

Editorial

Electronic Waste and the African Environment

“A Sky News Investigation has revealed that electronic waste, sent to Hampshire County Council, has been exported abroad, illegally. We placed a satellite tracker in a broken old television and followed it from a recycling site in Basingstoke, all the way to Nigeria. Here our undercover cameraman described his experience in Lagos.....”

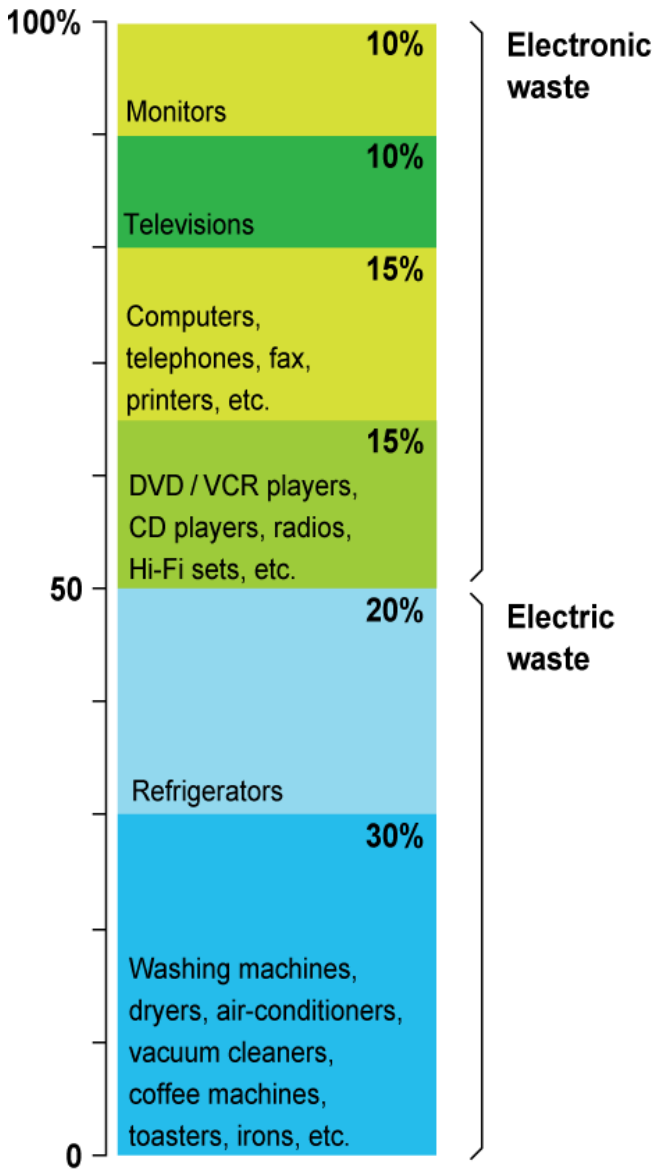
— Catherine Jacob, for Sky News, United Kingdom in collaboration with *Greenpeace* (18 February 2009)¹.

So began yet another **exposé** about the global electronic waste (e-waste) challenge and its impacts on the global environment. A special section was dedicated to e-waste recycling at the recently concluded annual conference of The Minerals Metals and Materials Society (TMS) in San Francisco, California (15 – 19 February 2009). It is abundantly clear that the problem with e-waste is not technological, but sociological in nature. Top-notch e-waste recycling facilities are available, although they are sparsely distributed in no more than five countries in Europe and Canada. A notable presentation was given at the conference by a representative of Belgium’s UMICORE in what appears to be among the most conscientious recyclers of e-waste globally. The United States notably does not have adequate smelting facilities for safely recovering both useful and hazardous components from e-waste. Much has also been written about the lack of full support by the U.S. for the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*². Even countries such as England that have ratified the convention are still vulnerable to clandestine businesses. It is time to toughen the national and international policies on hazards associated with electronic products. Regions in the developing world that need to adopt the blessings of information technology are now threatened with the worst pollution associated with the digital age. Tough standards and rigorous enforcement plus public education should do the trick. Figures 1 – 8 provide a pictorial educational story of the many dimensions of this problem for which the solution will require collaboration across international boundaries.

