



solving the e-waste problem

Guiding Principles to develop e-waste management systems and legislation

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🔄 Why a White Paper on Guiding Principles



- Many countries around the world with developed/draft legislation
- Many countries discussing policy bills

Each country has individual:

- Societal conditions
- Market maturity
- Recycling Infrastructures
- ...

- No “one-solution-fits-all” exist
- No copy & paste of successful model could work

Identification of Guiding Principles to be implemented locally

↳ The 10 Guiding Principles



1. ESTABLISH A CLEAR LEGAL FRAMEWORK FOR E-WASTE COLLECTION AND RECYCLING
2. INTRODUCE EXTENDED PRODUCER RESPONSIBILITY TO ENSURE PRODUCERS FINANCE THE COLLECTION AND RECYCLING OF E-WASTE
3. ENFORCE LEGISLATION FOR ALL STAKEHOLDERS AND STRENGTHEN MONITORING AND COMPLIANCE MECHANISMS ACROSS THE COUNTRY TO ENSURE A LEVEL PLAYING FIELD
4. CREATE FAVORABLE INVESTMENT CONDITIONS FOR EXPERIENCED RECYCLERS TO BRING THE REQUIRED TECHNICAL EXPERTISE TO THE COUNTRY
5. CREATE A LICENSING SYSTEM OR ENCOURAGE CERTIFICATION VIA INTERNATIONAL STANDARDS FOR COLLECTION AND RECYCLING
6. IF AN INFORMAL COLLECTION SYSTEM EXISTS, USE IT TO COLLECT E-WASTE, AND ENSURE E-WASTE IS SENT TO LICENSED RECYCLERS THROUGH INCENTIVES
7. WHEN NO LOCAL END-PROCESSING FACILITIES EXIST FOR AN E-WASTE FRACTION, ENSURE GOOD AND EASY ACCESS TO INTERNATIONAL LICENSED TREATMENT FACILITIES
8. ENSURE THAT COSTS TO RUN THE SYSTEM ARE TRANSPARENT AND STIMULATE COMPETITION IN THE COLLECTION AND RECYCLING SYSTEM TO DRIVE COST EFFECTIVENESS
9. ENSURE THAT ALL STAKEHOLDERS INVOLVED IN E-WASTE COLLECTION AND RECYCLING ARE AWARE OF THE POTENTIAL IMPACTS ON THE ENVIRONMENT AND HUMAN HEALTH AS WELL AS POSSIBLE APPROACHES TO THE ENVIRONMENTALLY SOUND TREATMENT OF E-WASTE
10. CREATE AWARENESS ON THE ENVIRONMENTAL BENEFITS OF RECYCLING AMONG CONSUMERS



- Legal Framework
- Framework Conditions for Operations
- Operations
- Transparency & Acceptance
- Awareness

↳ P1: Establish a clear legal framework



Key elements need to be included/specified in the legislation:




- Role of local municipality and the national government
- Who is responsible for organizing the collection and recycling? Who for financing?
- National alignment on definitions of e-waste
- A permitting and licensing structure for collectors and recyclers
- A clear definition of “producer” (P2)
- Allocation of collection and recycling obligations (e.g.):
 - how the obligations will be divided among all companies
 - how a producer knows how much e-waste it needs to collect and recycle
- How companies shall register as “producers” and document their compliance
- Goals and targets of the legislation to assess whether or not stakeholders are compliant



↳ P2: Introduce EPR for financing



- Under EPR, producers are the main stakeholders responsible for the entire life cycle of a product, including its end-of-life stage 
- EPR programs involve three types of instruments:
 - **Administrative instruments**
 - **Economic instruments**
 - **Informative instruments**
- Fundamental to have a clear definition of who is considered to be the producer of a product and thus responsible for financing the collection and recycling.

The local manufacturer or importer of new and used electrical and electronic equipment (EEE) to be placed on a national market at first invoice by sale or donation.

