COMMENTS ON THE DRAFT POLICY PAPER ON CIRCULAR ECONOMY (CE) IN THE ELECTRONICS AND ELECTRICAL SECTOR

A. Green public procurement should be made the norm:

1. We commend the importance placed by the Policy Paper on promoting green public procurement ("**GPP**") by government agencies. GPP is essential to create business incentives and market demand, and to achieve the economies of scale necessary to reduce the cost of materials in the electronics and electrical equipment ("**EEE**") sector.[1]

2. We recommend setting a short timeline to notify a national green procurement policy or to introduce suitable internal policy and/or regulatory changes to ensure GPP across all sectors. The idea of GPP or sustainable public procurement has been recognised in different policy documents of the government.[2] We believe that codifying this idea in a single national policy will have a significant impact on implementing CE principles in the EEE sector. Such a policy can:

    a. Establish general criteria to evaluate the environmental impact of EEE, and introduce tools to monitor GPP. Where necessary, the government can also give sector-specific guidance. GPP criteria can take the form of identifying environmental parameters and resource efficiency criteria that will be used to assess the environmental cost and lifecycle of a product. For example, the European Union ("**EU**") has adopted certain product-specific GPP criteria.[3] The EU GPP has five criteria for computers, monitors, tablets and smartphones- (i) product lifetime extension (repairability, reusability, and upgradability of the product; rechargeable battery life; durability and interoperability of the product); (ii) energy consumption; (iii) use of hazardous substances; (iv) end of life management; and (v) the supply of refurbished/remanufactured equipment.[4]

    b. Use eco-labels and certification, as provided in the draft National Resource Efficiency Policy of 2019, to evaluate the environmental impact of the equipment.[5]

    c. Use software tools as part of the award criteria for larger projects. For example, the Dutch government uses a sustainable construction calendar, DuboCalc,[6] to conduct a life-cycle

[1] Circular economy in India: Rethinking growth for long-term prosperity, Ellen McArthur Foundation (December 2016), https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Circular-economy-in-India_5-Dec_2016.pdf.
[2] India's finance ministry had formed a 'Task Force on Sustainable Public Procurement' in March 2018, https://doe.gov.in/sites/default/files/Task%20Force%20on%20Sustainable%20Public%20Procurement.pdf; this was also confirmed in a parliamentary question- http://164.100.24.220/loksabhaquestions/annex/173/AU1840.pdf. The Indian Railways had submitted a case study to the OECD on best practices for green procurement in October 2014- https://www.oecd.org/governance/procurement/toolbox/search/india-best-practices-green-public-procurement-gpp-market-capacity-cost-benefit-assessment.pdf. There is a section on green procurement in the 'Draft National Resources Efficiency Policy, 2019' released by the MoEFCC, 23 July 2019, http://moef.gov.in/wp-content/uploads/2019/07/Draft-National-Resourc.pdf.
[3] Background and approach, Green public procurement, European Commission, 16 July 2008, https://ec.europa.eu/environment/gpp/gpp_criteria_en.htm.
[4] EU green public procurement criteria for computers, monitors, tablets and smartphones, European Commission, 05 March 2021, https://ec.europa.eu/environment/gpp/pdf/210309_EU%20GPP%20criteria%20computers.pdf.
[5] Draft National Resources Efficiency Policy, MoEFCC, Government of India, 23 July 2019, http://moef.gov.in/wp-content/uploads/2019/07/Draft-National-Resourc.pdf.
[6] What is DuboCalc?, Directorate-General for Public Works and Water Management, https://www.dubocalc.nl/en/what-is-dubocalc/.

analysis, and compare and calculate the sustainability and environmental costs of a product.[7] The European Commission has also developed a series of sector-specific life cycle cost calculation tools, such as for vending machines, imaging equipment, computers and monitors, indoor lighting and outdoor lighting that can be useful.[8]

3. Other countries such as New Zealand,[9] Canada,[10] Hong Kong,[11] Netherlands,[12] and USA (in the State of Massachusetts)[13] have come out with their own guidance on green procurement or environmentally sustainable procurement that may be useful. A three-month timeline may be reasonable to notify such a policy.