¹ SkyNews Exclusive Video. 18 February 2009. http://news.sky.com/skynews/Home/video/Electronic-Waste-Dumped-In-Africa-Exclusive-Probe-Reveals-Potentially-Toxic-Televisions-Shipped-From-Hampshire-To-Nigeria/Video/200902315225015?lpos=video_Article_Related_Content_Region_1&lid=VIDEO_15225015_Electronic_Waste_Dumped_In_Africa%3A_Exclusive_Probe_Reveals_Potentially-Toxic_Televisions_Shipped_From_Hampshire_To_Nigeria. Accessed on 19 February 2009.

² <http://www.basel.int/> Accessed on 19 February 2009.

What is e-waste?



Additional categories: lighting equipment (fluorescent tubes); toys, sports and recreational equipment; electric and electronic tools (drills, sewing machines, lawn mowers, etc); surveillance and control equipment; medical instruments; automatic ticket machines.

Source : EMPA Swiss Federal Laboratories for Materials Testing and Research (definition according to the European Union WEEE Directive).

Figure 1. What is e-waste?. (2006). In *UNEP/GRID-Arendal Maps and Graphics Library*. Retrieved 07:01, February 20, 2009 from http://maps.grida.no/go/graphic/what_is_e_waste.

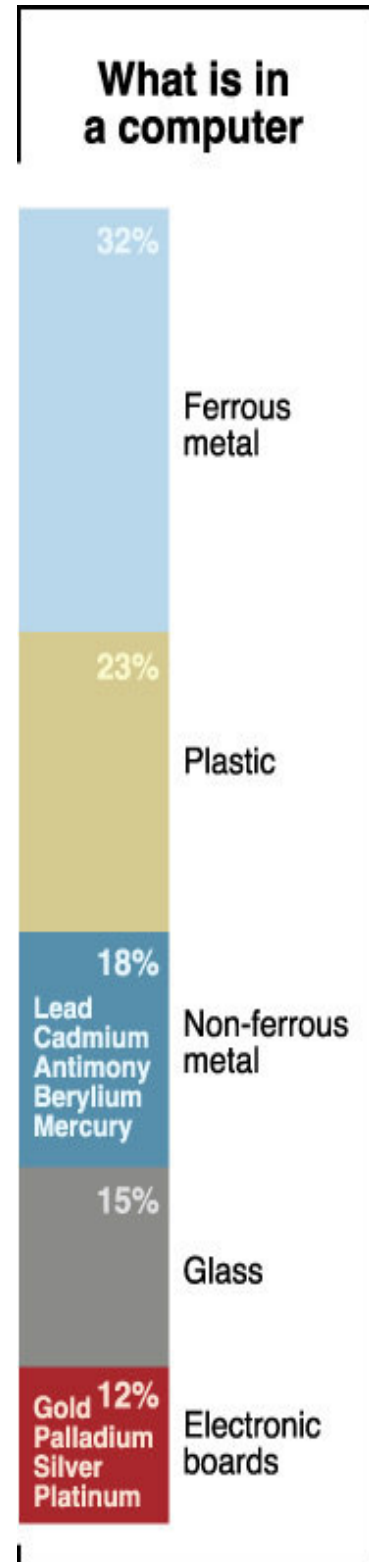


Figure 2. What is in a computer. (2004). In *UNEP/GRID-Arendal Maps and Graphics Library*. Retrieved 07:03, February 20, 2009 from <http://maps.grida.no/go/graphic/what-is-in-a-computer>.

