



PMPI'S e-SCRAP RECYCLING CAMPAIGN



THIS E-SCRAP PRIMER IS DEDICATED TO
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ELECTRONIC SCRAP RECYCLING



The **Philippine-Misereor Partnership Inc. (PMP)** is a network of people's organizations (POs), non-governmental organizations (NGOs), church/faith based groups and Misereor, the overseas development agency of the Catholic Church in Germany based in Aachen, Germany.

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WHY WE SHOULD RECYCLE ELECTRONIC SCRAPS LIKE DISCARDED MOBILE PHONES, COMPUTERS AND APPLIANCES?

The boom of the electronics industry started during the 90's. That was the time when television sets and transistor radios began to be sold at cheaper prices. Before the end of that decade, different models of cellphones also flooded the market. The use of electronic products continues to enjoy popularity until this day. Especially since the use of internet and

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social media became a part of the daily lives of most urban dwellers.

The Philippines, though still a developing country, is part of this global trend. In fact, the Philippines is one of the leading markets in the use of electronics.

When television sets invaded Filipino houses, it commanded strong influence in the minds of most Filipinos. One of the evidence of the market of TV is the most recent list of the BIR's top individual taxpayers where most of the familiar names are TV personalities¹. In fact, several former and present TV celebrities owe their success in politics to their television stint².

The Philippines is considered as the texting capital of the world³. According to the latest count, there are already about 103 million active mobile phone subscribers in the country⁴. Even in the world of politics, texting has played a crucial role when several young students and professionals used SMS to topple a elected President via people power⁵.

Our country also leads the world in the percentage of its citizens owning a Facebook account⁶. While we



placed tenth⁷ worldwide in terms of the number of Twitter users per nation. The use of other forms of social media like Youtube, Wordpress, and Instagram is also widespread in the Philippines.

The newest models of mobile phones called smart phones can now be used in accessing the internet. The latest data⁸ mentioned that one out of every three new cellphones purchased in the country is a smart phone. This phenomenon further cemented the role of social media in the lives of urban Filipinos.



Evidence of the growing market of social media in the Philippines is the release of more sophisticated electronic gadgets, but more portable than regular laptop computers, like netbooks, tablets, and phablets.

While new models of these mobile phones and other gadgets are released in a monthly basis, we ask,

¹<http://www.abs-cbnnews.com/business/10/14/13/wh-o-defined-kno-phi-top-taxpayer>
²<http://www.inquirer.net/story/2013/11/13/televi-sion-celebrities-lose-and-winners-in-the-year-phiapp-ne-election>
³<http://www.itsarakasyon.com/infotech/20-years-on-a-ms-remains-king-in-the-texting-capital-of-the-world>

⁴<http://business.inquirer.net/111607/telcos-report-record-number-of-customers>
⁵<http://pcjr.org/mag/SpecialReport/textrev2.html>
⁶<http://datacenter.bordent.com/64475/philippines-is-med-the-social-networking-capital-of-the-world-into-news-malaysia-amongst-top-10>

⁷<http://technology.inquirer.net/15189/philippines-has-9-5m-twitter-users-ranks-10th>
⁸<http://www.ecnmag.com/news/2012/07/one-every-three-mobile-phones-sold-philippines-smartphone-philippines>

where are old ones now?

Our question even becomes more relevant if the people would know that every time they change, throw out or store gadgets in their closets, they are also rendering as useless all its metal components⁹. Metals that needed to be mined to catch up with the demand for hand-held electronics.

Wires are made with copper. Batteries have nickel, cadmium, zinc and lithium. While gold and silver are used as conductors in small circuit boards.

These metals will not be present in our gadgets without flattening some mountains, destroying small islands, and denuding forests. In the process of mining these metals, there is also the possibility that the lives, health, and livelihood of some citizens especially indigenous people were compromised. For example, the copper may have been sourced from Philex Mining in Benguet where the spill of their tailings

⁹<http://www.pbs.org/wgbh/nova/next/physics/rare-earth-elements-in-cell-phones/>



pond in 2012¹⁰ affected several farms, fisheries and even the generation of electricity in several provinces. Copper is also the main produce of the infamous Marcopper Mining that rendered rivers dead, destroyed farms, and killed animals and human beings in Marinduque in 1996¹¹.

The nickel used probably came from Hinatuan Mining that left a gaping hole in the middle of the tiny island of Manicani¹² in Guiuan, Eastern Samar. Because of super typhoon Yolanda, the inhabitants of this very small island is now confused where they will settle; near the sea where there is threat of tsunami and storm surges or atop the landslide-prone areas abandoned by mining operations.

The electronics industry might also use the gold from the planned mining project by Sagittarius Mining in Tampakan, South Cotabato. A mining project that has yet to start but already sparked social unrest in its vicinity. In fact, many members of the Blaen tribes including two children were murdered because of their resistance to the project¹³. Sagittarius Mining also threatens to clear vast forests with a land area larger than the City of Manila¹⁴.

That is the reason why we need to ensure that our discarded electronic items are recycled. It is even better if we avoid unnecessarily discarding our

¹⁰<http://www.rappler.com/business/special-report/wh-ymining-will-mining-silver-copper-22034-philippines-ds-pa-b-for-pedal-mine-leak>
¹¹<http://www.twinside.org.sg/title/toxic-ch.html>
¹²<http://www.sunstar.com.ph/dayao/local-news/2011/12/05/16-group-seeks-total-mining-ban-guivan-island-20111205>

¹³<http://newsdesk.assa.com/soldiers-face-criminal-charge-2-49-2007-messiah>
¹⁴<http://www.sunstar.com.ph/dayao/local-news/2011/09/07/mine-firm-clear-3900-ha-forest-17907>

our gadgets just because we want a new one.

