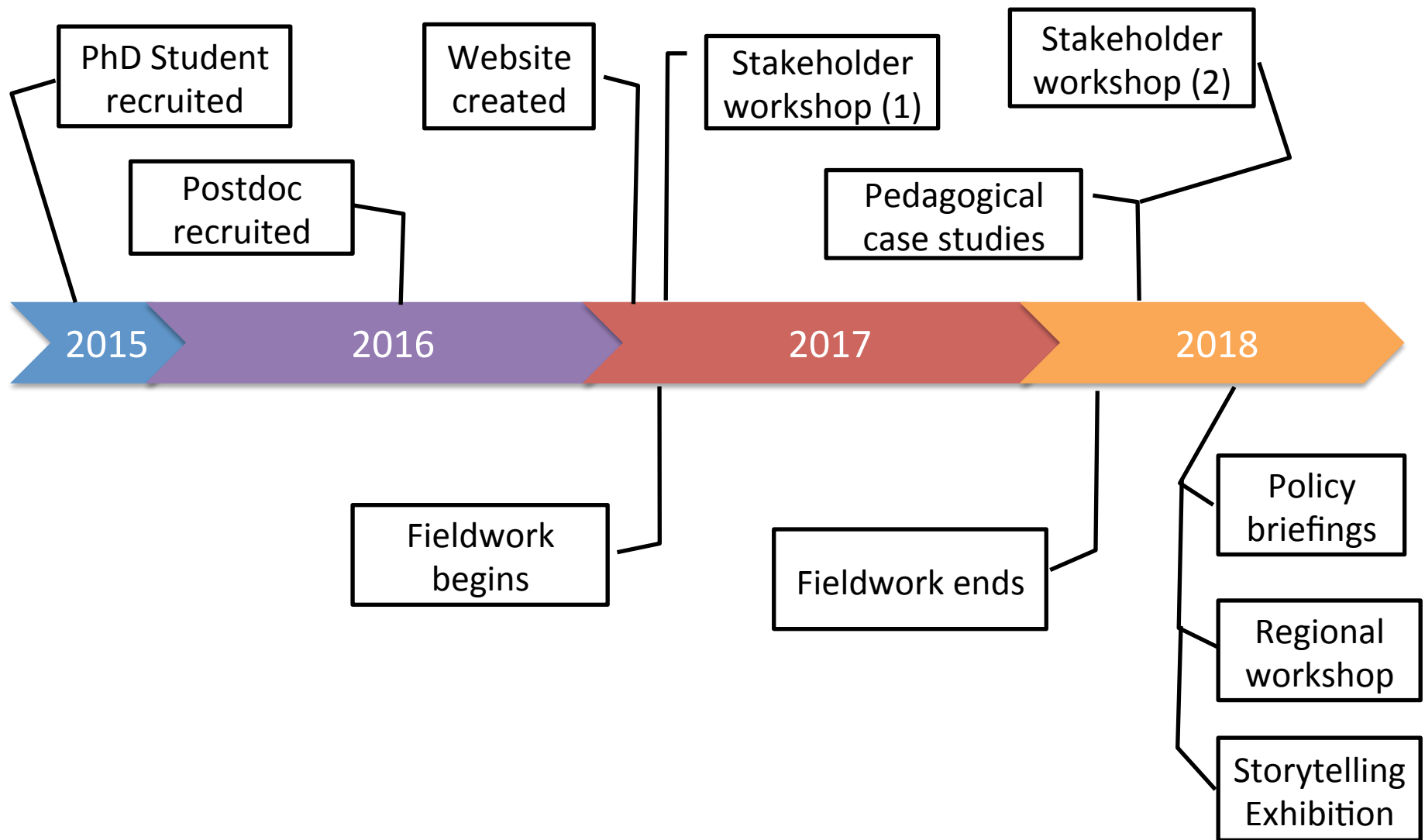
Internationalization of waste finance and its connection to SA