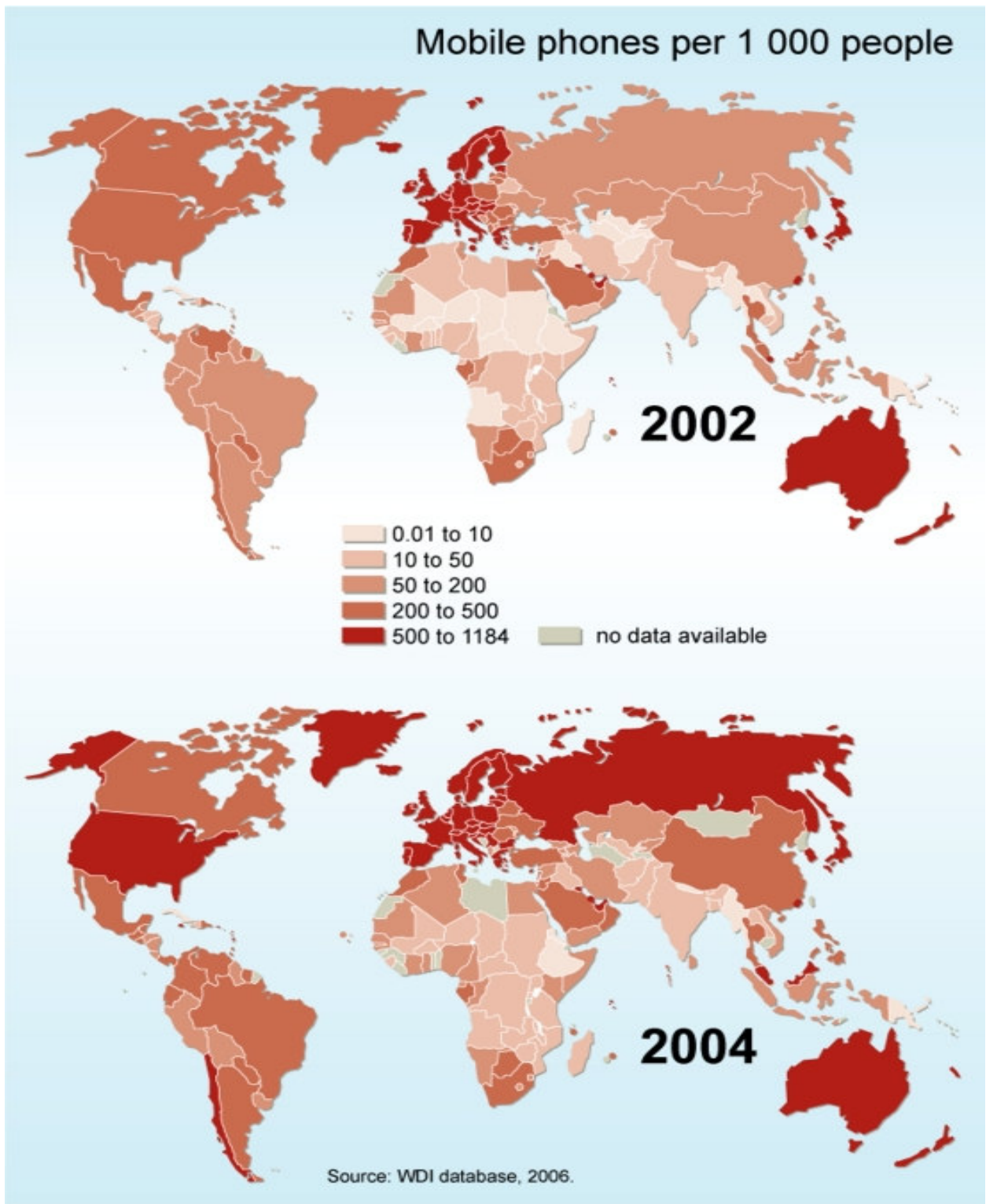
