

The Best of two Worlds Project (Bo2W)

Project introduction

Dr. Matthias Buchert, Oeko-Institut

Bo2W Closing Event, Berlin, 24 September 2015



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The Project

Global Recycling of Strategic and Essential Metals: Best-of-two-Worlds Approach (Bo2W)



Project Duration: June 2012 – October 2015

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Federal Ministry of Education and Research



CITY WASTE RECYCLING UTD.



Currently, critical metals are lost...



Source: Oeko-Institut

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CITY WASTE SECTLUNG LTD.

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... with threat to environment and human health



Source: Oeko-Institut

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The Challenge

Challenges

- To reduce threats to human health and the environment
- To create better working conditions
- To close the loop of valuable metal cycles
- Focus of the project: electronic waste and end-of-life vehicles

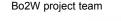






Source: Oeko-Institut

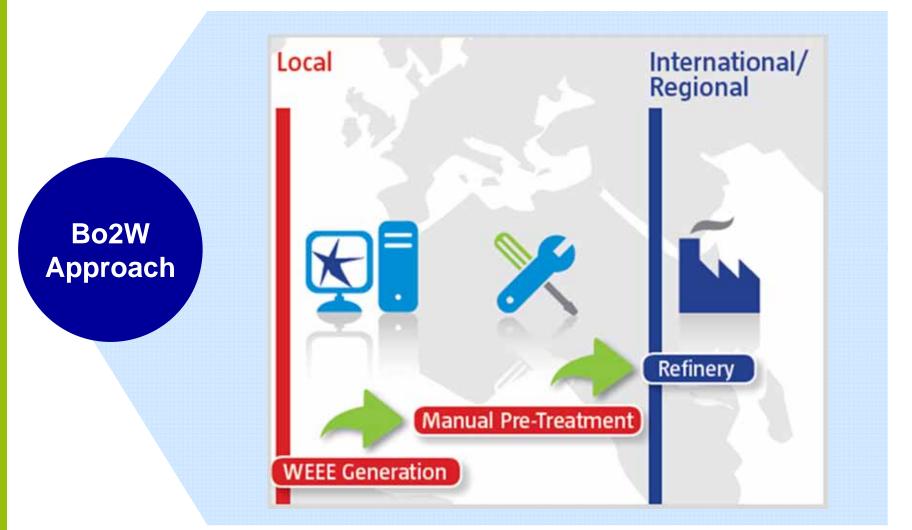






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The Bo2W Approach: a sustainable business model

International co-operation to combine strengths of recycling systems in developing countries and emerging economies with those of industrialized countries

Benefits:

- Improved management of hazardous substances
- Increased resource efficiency / closed material cycles
- Reduced GHG emissions
- Increased income and employment generation in Egypt and Ghana
- Increased investments in social & environmental standards

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Benefits

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Developing sound recycling



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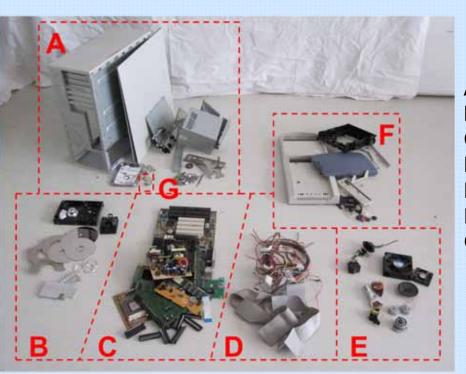
CITY WASTE RECYCLING 17D.

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The Bo2W Approach – an example

Solution for Information and Communication Technologies (ICTs): the key factor is careful dismantling and separation

Bo2W Approach



A: Steel scrap B: Aluminium scrap C: Printed circuit boards D: Cables E: Copper-steel scrap F: Plastics G: Magnets

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Project objectives

Objectives

First lots of **complex and environmentally dangerous fractions** will be carefully dismantled in Ghana / Egypt and treated in European refining plants (state-of-the-art technology).

Other fractions like steel will be **treated locally** in Ghana / Egypt in available industrial capacities.

It's key to adopt a **holistic approach** and consider all the fractions coming out of e-waste.

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Many Thanks for Your Attention!

Dr. Matthias Buchert

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> Find more information about the Best of two Worlds Project (Bo2W): <u>www.resourcefever.org</u>

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