

Towards Eco-design and a Life-cycle Approach on Tackling E-waste

A Preliminary Situational Analysis

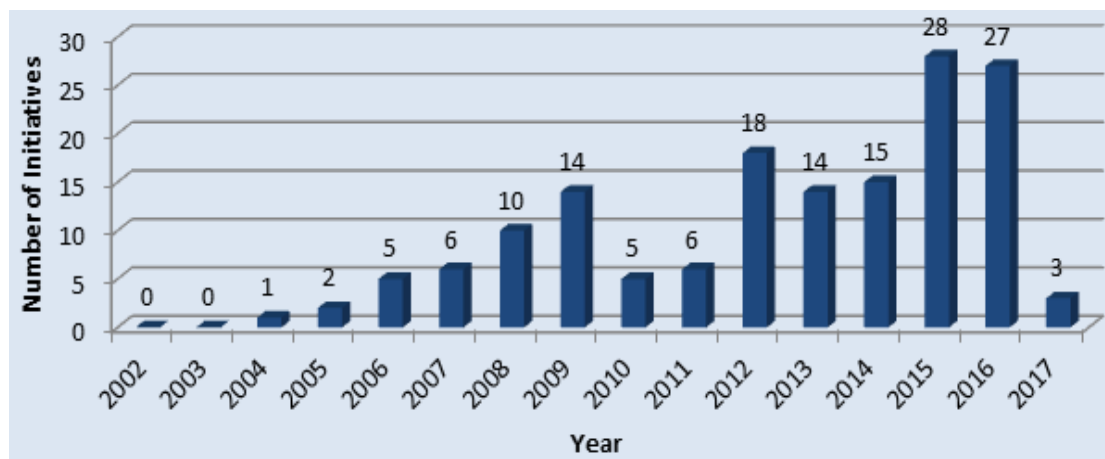
The following document provides a preliminary situational analysis based on the results of a mapping exercise and survey which involved over 20 UN and related agencies, as part of the research undertaken to support the development of an Analytical Report.

The aim of the Report is to map existing initiatives carried out by UN agencies and programmes, and to gather information on standards, guidelines and best practices etc., in order to support and lay foundations for the work of this Issue Management Group. This preliminary situational analysis provides an overview of the key findings which make up the report.

A general overview of UN and related entities e-waste activity

Engagement in the e-waste domain really began at the international level, by the UN system and related entities (OECD and INTERPOL), in the early 2000s. From 2015 onwards there has been a significant increase in this engagement.

E-waste initiatives across the UN by date



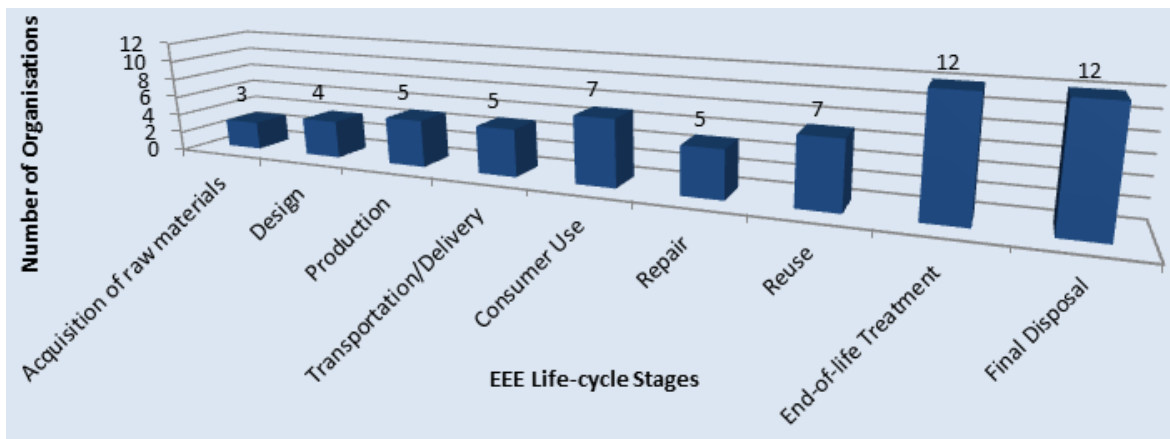
The number of organisations now involved in tackling the global problem of e-waste is significant; however, there is still a core group of entities with whom e-waste is part of their mandate and this is evident in the graph below. The Secretariat of the Basel Convention (and its PACE and MPPI work streams – which have now concluded), plus efforts by UNU (and UNU-led Step initiative), ITU, UNIDO, UN Environment and UNDP are all entities heavily involved in tackling e-waste. Yet, there are some key agencies which govern other significant matters related to e-waste which are also fairly active; and these include, ILO, OECD, World Bank, UNITAR and UNESCO.