In a 2008 scientific study¹⁵, it was learned that there is more gold from used mobile phones than from mining operations. According to the study, a ton of ore will only yield about .3 to 5 grams while a ton of discarded phones is equal to 280 grams of gold. The latter will also yield 140 grams of other reusable parts made of platinum, copper, plastic and glass.

Aside from the direct correlation of mining and electronic scrap recycling, the improper disposal of electronic scrap also poses serious health hazards. If they are included in landfills¹⁶, they will release poisonous substances that would affect the health, livelihood, ecology, and even human lives. Burning them will pose even more serious and immediate health risks¹⁷.

Some of the chemicals that electronic scrap could release to the environment are lead, mercury and arsenic¹⁸.

Even the United Nations and industrialized countries

¹⁵<http://www.pacebutler.com/blog/cell-phone-recycling-02/>
¹⁶<http://www.ncbi.nlm.nih.gov/pubmed/16825626>
¹⁷<https://www.google.com/patents?hl=en&aspc=aspc&source=web&cd=13&cad=rja&ved=0CDDQF4ASu>
¹⁸<http://www.unep.org/publications/gov.uk/2F>
<http://www.technologyinsurer.net/23083/winning-the-war-again-against-electronic-waste>



are now discussing¹⁹ how to maximize the untapped resources from abandoned electronic products.

In the Philippines, there are some groups that take this advocacy seriously like the Philippine Misereor Partnership, Inc. For PMPI, they even assert that the term "e-scrap" be used instead of "e-waste" to reinforce the message that discarded electronics are not trash but untapped resources.

It must also be clarified that for electronic scrap recycling to be done in the most efficient, healthy, and environment-friendly way, we should prefer formal recycling than informal methods.

Formal recycling is done by government-accredited recyclers. They don't burn the gadgets to get the reusable parts. They also ensure that other non-metal components like plastic, glass, and rubber are recycled as well.

Thus, informing informal recyclers, which usually work in junk shops and dump sites, of the hazards of burning electronic items is included in our advocacy. We will reach out to them so they will learn that it is better to partner with formal recyclers. As such, we should also ensure that these informal recyclers will be given fair and just rates by formal recyclers.

What can we do to help? First, we should educate our friends and relatives that we could recycle electronic

¹⁹<http://urbanmining.org/2013/12/17/un-solve-growing-global-e-waste-problem/>

gadgets. We can use the internet to reach a broader audience. Some graphics and reading materials about this advocacy is already accessible online. You can even compose your own status message or tweet, or design your own graphic or make your own video.

Second, contact PMPI or other groups with a similar advocacy to organize e-scrap collection in your communities, schools, churches, shops, or offices. These organizations could help you plan and organize your collection efforts.

Third, if you are a barangay official, student leader, community leader, priest/pastor, or an owner of an establishment, you can set-up a regular e-scrap collection site in strategic locations.

Finally, you can attend various activities about the campaign to volunteer or to simply know more. Aside from learning the other initiatives, methods, and strategies of fellow advocates, these activities will also serve as a venue for us to know each other. Announcements regarding these activities will be posted through our Facebook campaign page. If you are planning on organizing one, don't forget to inform us so we could spread the news.



PMPI'S E-SCRAP RECYCLING CAMPAIGN



The campaign for E-scrap (electronic scrap) mining or metal recycling rests on the foundational framework of the anti-mining campaign of PMPI - "to perform its role as **stewards of the land, caretakers of the environment and partners in sustainable development**". Stewardship of Creation demands the responsible and sustainable use of mineral resources, and re-cycling of metals is one of the viable alternatives to destructive "below the ground" mining. It is deemed that through e-scrap mining we will protect the environment and help promote people's right to a balanced ecology.

E-scrap mining or metal recycling fits within the scheme of being a good steward in the context of the management and utilization of the mineral resources. While we are continuing our advocacy against the negative impacts of large-scale mining in our SoS, the campaign on metal recycling will provide platform to broaden the perspective in terms of minerals management and utilization. We take inspiration from this truism: "it is indeed true that every kilogram of

¹⁵Sustaining the Mining Advocacy Campaign, Resolution 10, Series of 2006 Sponsored by Ms. Becky Barrios, Co-sponsored by Sr. Lucia Lascano and NCR National Cluster

¹⁶Prof. Thomas E. Graedel, Global Metals Flows Working Group, United Nation

resources that is successfully recycled obviates the need to locate and mine that kilogram from virgin ores²⁷.

Reducing the need to open up new mines is a major underlying driver for metal recycling. It will reduce the generation of waste associated with mining as well as the emissions of greenhouse gases and ultimately the use of virgin ore.

This fits within the scheme of proposing alternatives to mining. But **HOW** to operationalize this campaign as an alternative poses a major challenge to us. Thus, it is proposed that a committed plan to develop the campaign should be developed with the end in view of drawing the network to support it and ultimately heighten our advocacy against the negative impacts of large-scale mining in our SoS.

The E-Scrap Mining Campaign will not only consider its environmental sustainability but also the *"economic viability"* considering the Small and Large Scale Informal recyclers and the Formal Recyclers as partners in pursuing the campaign project.

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²⁷Prof. Thomas E. Graedel, Global Metals Flows Working Group, United Nation



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JAMIA MEI TOLENTINO
SHE BAGGED THE 1ST PRIZE
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MAY MINA SA BASURA
POSTER-MAKING CONTEST
LAST YEAR.

