

Issue 1: To improve its energy savings estimate and help set revised specification levels, EPA seeks to expand its data set to include current non-qualified models. EPA will consider complete data received by April 1, 2011, using the data form attached to this discussion document.

---> No comment

Issue 2: EPA seeks comment on the very high and very low market penetrations of scanners and fax machines, respectively, and on whether the ENERGY STAR label provides any differentiation in the market for these two equipment types. Please provide documentation on the state of the markets for faxes and scanners. (Note that scanners have not been included in the latest draft of the Industry Voluntary Agreement proposed for meeting the requirements of the Lot 4 Energy Using Products (EuP) Directive in the European Union.) EPA is interested in partner input on whether these products should continue to be of interest for ENERGY STAR labeling.

---> No comment

Issue 3: EPA also seeks comments on the characteristics of non-qualifying fax machine models and methods of promoting broader qualification.

---> No comment

Issue 4: EPA welcomes any further comment on the equipment types currently included in the scope of the imaging equipment specification, and whether any should be considered for removal due to low energy savings potential.

---> No comment

Issue 5: EPA seeks comment on the current and potential prevalence of small-format high-performance IJ printers and welcomes product performance test data.

---> No comment

Issue 6: EPA seeks comment on the current and potential prevalence of impact MFDs and welcomes product performance test data.

---> No comment

Issue 7: EPA also seeks comment on any other imaging equipment products with significant savings potential that should be added to the scope of the specification. (e.g. Professional photo "minilabs".)

---> No comment

Issue 8: EPA welcomes stakeholder comment on the impacts of incorporating IEC standard 62301 Ed. 2.0 into the ENERGY STAR Imaging Equipment test method.

---> We don't have enough data to comment although important information is included.

Issue 9: EPA would appreciate data on the prevalence of color printing with current products, including color in text documents and full-page color images. EPA also seeks data on the impact of color printing of text and images on the absolute and relative energy consumption of imaging equipment.

---> Texts instead of illustration or photographs should be good enough in reviewing a color printing pattern. The printing ratio is about 5%, which is acceptable. JBMS-74-1 for noise measurement should be good for a color text pattern for reference.

Issue 10: EPA seeks data on the prevalence of color versus monochrome printing since the energy impact of color printing is a product of its frequency of use.

---> We don't have either any data to review a color and monochrome printing ratio or any specific data of how much the ratio impacts on a TEC value. However, we don't agree to complicate the current procedure of measuring TEC and increase work manhours of the procedure by adding anything other than monochrome printing.

Issue 11: EPA seeks comment on the prevalence of storing drum warm-up energy in a Power Buffer prior to the beginning of measurement and any effects on the energy consumption of the product.

---> We can't make a specific comment as we don't have an element of "Power Buffer." Nevertheless, we don't think it is necessary to individually consider "Power Buffer." "Power Buffer" is never a usual function and shouldn't be expected to get pervasive in the future. We don't like the measurement procedure to change for a sole purpose of this and to get complicated unnecessarily.

Issue 12: EPA seeks comment on the impact of print driver settings on a TEC product's energy consumption as well as methods of eliminating this potential source of testing variation.

---> We don't think special rules are necessary as printer driver settings in the state of product shipment are tested even now. However, "Always test in Simplex printing mode," should be stated, as directed in ErP Directive Lot4 Voluntary Agreement, even if Duplex printing mode is ON for a shipment setting.

Issue 13: EPA welcomes comment on the above two areas for clarification and/or simplification. Alternatively, EPA also welcomes suggestions for additional edits to the TEC and OM test methods.

---> We can accept the EPA's suggestion of "As an alternative, the manufacturer could specify a power level below which the product could be considered to be in its final sleep mode," considering an ambiguous definition or convenience at a third-party test lab. However, we don't welcome change of the TEC test method. An integrating wattmeter should be used in the TEC/OM tests.

Issue 14: EPA welcomes comment and usage data that could be used to support more representative usage assumptions for the TEC test method. In particular, EPA would appreciate data from manufacturers engaged in managed print services, who track the number of sheets printed as well as time spent in various modes across an entire fleet of imaging products.

---> We strongly disagree that "usage assumption" should be revised in TEC test as the revision causes confusion in a large scale.

Issue 15: EPA welcomes comment on the apparent discrepancy between Active1 time and Active0 time, as well as any test method clarifications that could eliminate this discrepancy.

---> — Although Active 1 time is generally considered to be longer than Active 0 time, the specification of some devices may cause an opposite result. We disagree to change the test method without examining a device with potential discrepancy.

Issue 16: Further, EPA welcomes comment on including a similar measurement of Active1 time and Active0 time into the OM test method.

---> We don't think OM instrument needs the measurement of Active 0 or 1. We don't like the OM measurement procedure to be more complicated or have more manhours.

Issue 17: Finally, EPA has received comments on setting a specific maximum recovery time and a default recovery time. EPA would appreciate receiving supporting data from partners to justify the energy savings associated with specifying a recovery time requirement.

---> We don't have appropriate data to make a comment.

Issue 18: EPA welcomes comment on the best method of addressing the energy consumption of DFEs.

---> No comment

Issue 19: Specifying that only one network/data connection be used during testing.

---> Wired or wireless Ethernet that is available at shipment should be used without failure regardless of TEC or OM if either of them is available. If USB is available as well, USB can be used to receive data. We would like to apply these current ideas as there is no problem in the ideas.

Issue 20: Specifying the type of network connection active during testing, in order of preference (e.g., USB, Ethernet, WiFi, other wired, other wireless, etc.). These are currently unspecified (except for an instruction that the device be connected to the network if an interface is available);

---> Same as Issue 19.

Issue 21: Specifying the state of the network connection during testing (could impact the energy consumption of the product under test);

---> If Ethernet is used for network, a device needs to connect through Ethernet as Ethernet connection impacts on energy consumption.

Issue 22: Specifying that any fax function, if available, be enabled and connected to the phone line during testing to better represent the typical usage scenario.

---> A telephone line doesn't need to be connected as its connection has little impact.

Issue 23: Measuring and/or specifying the default delay time to sleep for TEC products;

---> It is inappropriate to specify the Default Delay Time to Sleep in TEC instrument. A value reported by a manufacturer is good enough.

Issue 24: For imaging equipment that supports Energy Efficient Ethernet, requiring that the network device connected to the imaging equipment during the test also support Energy Efficient Ethernet; and

---> A device with Ethernet at shipment should be connected without failure, as in Issues 19 and 20.

Issue 25: Applying the TEC test method or on-mode measurement to some OM products that spend significant time in active mode (e.g., receipt printers, ink jet printers for business, etc.).

---> TEC or OM procedure should neither be more complicated nor have more man-hours than the current one.

Issue 26: EPA seeks clarification on sources of high GHG emissions in the imaging equipment life cycle and supporting data. EPA would welcome input from stakeholders on any work they may have conducted on life cycle impacts of imaging equipment, including the results of any life-cycle analyses (LCAs).

---> We shouldn't discuss an issue for ENERGY STAR to the extent of LCA.