Number of initiatives implemented by UN and related entities



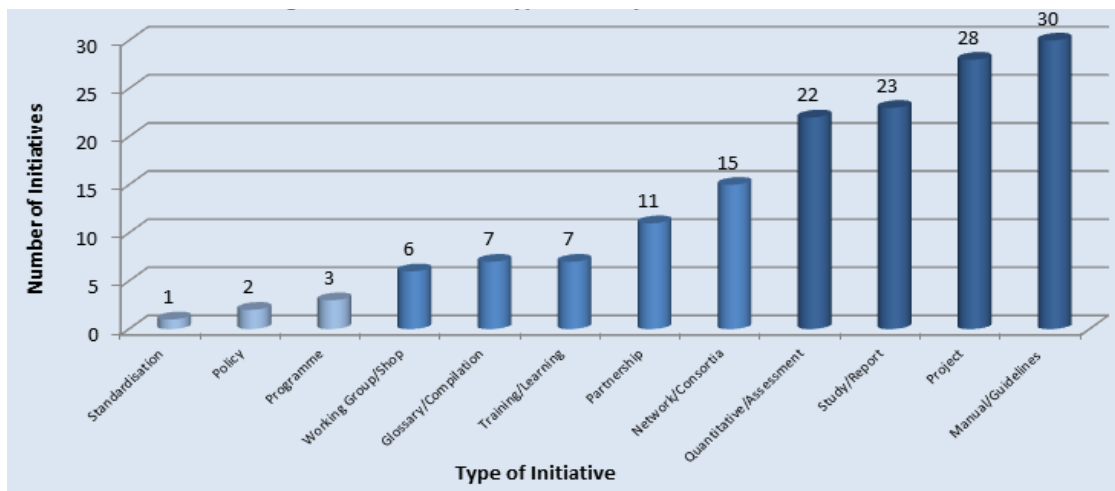
The study and survey undertaken has identified that the UN system is more focussed on the end-of-life stages of electrical and electronic equipment (EEE); these include, end-of-life treatment and final disposal. Yet, there are key stages in the life-cycle of EEE which play a role in when and how this equipment becomes e-waste. As the chart below indicates, there is less attention paid by the UN system to the acquisition of raw materials, and the design and production of this equipment.

E-waste initiatives by life-cycle stages



The type of initiatives across the UN system to tackle the global e-waste problem tend to involve the publication of manuals and guidelines (mostly influenced by in-depth initiatives by the Secretariat of the Basel Convention on computing equipment and mobile phones); whilst, there is also significant undertaking of country projects with which studies and reports are often produced as a follow-up. In line with the findings on the life-cycle stages of EEE above however, there is ultimately less attention paid to designing e-waste initiatives in the field of standardisation, policy and programming.

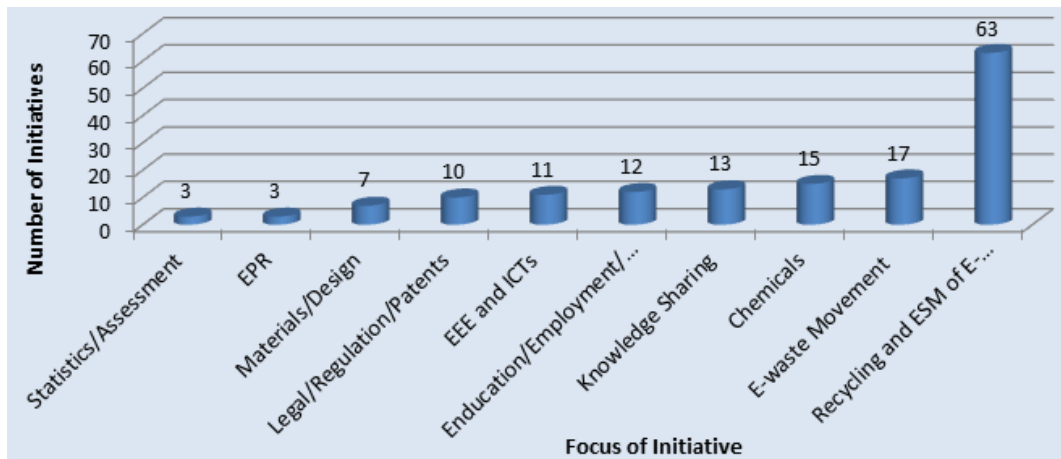
Number and type of UN system-wide e-waste initiatives