Leads:
Erik Swyngedouw
Henrik Ernstson

Livelihoods, multi-scalar governance and waste-to- energy in Cape Town

Leads:
Anesu Makina
Mary Lawhon

Case studies of concrete interventions



Project Timeline

Nov 2015 – Oct 2018

- **Policy Briefings**
 - Coordinate and link in with on-going policy processes (DEA, Melanie, etc.)
- **Pedagogical Case Studies**
 - Designed for the African Association of Planning School (AAPS), a network across over 40 African universities
- **Stakeholder Workshops 1 and 2 (2017, 2018)**
- **Regional Workshop**
 - Based on Uganda & Ghana desktop studies // Connected with HICCUP Project (PI H Ernstson)
- **Storytelling Exhibition**
 - Linked with film-based research grant Visual Humanities at KTH Stockholm by von Heland & Ernstson)
- **Peer-reviewed articles & Conference presentations**

Outputs

- Exchange of information and network
- Input on research direction & feedback on case studies
- Coordination across our different research projects (Wits, UoJ, NWU, UWC, UCT, etc.)
- Identify synergies and try to avoid overlap and duplication in our research with other groups
- Identify on-going policy processes and how to contribute
 - Melanie—national guidelines on waste picker integration; national guidelines for National Waste Management Strategy (DEA).
- Discuss how to do policy-relevant research (including outputs)

Workshop aims

Discussion around the project...

...and then a break!

Rest of workshop

- Presentation and discussion of specific case studies
 - (i) Kathleen 7 + 15 min
 - (ii) Nate 7 + 15 min
 - (iii) Erik & Henrik 7 min (iv) Mary & Anesu 7 min — 15 min discussion of both iii+iv
- LUNCH
- Further discussion of the overall project; and general networking.
- DRINKS (Taxi waiting 15.45)



Community responsibility and labourers' livelihoods

Kathleen Stokes

Responsible communities/ Active citizens

Active citizenry and social activism is necessary for democracy and development to flourish. The state cannot merely act on behalf of the people – it has to act with the people ,working together with other institutions to provide opportunities for the advancement of all communities. – *National Development Plan 2030*

...Ensure that all municipal residents and businesses in the Council's jurisdiction participate in the promotion of **responsible citizenship** by ensuring sound waste management practices within residential and industrial environments - *Johannesburg Waste Management By Laws, 3(e)*

Think Twice

Separation@Source

EcoRangers

Zibi

WasteWise

Food for Waste

Jozi@Work*

Zivuseni (Reloaded)

**Public awareness +
education**

Community-led projects

**Voluntary groups +
activities**

**Local enterprise +
cooperatives**

Aim:

To better understand how campaigns and programmes that promote community responsibility for waste management affect the livelihoods of frontline waste workers.

Questions:

- How are government initiatives that promote and assign community responsibility for waste affecting labour within South Africa's urban waste management?
- How are frontline labourers responding to such changes, and do these changes affect their ability to secure a livelihood?

Urban political ecology
(Lawhon, Ernstson, & Silver, 2014;
Heynen, Kaika, & Swyngedouw, 2004)
Urban metabolisms
(Swyngedouw, 2006; Gandy, 2004)

Labour theory of value
(Harvey, 2014)
Enclosure and dispossession
(Samson, 2015)

Infrastructural Assemblage
(Bennett, 2009; McFarlane, 2009/2011)
‘People as infrastructure’
(Simone, 2004)
‘Incremental infrastructure’
(Silver, 2014)

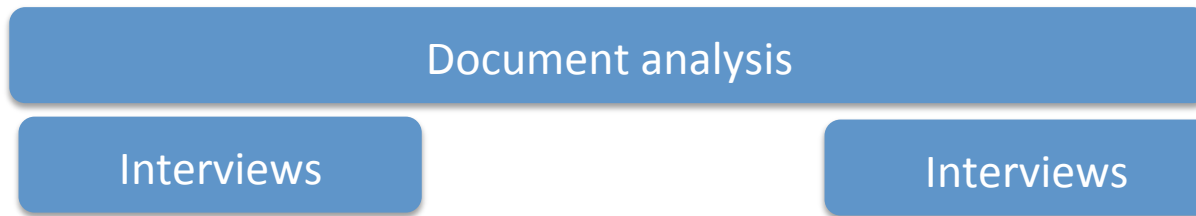
Social production of space
(Lefebvre, 1991)

Discipline and citizenship
(Fredericks, 2014)

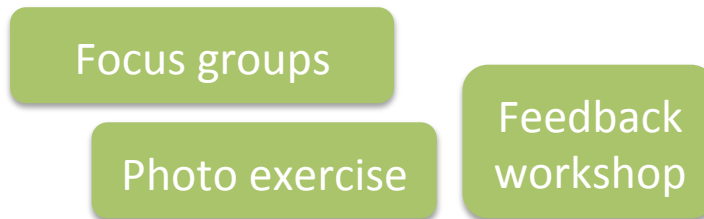
**Theoretical/
conceptual framing**



**Political
Expectations,
discourses**



Cape Town



Johannesburg



**Approach/
Timeline**

Your input

In particular:

- Any additional insight into case studies
- Feedback on methodology
- Feedback on theoretical/conceptual framing
- Contacts for case studies and interviewees

Thank you!