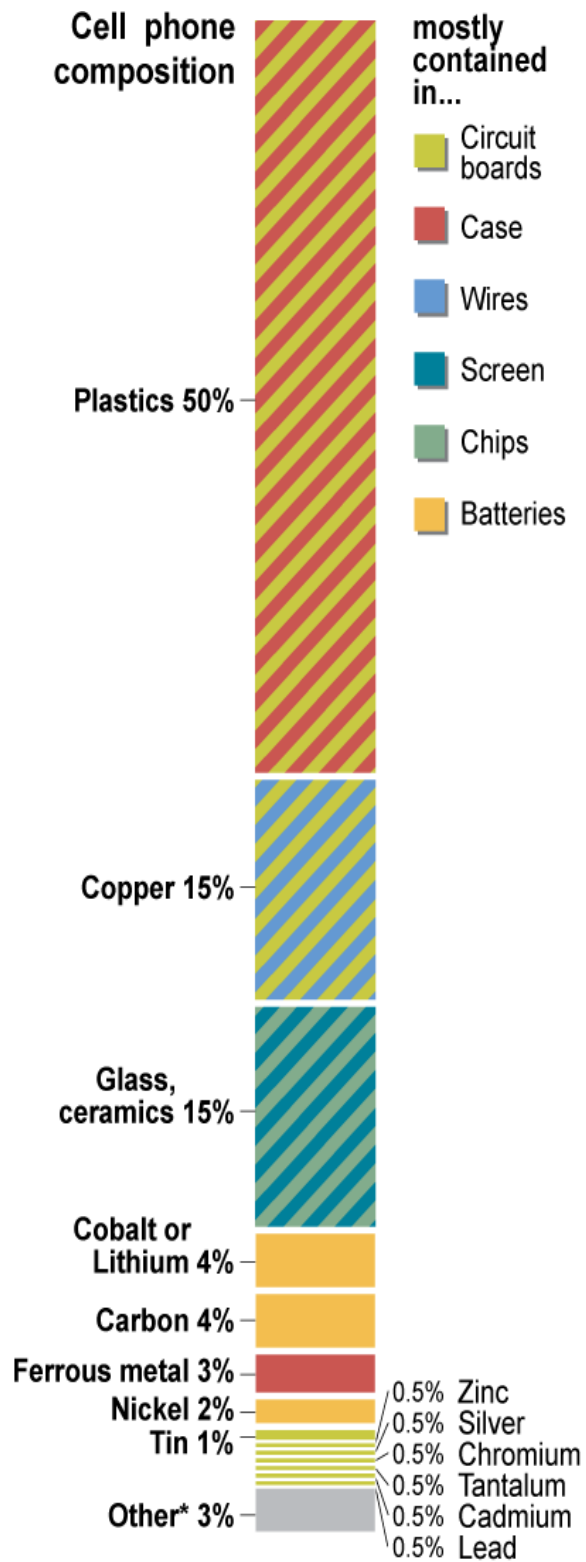