4. The government should actively consider CE benefits by promoting bulk procurement by government agencies / companies (such as the Energy Efficiency Services Limited), to bring down costs for products that meet the CE criteria. This will entail a shift in focus from evaluating the purchase price alone to considering the full lifecycle cost of the product.[14] A long-term target can also be fixed to ensure that some percentage of public procurement for EEE is compliant with CE principles.

B. Standards to check planned obsolescence should not be overly prescriptive:

1. We welcome the focus of the Policy Paper on planned obsolescence. Planned obsolescence can adversely affect consumer welfare and the environment by locking in consumers into a specific company's ecosystem, thereby requiring constant upgrades of its products.[15]

2. However, the Policy Paper's recommendation to develop "standards to check forced obsolescence in electronics"[16] should not be overly prescriptive, such that it impacts innovation or investment in R&D which will then affect consumers adversely. The legal regulation against planned obsolescence is complex and involves establishing the definition of these terms, the systems developed to detect the obsolescence in products, and the transparency requirements for companies providing security/software updates.[17] Thus, it may be difficult for regulators to differentiate between programmed obsolescence (where a product may stop working after a certain time/use), systemic obsolescence (where newer software updates may eventually result in reduced or inferior functioning

[7] Using LCA and CO2 performance to assess bidders, European Commission, November 2013, https://ec.europa.eu/environment/gpp/pdf/news_alert/Issue36_Case_Study78_Rijkswaterstaat.pdf.
[8] Life cycle costing, Green public procurement, European Commission, 2014, https://ec.europa.eu/environment/gpp/lcc.htm.
[9] Environmentally sustainable procurement, New Zealand Government Procurement, https://www.procurement.govt.nz/assets/procurement-property/documents/broader-outcomes/environmentally-sustainable-procurement.pdf.
[10] Green Procurement, Treasury Board of Canada Secretariat, 02 August 2019, https://www.canada.ca/en/treasury-board-secretariat/services/innovation/greening-government/green-procurement.html.
[11] Sustainable Procurement Charter, Green Council, 2018, https://www.greencouncil.org/spc.
[12] Using LCA and CO2 performance to assess bidders, European Commission, November 2013, https://ec.europa.eu/environment/gpp/pdf/news_alert/Issue36_Case_Study78_Rijkswaterstaat.pdf.
[13] Environmentally Preferable Products (EPP) Procurement Programs, Government of Massachusetts, https://www.mass.gov/environmentally-preferable-products-epp-procurement-programs.
[14] Sustainable/Green Public Procurement, CERC- ENVIS Resource Partner Consumer Education and Research Centre, Ahmedabad, 2020, http://cercenvis.nic.in/PDF/gpp.pdf.
[15] Planned obsolescence, The Economist, 23 March 2009, https://www.economist.com/news/2009/03/23/planned-obsolescence.
[16] Pg. 39, Policy Paper.
[17] Further reading on the legal classifications of planned obsolescence- https://link.springer.com/article/10.1007/s40319-019-00812-1#Fn4.

of the product), perceived obsolescence (where companies try and push an attractive and trendier version of an older product), and planned obsolescence, which may result in over-regulation.[18]

3. Therefore, we recommend that an incentive-based structure be adopted instead of a regulatory/penal approach. This would encourage companies to ensure a longer lifecycle of their products, reduce implementation and definition problems associated with the regulation approach, and ensure consumer welfare. An example of the incentive approach is for GPP to give incentives on the basis of the product life or the warranty offered by companies. This will incentivise companies to design sustainable products. Even if the government decides to adopt a regulatory approach, we recommend that the focus should be on establishing minimum requirements for repairability and reusability of EEE.[19]

C. The focus should be on incentives, rather than regulation, to achieve standardisation during the design and manufacturing stage

1. The Policy Paper states that future promotional schemes to manufacture electronics "*may incentivise or mandate…standardisation of interfaces of accessories like chargers, headphones*…"[20] The Action Plan in the Policy Paper suggests that such standardisation will be part of the government's future production linked incentive scheme.[21] At the same time, in the medium-term, the government aims to develop "standards and guidelines for manufacturing".[22] To avoid confusion, the Policy Paper should clarify that such standardisation will be sought to be achieved through incentives and not regulation.