Next sub-project...



Institutionalizing recycling in South Africa

Nate Millington

Aim:

To better understand the contemporary nature of the recycling economy in South Africa, and the technologies, processes, and discourses that allow for the conversion of waste into resource.

Conceptual / Theoretical Orientation

- Urban landscape politics / Urban Political Ecology / Env Justice
- Global automation and the 'end of work'
- Urban Governance (Public/Private, Land Values, Municipal Budgets)
- Converting waste into value: technologies and processes

1. Ongoing institutionalisation of recycling and the development of kerbside pickup

How and through what means is kerbside recycling being developed in South Africa, what are its geographies, and how is it altering existing labour configurations and informal livelihoods?

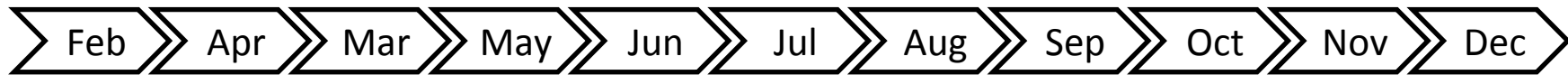
How are private recycling providers making profit and what is the relationship of the state to the development of new and old recycling initiatives and infrastructures?

2. Extended Producer Responsibility and circular economy

How and through what means is extended producer responsibility being implemented in South Africa?

What are the implications of extended producer responsibility for the livelihood strategies for informal reclaimers?

Case Studies



Cape Town

Cape Town

Joburg + Durban?

Other city?

Phase 1

Phase 2

Phase 3

Material Associations

Consultants

Neighborhood Associations

Private Recyclers

Municipal Initiatives

Employees

Provincial government

REDIS A

Funders

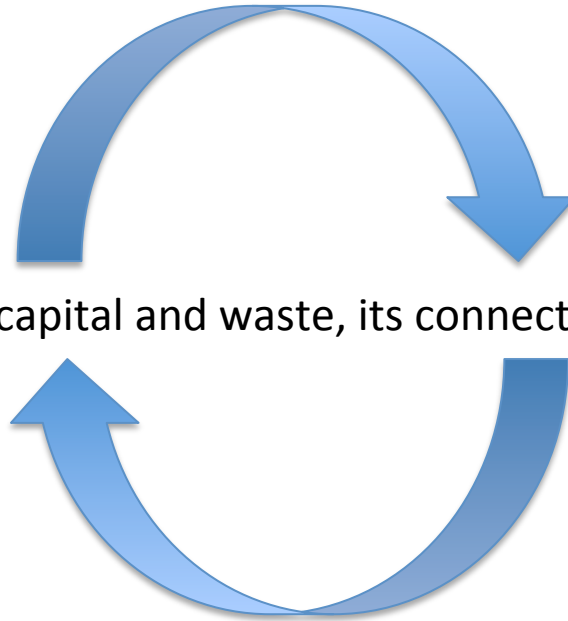
Timeline

Your input

- Suggestions of specific programmes / projects
- Methods of programme evaluation
- Contacts for interviews and further project development
- Urban landscape / city gov't interfaces
- Experimental / innovative approaches

Thank you!

Next sub-project...




Circulation of capital and waste, its connections, and effects.

Internationalisation of waste finance

Erik Swyngedouw

Henrik Ernstson



HOW DO YOU
PLAN TO MAKE
A *LIVING*?

I'VE SET UP A
WEBSITE WHERE
PEOPLE CAN BUY MY
CARBON CREDITS!

THEY CAN TAKE
AIRPLANES AND DRIVE
SUVS, THEN JUST PAY
ME TO *STAY IN BED!*

Aim

We seek to understand the impacts of the internationalization of waste finance, the commodification of carbon, and whether the redistribution of climate finance to waste projects primarily enables established elites to benefit from the reframing of waste as a resource through carbon financialization.

