From informal to providers:
a São Paulo State perspective for waste pickers at Brazilian Solid Waste Policy

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Brazilian and Sao Paulo Solid Waste Policy

**National Solid Waste Policy** (PNRS): enacted in 2010

- Establish new principles, roles and responsibilities – including EPR;
  - Responsibility is *shared* within importers, producers, distributor and retailers;
  - Legal obligation for many products and packaging;
  - Implemented through Sectorial Agreement (Federal), Terms of Commitment or regulation;
- Since PNRS enactment, *great challenges* to implement;

**São Paulo State Solid Waste Policy** (PERS): enacted in 2006

- 2011: Decision to *accelerate EPR implementation* - 2 Phases strategy;
  - **Phase 1** (August 2011- December 2014): Dialog with industry/ “Pilot Projects”
    - Results (2015): ~13,000 Collection Points / ~350,000 tons/year collected
  - **Phase 2 (January 2015 – ongoing):** EPR as environmental permitting requirement;
Waste Pickers: who they are, what they do

• Waste Picker definition:

"low income person which dedicates to activities of recyclable material collection, sorting, processing, transformation and commercialization"

• Refers to different situations:

  ![People picking things at open-air dumping sites](image1)
  ![People pushing cars collecting recyclables at street](image2)
  ![People working at recyclables sorting plant](image3)

  Should be **banished**!
  Should be **replaced** by vehicles
  Should be **formalized**

• Work predominantly in urban areas, collecting and sorting material;

• Other possibilities of collection: great generators, retailers, events, etc;
Waste Pickers: who they are, what they do

- There is a labor division within the cooperatives:
  
  **COLLECTORS (or pickers)**
  With or without fixed collection points

  **SEPARATORS**

  **OPERATIONAL WORKERS**

  **OFFICE ASSOCIATES**
Waste Pickers at Solid Waste Policy

• Estimation of 400 to 500 thousand waste pickers in Brazil;
  • Majority works informally – from 1989, organized in cooperatives (1,175 in 2008);

• Very important role at waste economy:
  • Responsible for 90% of Brazilian MSW recycling;
  • 2013: US$5.5 billion saving in recycling;

• Brazil: the first country to create a policy that is inclusive for waste picker
  • PNRS require their inclusion- they are expected to be key elements for packaging EPR;
  • Municipalities should promote waste pickers inclusion at their waste plans;
  • Private EPR system (specifically packaging) should include waste pickers;

• Nov. 2015: Federal Agreement on Packaging EPR was signed
  • Phase 1: 24 months durations – 12 cities;
    • support to cooperatives infra-structure and training; collection point at retailers;
    • Target to sort and recycle 3,815 t/ day of packaging (20% recovery), until 2018;
  • Phase 2: extend the system to other cities, to be defined;

• São Paulo State: negotiating more ambitious models and targets;
Case Study 1: Cooperatives structuring

**Dê a Mão pra o Futuro Project**

- Initiative from cosmetic, healthcare and cleaning products industry;
- Model aligned with the Federal EPR Agreement for Packaging;
  - Supply equipment, software, training, etc;
- Results in Sao Paulo (2012-2015):
  - Support to 40 cooperatives in 35 cities;
  - Inclusion of 1,400 waste pickers;
  - Sorting of ~3,500 t/month (Jan./ 2015);
- Sorting amounts over time:
Case Study 2: Cooperatives contract

Ourinhos City (cooperatives contracts with municipalities)

- Alternative model – tendency already adopted in some regions

- Municipality hires cooperatives, through a one year service contract, including:
  - Waste pickers: door-to-door collection of recyclables, transportation and sorting
  - Tracking through a municipal register of waste pickers
  - City Council provides infra-structure and support (vehicles, equipment, electricity, etc)
  - Payment of US$ 157,15/ t (maximum of 155 t/month)

- Results (2015):
  - Cooperative (85 person- 74 women) “operated” before at the open-air dumping site
  - Improvement of revenue value after pre-treatment- ex: paper, from 0.05 to 0.14 US$/kg
  - Average income for waste pickers: US$ 500/ month
WEEE management in Brazil

• Brazil: 5th market for EEE – estimation of 600,000 t/ year of WEEE;
  – 30% of new EEE are illegal;
  – Culture of “reuse”/ donation- no dedicated structure to collect WEEE;
  – High level of informal sector, inadequate environmental practices;
  – Some voluntary programs operating;

• Some waste pickers cooperatives started to deal with WEEE:
  – As collecting points, sorting WEEE; and conducting pre-treatment (dismantling), eventually.

• CETESB: decided that **WEEE dismantling needs environmental permits**;
  • But most cooperatives are not prepared to deal with WEEE;
COOPERMITI

- Waste picker cooperative dedicated to WEEE management
  - “business like” operation;

- Founded in 2008 – contract with SP City Council in 2010;

- Contract with many enterprises (banks, TI companies, retailers, etc);

- Capacity: 100 t/month – operating at 30%;

- Average income of waste pickers: ~US$ 430/ month (2014);

  OBS: they do not like to be called “waste pickers” (stigma of “dirty job”)
Conclusions: lessons and challenges

- Waste pickers are a fundamental actor at Brazilian recycling scheme
  - But most works informally - municipality should be a key actor, within a regional framework
    (State level regulation can help EPR implementation)
  - Need to:
    - Assume social inclusion as a Public Policy objective
    - Promote an effort to organization and regularization/ register in cooperatives

- The intrinsic value of material are not enough to promote social inclusion
  - Social inclusion is a separate objective than increase recycling (but they can cooperate)
  - Need to:
    - Discuss and implement EPR financing
    - Facilitate the direct sales to industry, avoiding intermediaries
      (scrap yards, generally illegal, actually buys 54% of recycled material)

- Most cooperatives does not have sufficient conditions to deal with WEEE
  - Environmental permit is indispensable for dismantling (and afterwards);
  - Need to:
    - Training, equipment, technical support, etc;
    - Care with price volatility! (shortly shredding will be more profitable than dismantling);

Waste pickers need to be part of the systems, but officially and supported
THANKS FOR THE ATTENTION!

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Brazilian Municipal Solid Waste (MSW) Management

- Federal Constitution (1988): “it is up to municipalities organize and provide for, directly or by means of concession or permission, the public services of local interest”- including MSW;

Generation 215,297 ton/day (1.062 kg/ inhab.day)

Collection 195,233 ton/ day

“not collected” 20,064 ton/ day- ~20%

Landfill 113,975 t/day (58.4%)

Improper disposal 81,258 t/day (41.6%) ~60% of municipalities

- Low MSW recycling rates:
  • 1,962 municipalities (35.2%) does not have any program;
  • But impressive rates for some materials (aluminum cans 98.3%; PET bottles 58.9%);
  • Up to 2010 EPR only for tires, lubricant oil, agrochemical packaging and bateries;
  • Waste Pickers take part of 51% of the existent municipal initiatives;