The focus of e-waste initiatives is different to the type. Whilst the type involves the outcome, the focus depicts what specific element will be focussed on as the purpose of that initiative. The chart below highlights that across the UN system, there is a significant focus on the recycling and environmentally sound management of e-waste, which again, supports other findings on the attention paid to end-of-life stages. There is a lack of focus however, on issues pertaining to e-waste statistics, to extended producer responsibility (EPR) and to research into the materials used in/and design of EEE.

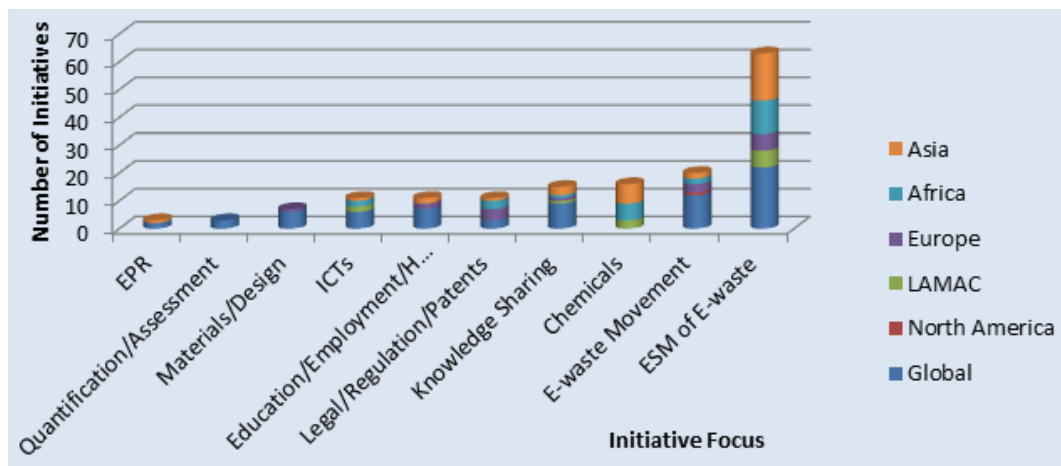
Please see the chart overleaf, which refers to the focus of e-waste initiatives

Number and focus of UN system-wide e-waste initiatives



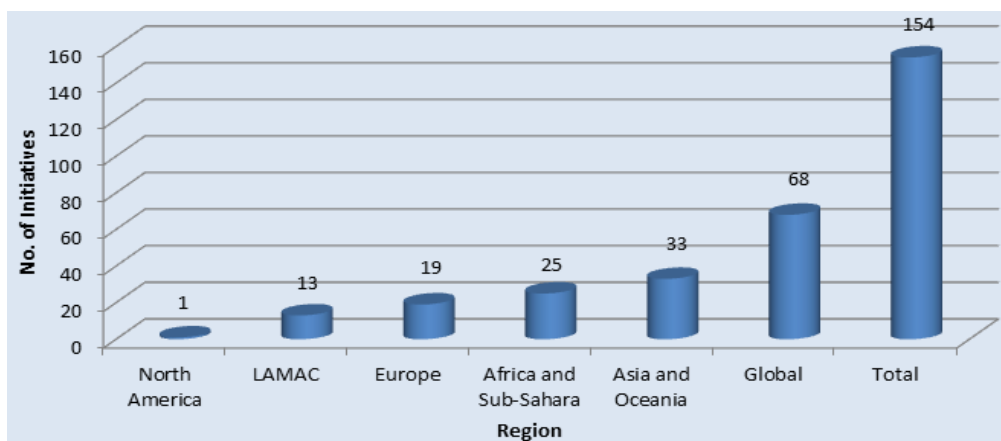
The focus of initiatives is interestingly distributed across the main regions of the world. In Asia and Africa there is substantial focus on the environmentally sound management of e-waste; this is most likely a result of the arrival of most of the world’s wasted electrical and electronic equipment and the subsequent rudimentary management procedures undertaken in these regions. However, in Europe and North America, there is very little focus at all on any e-waste initiatives; and those that have been or in place, focus predominately on more developed countries issues associated with e-waste such as materials and design, legislation, regulation and patents, and the movement of e-waste.