➔ Wider question: How does this relate to process of neoliberal globalization and urban green restructuring?

Urban Sustainability, Green
economy, and Climate Mitigation

```
graph TD; A[Urban Sustainability, Green economy, and Climate Mitigation] --- B[Waste-to-energy<br/>Incineration<br/>Methane combustion]; B --- C[CDM – CERs<br/>Global Finance]; B --- D[Un-sustained livelihoods]
```

Waste-to-energy
Incineration
Methane
combustion

CDM – CERs
Global Finance

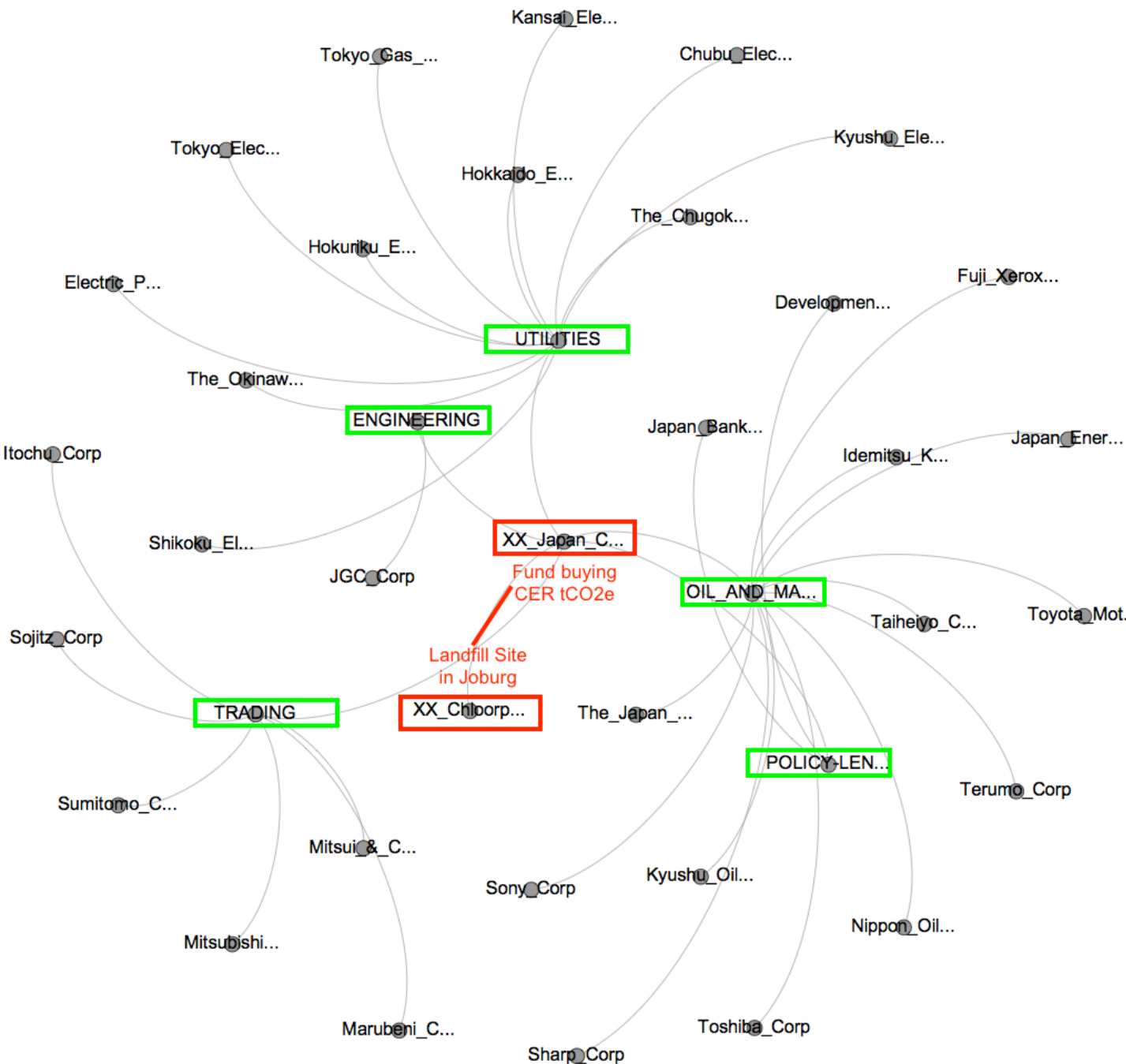
Un-sustained
livelihoods

An example: Chloorpok Landfill (Jo-burg)