Figure 3. Mobile phone subscribers. (2006). In *UNEP/GRID-Arendal Maps and Graphics Library*. Retrieved 07:18, February 20, 2009 from http://maps.grida.no/go/graphic/mobile_phone_subscribers.



*among them, less than 0.1% of antimony, gold and beryllium

Sources: Basel Convention, 2006; Lindholm (Nokia report), 2003.

Figure 4. Cell phone composition. (2006). In *UNEP/GRID-Arendal Maps and Graphics Library*. Retrieved 07:16, February 20, 2009 from http://maps.grida.no/go/graphic/cell_phone_composition.

Information and communication technology expenditures

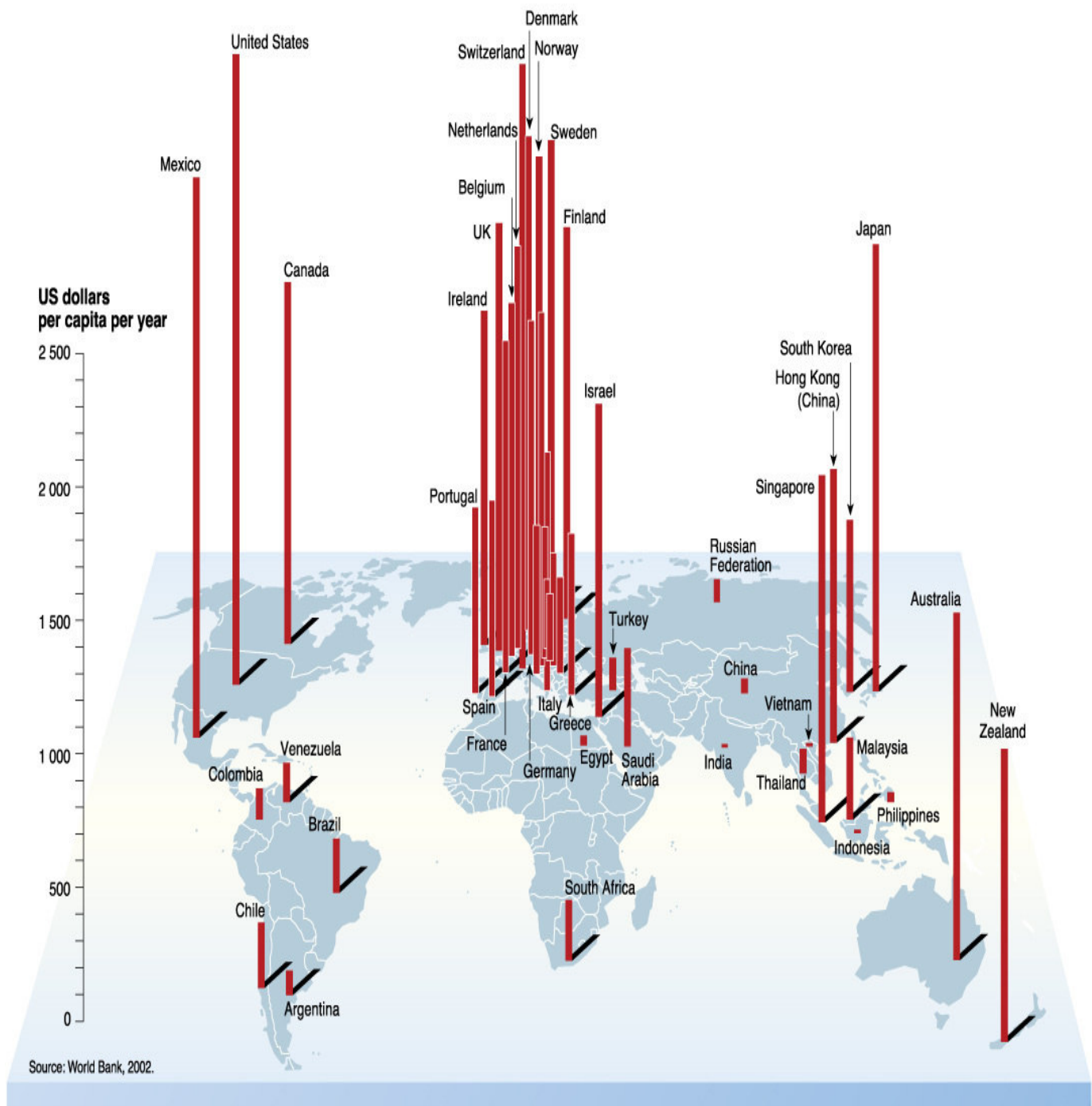


Figure 5. Information and communication technology expenditures. (2004). In *UNEP/GRID-Arendal Maps and Graphics Library*. Retrieved 06:59, February 20, 2009 from http://maps.grida.no/go/graphic/information_and_communication_technology_expenditures.