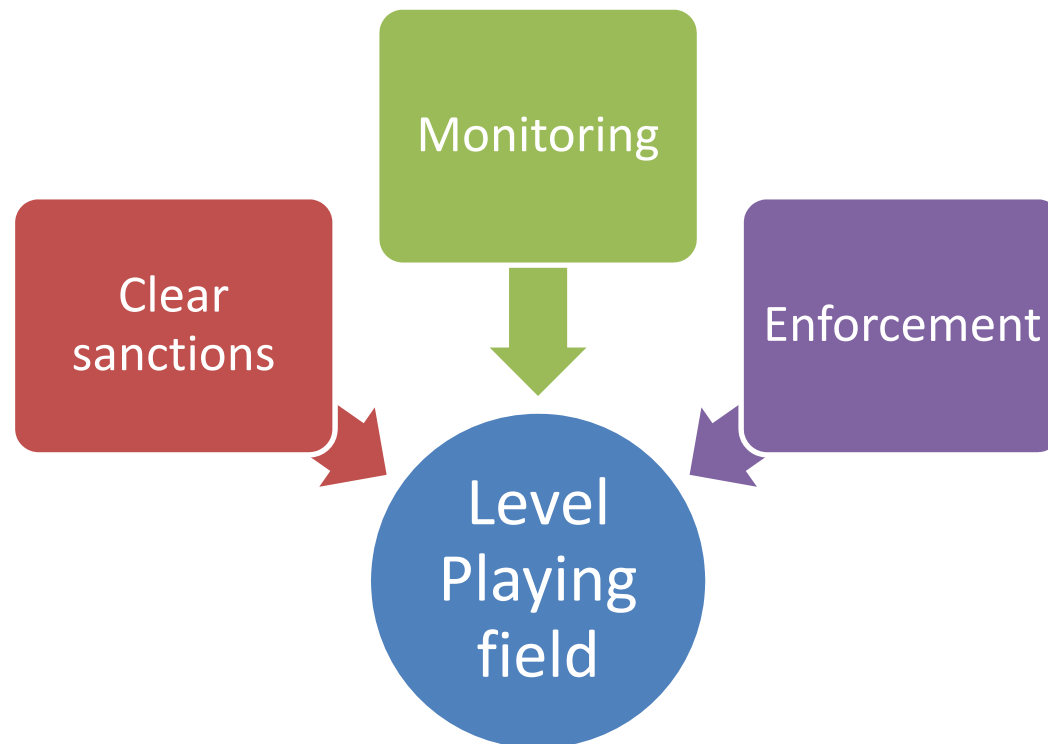
The producer can be a legal or natural person and must be established in the country of import.



🔄 P3: Enforce Legislation for ALL actors



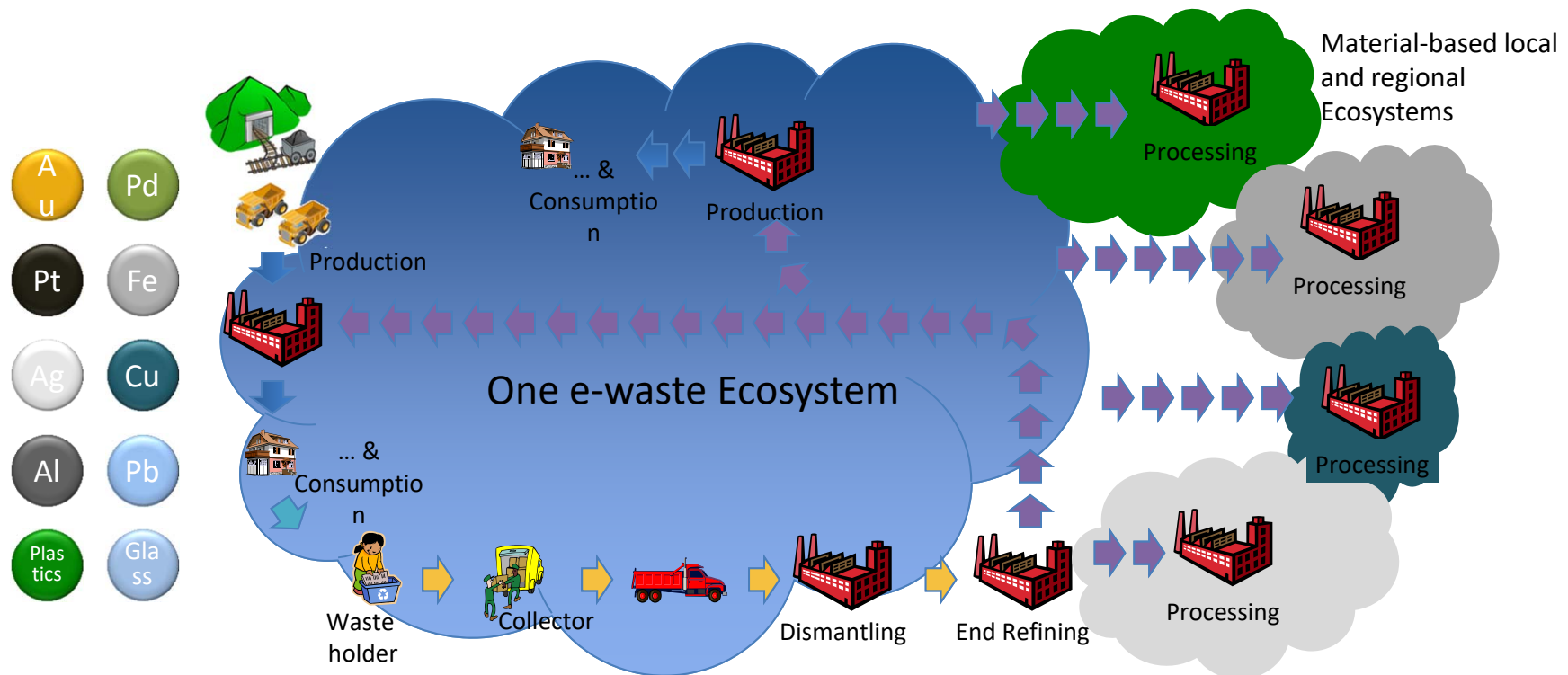
- Enforcement = ALL actors = Level playing field
- No Enforcement = disrupting markets = double burden on compliant companies = triggering non-compliance
- Clear indication of penalties and sanctions
- Monitoring complement efforts in enforcement



