

Urban Mining Project

(Discarded Metal Resources Recycling Project)

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1. Status and necessity

What is urban mining?

- A new industry that collects and reuses gold, silver, copper, palladium, cobalt and other metal resources from discarded mobile phones, PCs and other WEEE.
- Urban mining means digging up mineral resources from the very center of cities. The term was first used in Japan in the 1980s. It is attracting more and more attention now as a method to prevent a resource depletion crisis.

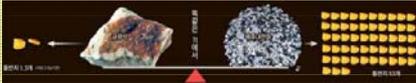
* WEEE : Waste Electrical and Electronic Equipment



Economic feasibility of urban mining

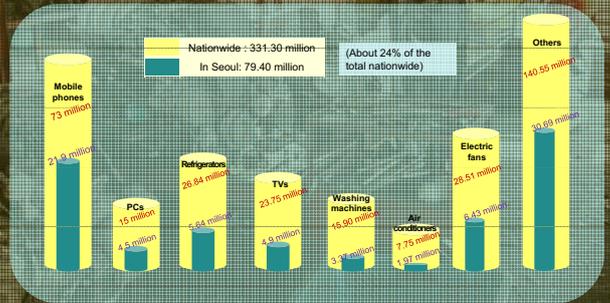
- Outstanding resource extraction with efficiency four to eighty times higher than existing mines

5g of gold per 1 ton of ore at a gold mine
400g of gold per 1 ton of mobile phones
 52g of gold per 1 ton of PCs
 20g of gold per 1 ton of home appliances



- One mobile phone: 0.04g of gold, 0.2g of silver, 0.03g of palladium, 14g of copper
- One PC: 0.6g of gold, 5g of silver, 100g of copper, 5kg of scrap metal

Amount of resources retained in Korea (no. of units)



Source: Korean Statistical Information Service (2006)