- Chloorpok landfill is registered gas-to electric CDM project
- The site is operated and owned by Enviroserv. They are the legal owner of the project and hold the rights to sell all GHG reductions generated and certified.
- Between Jan 2008-Dec2008 83,135 CERs were issued. Jan 2009-Dec 2009 a further 100,239 CERs were issued. Total expected sales from CERs as published on Chloorpok's UNFCCC CDM webpage equates to \$US 7, 777, 000.
- CERs were sold at a rate of \$5.95/tCO₂e. Enviroserv has an emission reduction purchase agreement (ERPA) with the Japan Carbon Fund (JCF) to purchase all CERs generated between 2008-2012 in which the project generated a total of 621,000 CERs.

An example: Chloorpok Landfill (Jo-burg)

- The Japan Carbon Fund has received committed funds of approximately US \$140million for its Japan GHG Reduction Fund (JGRF) to fund the purchase of emission reductions. Significant contributors to the fund include the Development Bank of Japan (DBJ) and the Japan Bank for International Cooperation



Chloorpok Landfill (Jo-burg)

<< tC02e / CER bought by>>

Japan Carbon Fund (JCF)

UTILITIES

Chubu Electric Power Co., Inc.,
Tokyo Electric Power Co., Inc.,
The Chugoku Electric Power Co.,
Inc., Electric Power
Development Co., Ltd. (J-
Power), Hokkaido Electric Power
Co., Inc., Hokuriku Electric
Company, Kansai Electric Power
Co., Ltd., Kyushu Electric Co.,
Inc., Shikoku Electric Power
Co., Inc., The Okinawa Electric
Power, Inc., Tokyo Gas Co.,
Ltd.

OIL & MANUFACTURING

Nippon Oil Corp., Idemitsu
Kosan Co. Ltd., Japan Energy
Corp., Kyushu Oil Corp., Sony
Corp., Toshiba Corp., Sharp
Corp., Fuji Xerox Co., Ltd.,
The Japan Iron and Steel
Federation, Taiheiyo Cement
Corp., Toyota Motor Corp.,
Terumo Corp.

TRADING

Mitsubishi Corp., Mitsui & Co.,
Ltd., Sumitomo Corp., Itochu
Corp., Marubeni Corp., Sojitz
Corp.

ENGINEERING

JGC Corp.

POLICY-LENDING INSTITUTION
Japan Bank for International
Cooperation (JBIC), Development
Bank of Japan (DBJ)