↳ P4: Create favourable investment conditions



- Favourable investment conditions = local investment in recycling infrastructures
- Technology in line with environmental standards = access to fund = stable market conditions required
- Various instruments could be used to facilitate investments
- Favourable conditions for investments = larger benefits in recycling sector



↳ P5: Create licensing system & encourage certification



- E-waste policy = environmental protection + recovery natural resources
- Licensing & certification key to achieve the objectives
- Licensing = Risk Assessment for individual activities
- Licensing = Tailored on local conditions + roadmap for future alignment of best standards
- Licensing as minimum for:
 - Collection points (receiving, managing, sorting, sorting)
 - Collectors should be trained (and in long term licensed)
 - Treatment plants: encourage adoption of international standards



↳ P6: Allow informal collection of waste



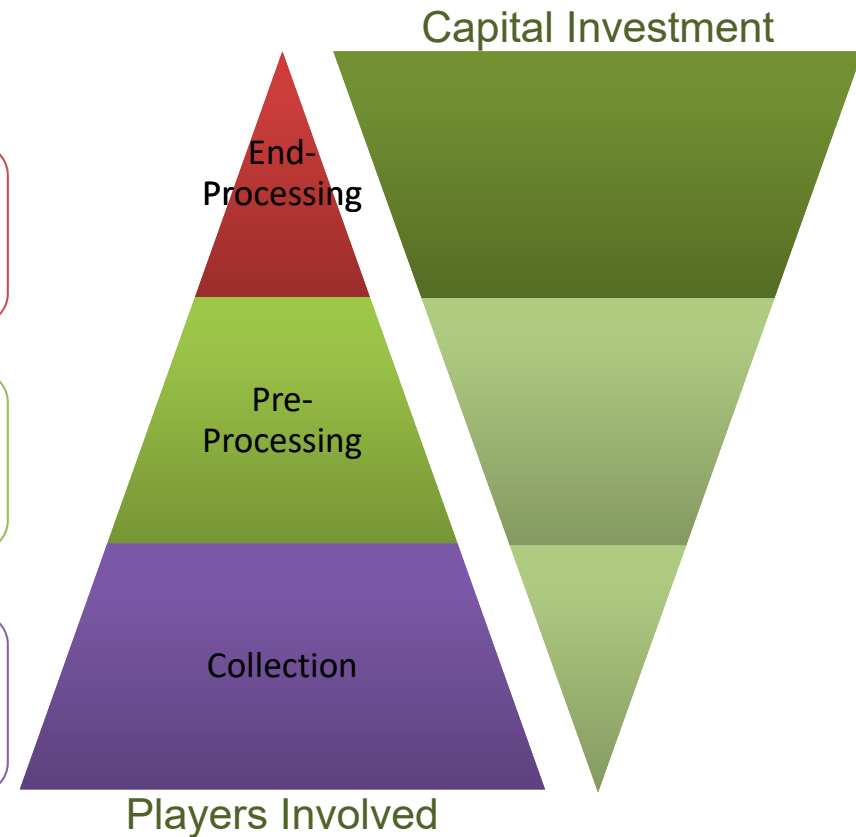
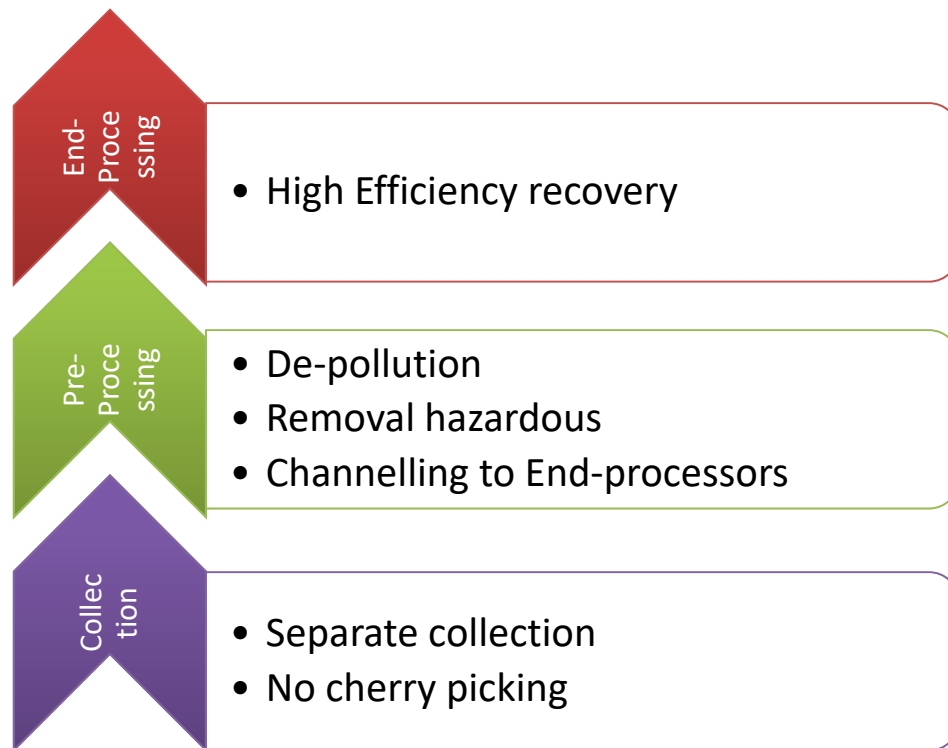
- Informal activities common in many countries (not only developing ones)
- What can be done “informally” and what NEEDS to BE STOPPED?
Informal recycling is often a big concern while informal collection can be very efficient
- Development of guidelines and roadmap
- Push existing “informal flows” into formal system
 - Awareness and incentives to consumers and collectors
 - Incentives offered by producers, municipalities or recyclers
- Incentives are NOT only financial ones = No Printing Money! Could be different and tailored to local context
- Incentives:
 - To be more attractive than payment by informal players
 - Increase collection of whole products over cherry picking



