



International  
Labour  
Organization

# From waste to value

## Opportunities and challenges for the world of work from discarded electrical and electronic equipment

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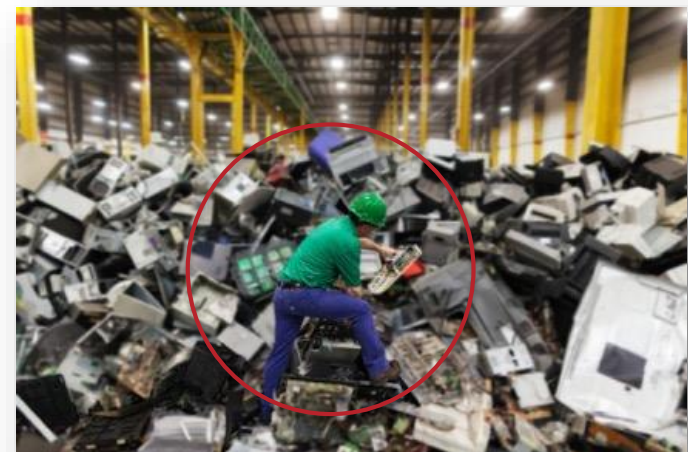
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Sectoral  
Policies  
Department

# 1. Why is e-waste relevant for the world of work?



E-waste is a 'high volume, low value' resource that – if managed better and in accordance with a circular economy approach – can generate inclusive economic growth, decent work and green jobs.



## 2. Employment in e-waste

Embracing the model of circular economy could create up to 6 million jobs, above all in reprocessing industries, waste management and services. However, there is no reliable employment data for e-waste.

- ▶ Estimations of employment in e-waste include:
  - Global: employment in waste management and recycling: 4 million workers (formal sector), 15-20 million workers (informal sector) [ILO, 2013]
  - China: in 2007, approx. 69,000 collectors and recyclers [Feng Wang, 2013]
  - India: approx. 400,000-500,000 children aged 10-15 working with e-waste; estimate of 25,000 informal e-waste workers in Delhi [Veenu Joon, 2017]; [Laha, 2015] [Frost & Sullivan, 2013]
  - Argentina: in 2016, 34,000 workers estimated in the e-waste value chain [ILO, 2017]
  - Nigeria: up to 100,000<sup>2</sup> workers in the e-waste economy [Olakitan Ogunbuyi, 2012]

### 3. Challenges of e-waste

The bulk of e-waste recycling is carried out in the informal economy and its workers are generally involved in labour-intensive activities that involve low earnings, long working hours and exposure to hazardous substances, leading to a serious of decent work deficits.

► Challenges in e-waste management include:



safety & health concerns



hazardous substances



child labour & marginalization



informality



availability of recyclables



## 4. Opportunities of e-waste

**E-waste can be a profitable and productive industry**, which can generate employment in safer conditions, help organize formerly informal workers, and reduce the impact of e-waste on the environment.

► Opportunities in e-waste management include:



employment & business



environmental health



public safety & health



social advancement



## 5. What has the ILO done so far?

The ILO has been working on e-waste since 2008. **The first global ILO tripartite meeting on e-waste will be held in April 2019.**

- ▶ 2008: ILO first took note of the emerging e-waste problem
- ▶ 2012: E-waste included in the Sectoral Policies Department's work programme & in-depth research started
  - Country-level research in i.a. Argentina, Bolivia, China, Serbia, S-Africa
  - Country-level capacity building activities in China, Serbia, S-Africa
- ▶ 2017: *Tripartite Global Dialogue Forum on decent work in the management of e-waste* decided upon for April 2019
- ▶ 2018-2019: Preparations of the Global Dialogue Forum for 2019
  - Country studies on e-waste in Argentina, India and Nigeria
  - Issues paper "From waste to value – opportunities and challenges for the world of work from discarded electrical and electronic equipment"
- ▶ 2018-2020: UNIDO-ILO research & capacity building project in Latin America (Peru & Argentina)

## 6. ILO normative frameworks

▶ To download click on the titles:

- ILO [Declaration on Fundamental Principles and Rights at Work \(1998\) and its Follow-up \(2010\)](#)
- ILO [Occupational Safety and Health Convention, 1981 \(No. 155\) and its Protocol of 2002](#)
- ILO [Occupational Health Services Convention, 1985 \(No. 161\)](#)
- ILO [Promotional Framework for Occupational Safety and Health Convention, 2006 \(No. 187\)](#)
- ILO [Chemicals Convention, 1990 \(No. 170\)](#)
- ILO [Transition from the Informal to the Formal Economy Recommendation, 2015 \(No. 204\)](#)

## 7. ILO resources

**Forthcoming ILO e-waste publications in 2018-19** include studies on e-waste in Argentina, India and Nigeria and an issues paper for the ILO *Global Dialogue Forum on decent work in the management of e-waste*.

- ▶ To download click on the titles:

[ILO \(2012\)](#)



[ILO \(2014\)](#)



[ILO \(2015\)](#)





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