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# Microsoft

With the introduction of its line of Surface laptops and tablets, Microsoft has significantly expanded since we last evaluated its performance as a hardware company in the Guide (Version 16, 2010), when it had consistently ranked near the bottom. However, in our evaluation of Microsoft's data centers' operations in Greenpeace's Clicking Clean report,<sup>1</sup> we have recently noted a stronger commitment to environmental performance since Brad Smith was named president and put in charge of environmental sustainability. Unfortunately, this stronger commitment to the environment has not translated over to Microsoft's hardware design and supply chain management to date, particularly in the product design of its Surface laptops and tablets. These products currently suffer from both poor reliability and extreme difficulty to repair, a combination that is bad for the consumer as well as the environment. Microsoft has made efforts to address worker health in its supply chain, including preventing child labor associated with mineral extraction. Given its rapidly rising supply GHG emissions, Microsoft needs to work collaboratively with its supplier to quickly export the success it has made in securing renewable energy for its data centers to address its rapidly growing supply chain emissions footprint is East Asia, as we now see being executed by Apple.

## Renewable Energy & Climate Change

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**TRANSPARENCY.** Microsoft's reporting of its own energy footprint indicates gradual but important improvements in the past two years, moving beyond its claims of being "carbon neutral" to setting interim targets and reporting its progress toward becoming 100% renewably powered. However, Microsoft currently only publishes its top 100 production suppliers by spend, without any detail on location or their role in the supply chain.<sup>2</sup> While Microsoft can claim some significant improvement in its supply chain reporting, with more of its suppliers reporting their emissions to CDP, Microsoft's own reporting of its aggregate supply chain emissions have become more opaque, stating its reported 20% increase in emissions from its product supply chain may be over- or underreported by as much as 50%.<sup>3</sup>

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**COMMITMENT.** Microsoft's 100% renewable commitment for its own operations has been supplemented by an interim goal of 50% renewable by 2018. However, Microsoft has not expanded its 100% renewable commitment to its supply chain as Apple has done, nor has it set any reduction targets for rapidly growing supply chain emissions, which shot up by 20% in 2016 alone.<sup>4</sup> To begin to get control of this growth, Microsoft should also set targets for the percentage of its suppliers who have themselves established greenhouse gas reduction goals.

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**PERFORMANCE.** Microsoft has begun to act with greater urgency in tackling the energy footprint of its rapidly growing cloud infrastructure, working to deploy large-scale renewable energy projects to power its data centers. However, similar urgency and commitment is currently lacking in managing its rapidly expanding supply chain emissions, which saw a 20% increase in greenhouse gasses in 2016.

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## Renewable Energy & Climate Change (continued)

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**ADVOCACY.** Microsoft has recently stepped up its advocacy in the United States, joining Apple, Google, and Amazon in filing an amicus brief in support of federal legislation to restrict carbon emissions in the electricity sector. Microsoft also joined with a number of major corporations to urge the Trump administration to not seek to withdraw the United States from the Paris Climate Agreement.<sup>5</sup>

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## Sustainable Design & Resource Reduction

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**TRANSPARENCY.** Microsoft shares material composition data for several recent products, however these reports do not contain information about recycled content in products beyond packaging.<sup>6</sup> The company reports limited information on its consumer electronics recycling efforts.<sup>7</sup> However, Microsoft discloses a detailed list of its smelters, annual conflict-free compliance levels, as well as its due diligence efforts to avoid sourcing conflict minerals.<sup>8</sup>

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**COMMITMENT.** As far as committing to reduce overall resource consumption, Microsoft has issued vague principles for product design which include “closing the lifecycle loop through effective end-of-life practices” and “processes for the use of recycled metals, which aim to increase the ratio of recycled content significantly.” These statements lack specifics, measurable outcomes, and a timeline.