🔄 P7: Ensure good access to international markets



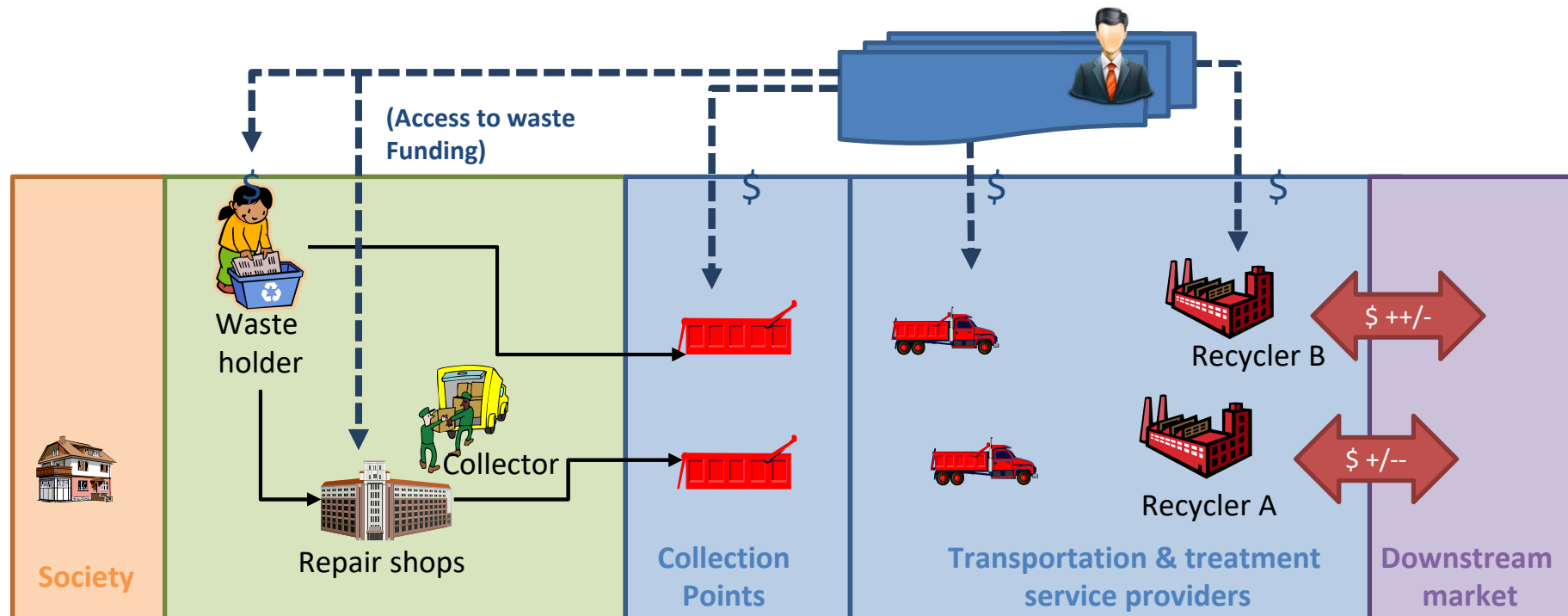
- E-waste recycling = Collection + Pre-processing + End-processing
- Operations are local, national, regional, global
- Not ALL operations can be local due to complex treatment and high investment cost = Leverage on best opportunities = access to the market where needed



↳ P8: Ensure cost transparency & competition



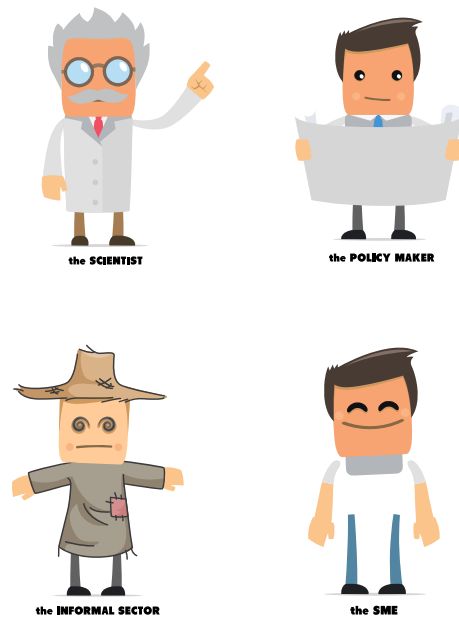
- Transparency on take back cost = understanding needs of financing
- Transparency = stimulate competition in the market between service providers
- Cost effectiveness to be de-coupled from quality standards!
- Quality standard = Level playing field = basis for fair competition
- Funds secured for e-waste management = 100% used for e-waste management!



🔄 P9: Ensure ALL actors are aware of impacts & opportunities



- ALL stakeholders to be aware of:
 - Environmental and health impacts
 - Importance sound collection and treatment
 - Legislative provision (role & responsibilities)
- Knowledge = easier acceptance



↻ P10: Create awareness



- Awareness of consumers (waste generators) paramount
- Role of consumers when discarding + pressure on existing systems (Knowledge)
- What do consumers need to know?
 - How to access collection infrastructures
 - Environmental benefits of proper recycling
 - Differences between effective resource recovery & disposal
 - Costs for proper recycling and importance of financing mechanism



↳ How to use the 10 Principles



- Implementing all guiding principles suggest = find the right balance
- Engage with local stakeholders
- Review as-is status in country/region to identify:
 - existing strengths & key focus areas before implementing
 - key stakeholders in the region

Download the White Paper here: http://www.step-initiative.org/files/step-2014/Publications/Green_and_White_Papers/Step_WP_WEEE_systems_and_legislation_final.pdf



Thank you