2. Standard setting is an important policy goal to achieve a circular economy. But it should not impact innovation and create a regulatory burden, especially given the costs and challenges of implementation. We recommend that the government focus on incentives to align production incentives with the circular economy approach. These could take the form of tax breaks to companies that stop providing chargers with their products by default (thus, reducing the number of chargers that customers have), or separate the charging cable from the charging plugs (to allow customers to replace individual parts).[23]

3. The government can also consider tax and other incentives to decouple chargers and cables from portable products (like laptops, smartphones, wearable devices, e-readers, portable game consoles and shavers), such that these different devices can be charged using a common charger.[24] These incentives can help reduce environmental and consumer costs, and improve consumer welfare and convenience.

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[18] The sneaky way manufacturers are trying to get you to buy more tech, Analytics Insight, 18 July 2020, https://www.analyticsinsight.net/sneaky-way-manufacturers-trying-get-buy-tech/; Planned obsolescence, Lexicon Systems, 23 October 2012, https://lexiconsystems.wordpress.com/tag/systemic-obsolescence/.

[19] Enhancing resource efficiency through extended producer responsibility- Sector study on plastic packaging and e-waste management in India, EU Resource Efficiency Initiative Project, September 2018, https://www.adelphi.de/en/system/files/mediathek/bilder/Hemkhaus%20et%20al_2018_Enhancing%20RE%20trough%20EPR.pdf.

[20] Pg. 25, Policy Paper.

[21] Pg. 39, Policy Paper.

[22] Pg. 39, Policy Paper.

[23] One charger to fit them all, Eco Standard, July 2020, https://ecostandard.org/wp-content/uploads/2020/07/ECOS-COMMON-CHARGER-PAPER.pdf.

[24] One charger to fit them all, Eco Standard, July 2020, https://ecostandard.org/wp-content/uploads/2020/07/ECOS-COMMON-CHARGER-PAPER.pdf

4. Standards and guidelines for manufacturing should only be set after consulting all the stakeholders, including start-ups; micro, small and medium enterprises ("**MSMEs**"), and newer entrants in the industry. In the short-term, we recommend that research grants are awarded to academic/policy/research institutions to collaborate with the government for R&D.

5. Finally, the long-term "Sustainable Product Policy" to be developed by MeitY for mandatory design for recycling and extension of product life should also evaluate a cost-benefit analysis of the proposed mandatory designs to ensure that the electronic products remain affordable.

D. End-of-Life Stage policies should take into account illegally imported e-waste:

1. In addition to the proposed action plan surrounding the end-of-life stage and the suggested amendments to the E-Waste Rules, 2016, the government should consider the problem of illegally imported e-waste, which was estimated to be about 50,000 tonnes in 2010.[25]

2. Under the Hazardous and Other Wastes (Management and Trans-boundary) Rules, 2016, import of e-waste for disposal is prohibited, although the import of second-hand electrical and electronic products for refurbishment is permitted under certain conditions of re-export. To improve the implementation of this law, the government can consider:
   a. Improving training and awareness in distinguishing between e-waste and used products; and
   b. Putting in place tracking mechanisms to monitor the re-export of the refurbished products.[26]

E. Strengthening the use of secondary material

1. The CE Policy Paper proposes a revision of the Extended Producer Responsibility ("**EPR**") Rules and envisages using EPR to create value chains allowing secondary resources to compete with virgin ones.[27] Any amendment to the EPR Rules should create an enabling framework that ensures efficient e-waste collection, re-use, recycling, and disposal. The focus should be on improving implementation, such as by developing parameters to create inventories for e-waste, providing market information regarding e-waste prices, and providing support to improve the physical e-waste recycling infrastructure.[28] At the same time, however, they should not be overly prescriptive on the functioning of the e-waste management system.[29]