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**PERFORMANCE: CIRCULAR PRODUCTION.** Microsoft has not assessed priority materials for closed-loop sourcing. While the company reports using recycled metals and plastics in its devices, no further details are reported including which materials or how much. Microsoft’s responsible sourcing due diligence program extends beyond 3TG to include cobalt.<sup>9</sup> While tricky to navigate online, Microsoft offers take-back services beyond legal requirements<sup>10</sup> and requires its recycling partners to follow the Basel Treaty regarding the export of e-waste.<sup>11</sup> Unfortunately, Microsoft’s products score very low on iFixit repairability assessments which means disassembly for recycling is time-consuming and expensive.

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**PERFORMANCE: PRODUCT LIFE EXTENSION.** Despite Microsoft’s “Design for Green”<sup>12</sup> approach, which purports to factor in resource efficiency, Microsoft’s products are some of the lowest scorers in repairability assessments. In June 2017, iFixit gave the Microsoft Surface laptop an unprecedented zero out of 10, for its difficulty to remove the battery, non-upgradable storage, and the fact the device could not be opened without “inflicting a lot of damage.”<sup>13</sup> Other Surface laptops and tablets tend to be low scorers as well, particularly for using excessive amounts of adhesive. These design choices make repairs time-consuming and upgrades impossible, both of which shorten product lifespans. A particular problem for Surface devices, which Consumer Reports recently found to break at higher rates than other brands they assess.<sup>14</sup> Additionally, Microsoft does not provide repair manuals or spare parts, further preventing repair. Microsoft does offer refurbished products in mature markets, saving itself from a total zero in this criteria.<sup>15</sup>

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**ADVOCACY.** Microsoft’s membership to ITI, which lobbies against Right to Repair legislation in the US, gives Microsoft a poor advocacy grade for reducing resource consumption.

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# Hazardous Chemical Elimination: Products & Supply Chain

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<p><b>TRANSPARENCY.</b> While Microsoft does publish a list of its top 100 suppliers, only the supplier name is provided. Microsoft's PRSL, however, is far more comprehensive.<sup>16</sup> Microsoft also publishes its MRSL,<sup>17</sup> one of only three companies assessed to do so. (Apple and Dell are the others). Microsoft reports out on overall findings of its EICC audits.<sup>18</sup></p>	<p>B</p>
<p><b>COMMITMENT.</b> Microsoft has yet to deliver on its earlier commitment to phase out PVC and BFRs altogether, and does not have a timeline at this point for phasing PVC, BFRs, beryllium, antimony trioxide, and phthalates out of all products.</p>	<p>D</p>
<p><b>PERFORMANCE.</b> Despite no overarching commitment to phase out PVC and BFRs, Microsoft has made some progress. For example, BFR use is restricted, with exemptions (pigments of color filters in displays and cameras). We can see from Microsoft's MRSL that it has banned certain process chemicals of concern, such as benzene and n-hexane from all manufacturing processes, and has restricted the use of toluene, methanol and VOCs in manufacturing settings. Additionally, Microsoft has expanded worker health and safety due diligence beyond periodic audits and corrective actions. Microsoft has established a Process Chemical Management Program to restrict and phase out of certain chemicals from the manufacturing processes of direct suppliers.</p>	<p>C</p>
<p><b>ADVOCACY.</b> No evidence found of positive or negative advocacy.</p>	<p>—</p>

## ENDNOTES

- [www.clickclean.org](http://www.clickclean.org)
- [http://download.microsoft.com/download/0/1/4/014D812D-B2E3-43A0-A89A-16E3C7CD46EE/Microsoft\\_Top\\_100\\_Production\\_Suppliers\\_2016.pdf](http://download.microsoft.com/download/0/1/4/014D812D-B2E3-43A0-A89A-16E3C7CD46EE/Microsoft_Top_100_Production_Suppliers_2016.pdf)
- Microsoft 2016 Supply Chain CCP Submission
- [http://download.microsoft.com/download/0/1/4/014D812D-B2E3-43A0-A89A-16E3C7CD46EE/2016\\_Data\\_Factsheet\\_Environmental\\_Indicators.pdf](http://download.microsoft.com/download/0/1/4/014D812D-B2E3-43A0-A89A-16E3C7CD46EE/2016_Data_Factsheet_Environmental_Indicators.pdf)
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