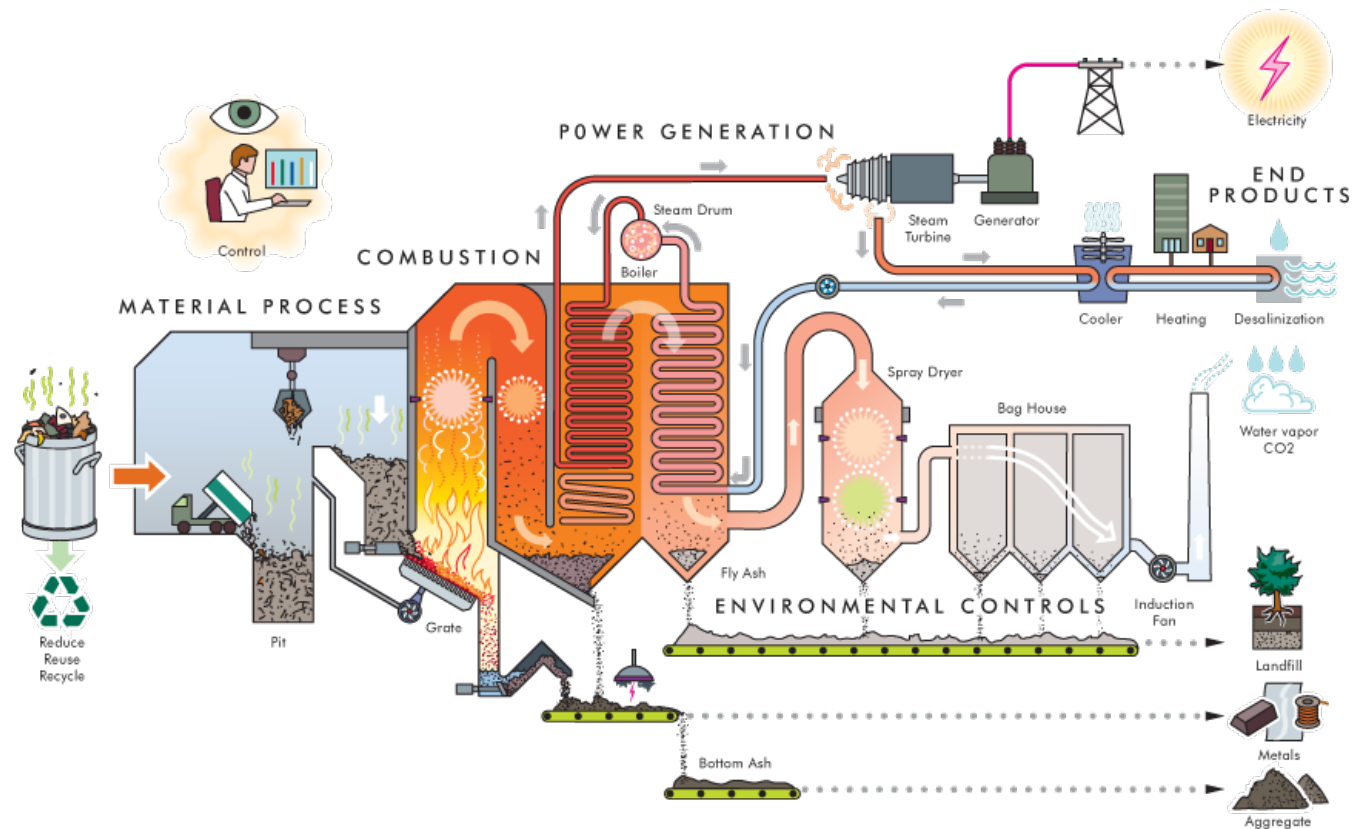
Questions

- What are the patterns of internationalization of waste management/infrastructure: actors, financial flows, institutional arrangements, CERs and their role.
- How does the discourses/practices of the 'green economy'/'sustainable city' nurture the process of commodification/financialization of waste-as-resource
- What, if any, is the role of climate finance (CDM), in this process of corporatization/financialization
- What are the consequences for community-based recycling/re-use and for informal recyclers
- What role do these kind of "green tech" projects play in the contemporary political moment of South Africa?
- ➔ The environmental concern as displacing/disavowing/foreclosing the **political**-ecological process

Your input

- Suggestions for good cases in SA: emblematic examples.
- (Examples in Southern Africa also)
- Fact-finding in who's who in urban waste management in CT and elsewhere.
- Information of financial architecture of waste-to-value projects.
- CMD, CERs and waste projects in SA: what is going on right now, what is in the pipe-line?

...in-depth case study planned in
Cape Town...



Livelihoods, multi-scalar governance and waste-to-energy in Cape Town

Anesu Makina
Mary Lawhon

Aim

- To understand the implications of global climate policy on waste infrastructure and, consequently, waste reclaimers.

Theoretical frames

- Sociotechnical infrastructure & urban political ecology.

Research site

- Waste- to-energy facility recently constructed in Cape Town.
- Motivated in part by global climate policy.
- Purported to generate sustainable energy and reduce waste to landfill.
- Diversion has impacts on informal waste collectors.

Methods

- Review of policy documents
- Interviews with decision makers, businesspersons & waste workers

Your input / Discussion

- *(Erik & Henrik ——— Mary & Anesu)*
- Suggestions for good cases in SA: emblematic examples.
 - Examples in Southern Africa also
- Fact-finding in who's who in urban waste management in CT and elsewhere.
- Information of financial architecture of waste-to-value projects.
- CMD, CERs and waste projects in SA: what is going on right now, what is in the pipe-line?

Lunch...

... and then discussion around the
project + general networking.

- How do these projects connect to your ongoing work/ expertise and what sorts of collaborations are possible?
- Are there case studies and specific projects that would facilitate our research aims?
- Who else should we talk to?
- Coordination between different research projects (identify synergies and try to avoid overlap/duplication)
- Identify on-going policy processes and how to contribute
- How to do policy-relevant research (including outputs)
- What would you like to see from these projects? Outputs?

Break up questions