

Laser multifunctional devices (MFDs)

Guidelines for Frontrunner Public Procurers



What is Topten?

- Topten is a European web portal helping buyers to find **the most energy efficient products available in Europe**.
- The laser MFDs displayed on www.topten.eu all meet the criteria contained in these guidelines.
- Procurers can use the website to verify the availability of products meeting the criteria. Links to national websites in a number of European countries are also available.
- **Sample tender documents** are provided to demonstrate how the criteria can be applied in practice.
- The European Commission's [GPP website](http://www.gpp.eu) also contains valuable legal and practical guidance and procurement criteria for a range of commonly procured products and services.

Product group covered:	All laser multifunctional devices (MFDs), both colour and monochrome
Product availability:	All products listed at .topten.eu meet the criteria listed below
Potential energy savings:¹	<p>The most efficient laser MFD typically consumes less than one eighth of the energy an inefficient model with a similar printing speed uses.</p> <p>Choosing a device with a slightly lower printing speed can bring even greater savings.</p>
Potential cost savings:¹	<p>The average electricity costs for the most efficient laser MFD will be only 20% of those of an inefficient model.</p> <p>For example, the electricity costs of one Topten printer with a colour printing speed of 45 pages per minutes (ppm) would be €103 over 5 years. For an inefficient model with 58 ppm this would be €872 – a saving of €769 in 5 years².</p>

¹ These represent rough figures comparing the best product currently available, with an inefficient model – see www.topten.eu for more details.

² Based on an electricity price of €0.15/kWh

Procurement criteria – Updated: December 2011

The following criteria can be inserted directly into tendering documents. The specifications are updated continuously. The newest versions are always available at [.topten.eu](http://topten.eu).