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[25] Tricks of the e-waste trade, Down To Earth, 31 May 2010, https://www.downtoearth.org.in/coverage/tricks-of-the-ewaste-trade--325.
[26] Can India manage its toxic e-waste? Down To Earth, 28 June 2018, https://www.downtoearth.org.in/news/waste/can-india-manage-its-toxic-e-waste--60891.
[27] Pgs. 40 and 42, Policy Paper.
[28] E-waste inventorization of Bastar division, IRG Systems South Asia Pvt. Ltd., 2016, https://enviscecb.org/Reports/Technical%20Report/E-Waste%20Inventorization%20Report.pdf; Improving e-waste management in India, Australia India Institute, 16 January 2019, https://bit.ly/3yPSayG; Enhancing Resource Efficiency and Circular Economy through EPR, EU Resource Efficiency Initiative Project, 26 February 2021, https://cdn.cseindia.org/attachments/0.86646000_1614665073_epr-rachna-arora.pdf; Enhancing resource efficiency through extended producer responsibility- Sector study on plastic packaging and e-waste management in India, EU Resource Efficiency Initiative Project, September 2018, https://www.adelphi.de/en/system/files/mediathek/bilder/Hemkhaus%20et%20al_2018_Enhancing%20RE%20trough%20EPR.pdf.
[29] Developing Legislative Principles for e-waste policy in developing and emerging countries, White Paper, STEP, 21 February 2018, https://www.step-initiative.org/files/_documents/whitepapers/Step_White_Paper_7_180221_low_compressed.pdf.

2. We welcome the MeitY's approach of recognising the role of the informal sector at the end-of-life stage and integrating them in the collection systems. It is important to recognise the unintended consequences of other policies on this sector. For example, in 2017, the government levied GST of 28% on e-waste and 18% on plastic waste, which adversely impacted the entire e-waste and recycling industry by reducing their competitiveness with virgin materials.[30] This tax was reduced to 5% after sustained objections.[31] We recommend further tax cuts on secondary raw materials and e-waste products to incentivize producers to help achieve the government target for utilisation of secondary materials. Similarly, in March 2021, a community bin was closed in Connaught Place in Delhi; this removed the space that was available for the informal waste recyclers to segregate the waste and collect the recyclables.[32] Such measures will only increase the unscientific waste disposal practices which will adversely affect the environment.

3. At the same time, the government should consider tax incentives to improve the utilisation of secondary materials. For example, as part of its 2022 goals, the National Digital Communications Policy, 2018 has listed incentivising the use of renewable energy technologies in the communication sector, including use of small cell fuel batteries, lithium-ion batteries and rationalising tax and levies on the manufacture, production and import of such digital equipment technologies.[33] We recommend that such policies be rolled out on an urgent basis, especially given the rise of e-waste pursuant to the Covid-19 pandemic.[34]

F. Creating a platform for multi-stakeholder consultation

The Policy Paper tasks the National Circular Economy Council with drafting an action plan across the EEE value chain to promote policies for sustainable products in India. We recommend that to develop its action plan, the NITI Aayog committee for circular economy on electronics waste should hold consultations with the relevant stakeholders in the value chain, including businesses, waste management companies, producers, consumers, suppliers, municipalities, research institutions and the informal sector. Such consultations should take place across industries, and take into account the practice on the ground.

G. Clarity around timelines and consultation may be provided:

We recommend that the Policy Paper should provide an actionable roadmap on the steps that need to be taken *before* the identified short-term, medium-term, and long-term goals can be achieved. This will help ensure that the roadmap to achieving a circular economy in the EEE sector is clearly laid out.

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[30] Why the Indian government must rescind GST levied on scraps of plastic, paper, cardboard and glass, Scroll.in, 23 July 2017, https://scroll.in/article/844027/why-the-indian-government-must-rescind-gst-levied-on-scraps-of-plastic-paper-cardboard-and-glass.

[31] Ragpickers heave a sigh of relief as gst on recycling waste comes down, NDTV, 10 October 2017, https://swachhindia.ndtv.com/ragpickers-heave-sigh-relief-gst-recycling-waste-comes-13269/.

[32] Closure of community bin area in Delhi deals blow to waste pickers, Down To Earth, 31 March 2021, https://www.downtoearth.org.in/news/waste/closure-of-community-bin-area-in-delhi-deals-blow-to-waste-pickers-76218.

[33] Pg. 11, National Digital Communications Policy, 2018, https://dot.gov.in/sites/default/files/EnglishPolicy-NDCP.pdf; E-waste management in India- Policies and Best Practices, Department of Telecommunications, Government of India, October 2018, https://www.itu.int/dms_pub/itu-d/oth/07/15/D07150000060001PDFE.pdf.

[34] New study highlights the rise in e-waste during global pandemic, Recycling Today, 17 November 2020, https://www.recyclingtoday.com/article/study-highlights-pandemic-drives-increase-e-waste/.