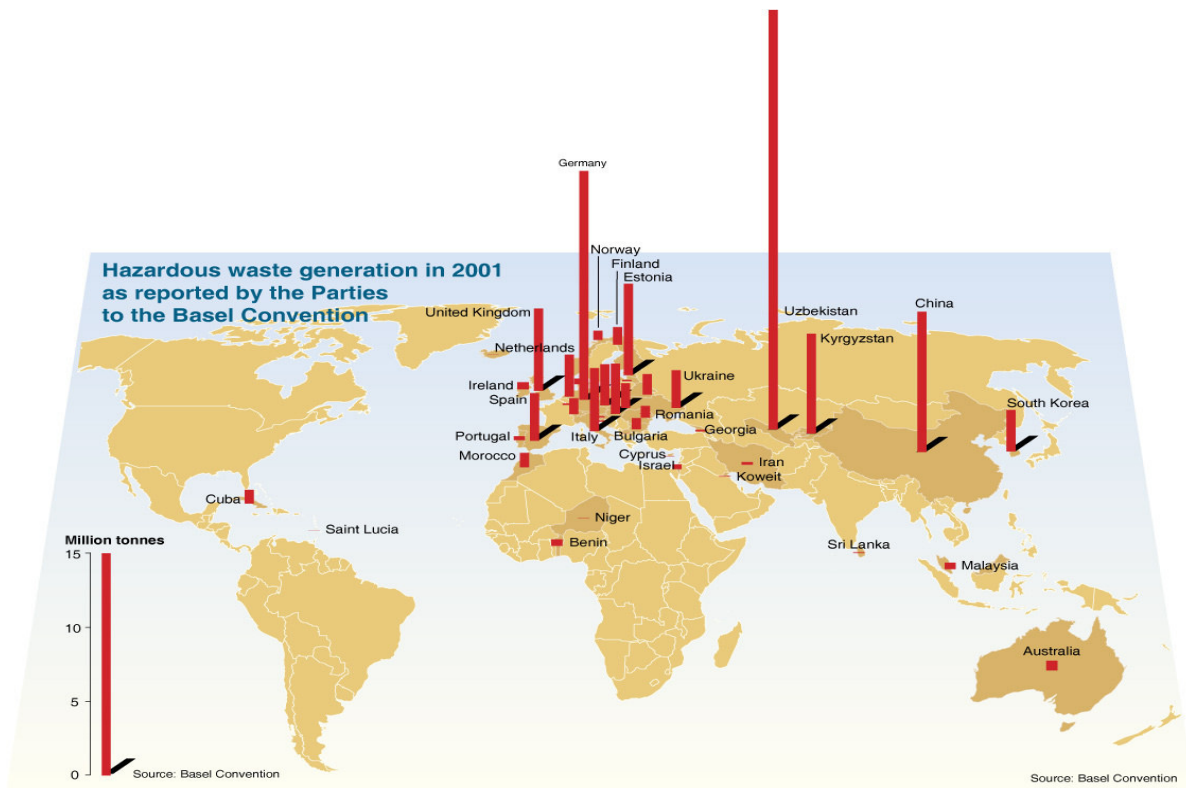


Figure 6. Hazardous waste generation in 2001 as reported by the Parties to the Basel Convention. (2004). In *UNEP/GRID-Arendal Maps and Graphics Library*. Retrieved 07:05, February 20, 2009 from http://maps.grida.no/go/graphic/hazardous_waste_generation_in_2001_as_reported_by_the_parties_to_the_basel_convention

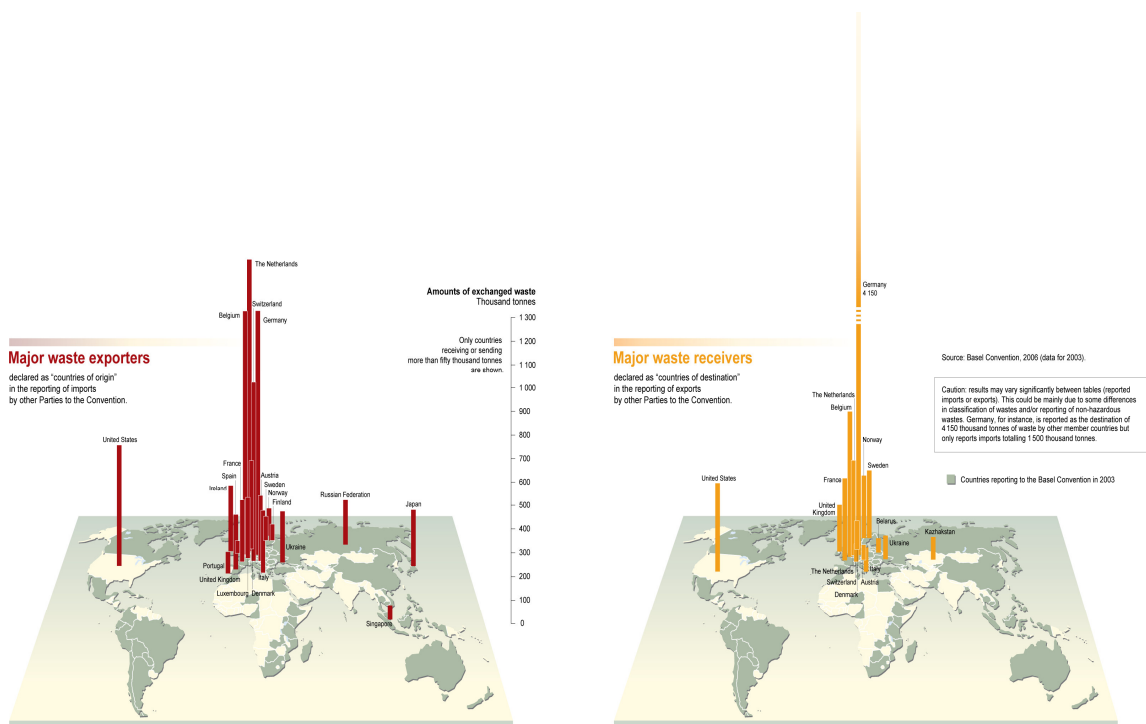


Figure 7. Major waste exporters, Major waste receivers. (2006). In *UNEP/GRID-Arendal Maps and Graphics Library*. Retrieved 07:07, February 20, 2009 from http://maps.grida.no/go/graphic/major_waste_exporters_major_waste_receivers.