Focus of e-waste initiatives by region



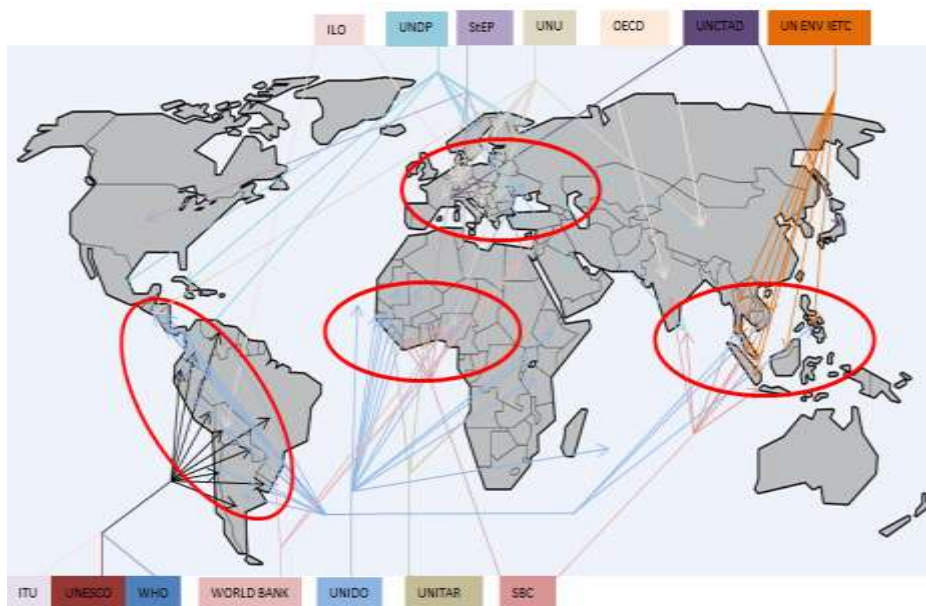
UN e-waste initiatives are predominately designed for implementation or attention at the global level. However, the chart below indicates that from a regional perspective, there are a significant number of initiatives which have aimed, or aim, to tackle e-waste in the Africa and Sub-Sahara region, and the Asia and Oceania region.

UN e-waste initiatives by region



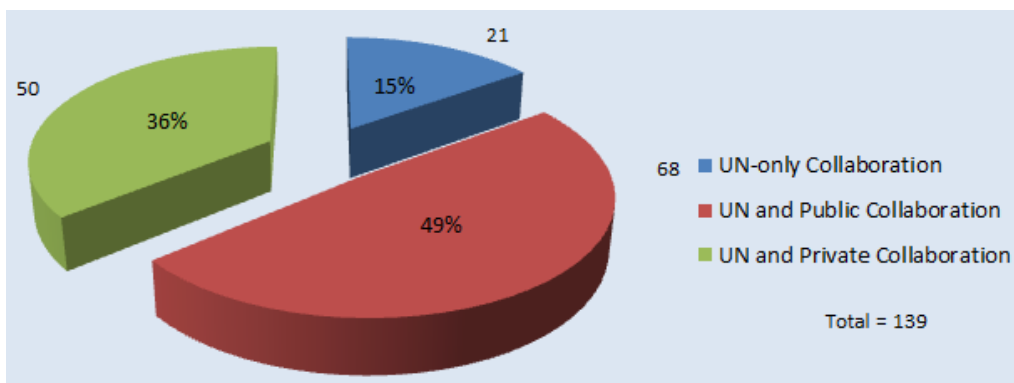
In relation to the graph above, the map below highlights in more detail the key regions in which the UN system and related entities are mostly active in tackling e-waste. In summary, there are four key regions which include Eastern Europe, Latin America and the Caribbean, Western Africa and South and South East Asia.

Map of notable country-specific e-waste initiatives



The mapping and survey also paid attention to the collaboration involved within and outside the UN system. The pie chart below highlights that there is much more collaboration between UN agencies and the public sector (which includes governments, NGOs and academia etc.), whereas there is less collaboration with the private sector and far less working together solely by UN entities. The final on this page indicates clearly, this internal and external collaboration difference.

Characteristics of existing collaborations in e-waste



UN system only vs. UN and external collaboration