Technical specifications:	1. All products must meet the latest criteria of the ENERGY STAR Programme Requirements for Imaging Equipment.																																																																																																																																																																														
	Verification: Products carrying the ENERGY STAR label will be deemed to comply. Alternatively, bidders may demonstrate compliance with the above requirements by another objective third-party means or by supplying test results in respect of their product demonstrating that the criteria are met.																																																																																																																																																																														
	2. Products must not exceed the following maximum TEC (Typical Energy Consumption):																																																																																																																																																																														
	<table border="0"> <thead> <tr> <th colspan="3">Max. TEC (kWh/week)</th> <th colspan="3">Max. TEC (kWh/week)</th> </tr> <tr> <th>Speed (ppm)</th> <th>b/w</th> <th>colour</th> <th>Speed (ppm)</th> <th>b/w</th> <th>colour</th> </tr> </thead> <tbody> <tr><td>4</td><td>0.68</td><td>1.76</td><td>31</td><td>1.94</td><td>3.14</td></tr> <tr><td>5</td><td>0.68</td><td>1.80</td><td>32</td><td>2.08</td><td>3.28</td></tr> <tr><td>6</td><td>0.68</td><td>1.85</td><td>33</td><td>2.22</td><td>3.42</td></tr> <tr><td>7</td><td>0.68</td><td>1.89</td><td>34</td><td>2.36</td><td>3.56</td></tr> <tr><td>8</td><td>0.68</td><td>1.94</td><td>35</td><td>2.50</td><td>3.70</td></tr> <tr><td>9</td><td>0.68</td><td>1.98</td><td>36</td><td>2.64</td><td>3.84</td></tr> <tr><td>10</td><td>0.68</td><td>2.03</td><td>37</td><td>2.78</td><td>3.98</td></tr> <tr><td>11</td><td>0.72</td><td>2.07</td><td>38</td><td>2.92</td><td>4.12</td></tr> <tr><td>12</td><td>0.77</td><td>2.12</td><td>39</td><td>3.06</td><td>4.26</td></tr> <tr><td>13</td><td>0.81</td><td>2.16</td><td>40</td><td>3.20</td><td>4.40</td></tr> <tr><td>14</td><td>0.86</td><td>2.21</td><td>41</td><td>3.34</td><td>4.54</td></tr> <tr><td>15</td><td>0.90</td><td>2.25</td><td>42</td><td>3.48</td><td>4.68</td></tr> <tr><td>16</td><td>0.95</td><td>2.30</td><td>43</td><td>3.62</td><td>4.82</td></tr> <tr><td>17</td><td>0.99</td><td>2.34</td><td>44</td><td>3.76</td><td>4.96</td></tr> <tr><td>18</td><td>1.04</td><td>2.39</td><td>45 - 100</td><td></td><td></td></tr> <tr><td>19</td><td>1.08</td><td>2.43</td><td>45</td><td>3.90</td><td>5.10</td></tr> <tr><td>20</td><td>1.13</td><td>2.48</td><td>50</td><td>4.60</td><td>5.80</td></tr> <tr><td>21</td><td>1.04</td><td>2.24</td><td>55</td><td>5.30</td><td>6.50</td></tr> <tr><td>22</td><td>1.08</td><td>2.28</td><td>60</td><td>6.00</td><td>7.20</td></tr> <tr><td>23</td><td>1.12</td><td>2.32</td><td>65</td><td>6.70</td><td>8.20</td></tr> <tr><td>24</td><td>1.16</td><td>2.36</td><td>70</td><td>7.60</td><td>9.60</td></tr> <tr><td>25</td><td>1.20</td><td>2.40</td><td>75</td><td>9.00</td><td>11.00</td></tr> <tr><td>26</td><td>1.24</td><td>2.44</td><td>80</td><td>10.40</td><td>12.40</td></tr> <tr><td>27</td><td>1.38</td><td>2.58</td><td>85</td><td>11.80</td><td>13.80</td></tr> <tr><td>28</td><td>1.52</td><td>2.72</td><td>90</td><td>13.20</td><td>15.20</td></tr> <tr><td>29</td><td>1.66</td><td>2.86</td><td>95</td><td>14.60</td><td>16.60</td></tr> <tr><td>30</td><td>1.80</td><td>3.00</td><td>100</td><td>16.00</td><td>18.00</td></tr> </tbody> </table>	Max. TEC (kWh/week)			Max. TEC (kWh/week)			Speed (ppm)	b/w	colour	Speed (ppm)	b/w	colour	4	0.68	1.76	31	1.94	3.14	5	0.68	1.80	32	2.08	3.28	6	0.68	1.85	33	2.22	3.42	7	0.68	1.89	34	2.36	3.56	8	0.68	1.94	35	2.50	3.70	9	0.68	1.98	36	2.64	3.84	10	0.68	2.03	37	2.78	3.98	11	0.72	2.07	38	2.92	4.12	12	0.77	2.12	39	3.06	4.26	13	0.81	2.16	40	3.20	4.40	14	0.86	2.21	41	3.34	4.54	15	0.90	2.25	42	3.48	4.68	16	0.95	2.30	43	3.62	4.82	17	0.99	2.34	44	3.76	4.96	18	1.04	2.39	45 - 100			19	1.08	2.43	45	3.90	5.10	20	1.13	2.48	50	4.60	5.80	21	1.04	2.24	55	5.30	6.50	22	1.08	2.28	60	6.00	7.20	23	1.12	2.32	65	6.70	8.20	24	1.16	2.36	70	7.60	9.60	25	1.20	2.40	75	9.00	11.00	26	1.24	2.44	80	10.40	12.40	27	1.38	2.58	85	11.80	13.80	28	1.52	2.72	90	13.20	15.20	29	1.66	2.86	95	14.60	16.60	30	1.80	3.00	100	16.00	18.00
Max. TEC (kWh/week)			Max. TEC (kWh/week)																																																																																																																																																																												
Speed (ppm)	b/w	colour	Speed (ppm)	b/w	colour																																																																																																																																																																										
4	0.68	1.76	31	1.94	3.14																																																																																																																																																																										
5	0.68	1.80	32	2.08	3.28																																																																																																																																																																										
6	0.68	1.85	33	2.22	3.42																																																																																																																																																																										
7	0.68	1.89	34	2.36	3.56																																																																																																																																																																										
8	0.68	1.94	35	2.50	3.70																																																																																																																																																																										
9	0.68	1.98	36	2.64	3.84																																																																																																																																																																										
10	0.68	2.03	37	2.78	3.98																																																																																																																																																																										
11	0.72	2.07	38	2.92	4.12																																																																																																																																																																										
12	0.77	2.12	39	3.06	4.26																																																																																																																																																																										
13	0.81	2.16	40	3.20	4.40																																																																																																																																																																										
14	0.86	2.21	41	3.34	4.54																																																																																																																																																																										
15	0.90	2.25	42	3.48	4.68																																																																																																																																																																										
16	0.95	2.30	43	3.62	4.82																																																																																																																																																																										
17	0.99	2.34	44	3.76	4.96																																																																																																																																																																										
18	1.04	2.39	45 - 100																																																																																																																																																																												
19	1.08	2.43	45	3.90	5.10																																																																																																																																																																										
20	1.13	2.48	50	4.60	5.80																																																																																																																																																																										
21	1.04	2.24	55	5.30	6.50																																																																																																																																																																										
22	1.08	2.28	60	6.00	7.20																																																																																																																																																																										
23	1.12	2.32	65	6.70	8.20																																																																																																																																																																										
24	1.16	2.36	70	7.60	9.60																																																																																																																																																																										
25	1.20	2.40	75	9.00	11.00																																																																																																																																																																										
26	1.24	2.44	80	10.40	12.40																																																																																																																																																																										
27	1.38	2.58	85	11.80	13.80																																																																																																																																																																										
28	1.52	2.72	90	13.20	15.20																																																																																																																																																																										
29	1.66	2.86	95	14.60	16.60																																																																																																																																																																										
30	1.80	3.00	100	16.00	18.00																																																																																																																																																																										
	Verification: Bidders must supply test results demonstrating that these requirements are met according to the methodology set out in the ENERGY STAR Programme Requirements for Imaging Equipment (Version 1.1).																																																																																																																																																																														
Award criteria (optional):	X% of the total marks available will be given to products equipped with an automatic double-sided copying function (duplex unit).																																																																																																																																																																														

Notes on implementation

- TEC values recommended in specification 2 above are 50% lower than required by ENERGY STAR Programme Requirements for Imaging Equipment (Version 1.1). For details see Topten selection criteria: [.topten.eu/english/criteria/selection_criteria_multifunction_devices.html](http://topten.eu/english/criteria/selection_criteria_multifunction_devices.html)
- Duplex printing: Printing double-sided can save even more energy than choosing an energy efficient MFD. The production of paper consumes a considerable amount of energy, therefore reducing paper consumption by printing on both sides contributes to energy saving.
- Using award/evaluation criteria: The exact model used for evaluating compliant tender bids will vary from authority to authority. If you apply this criteria however, it should be given a significant weighting (at least 10-15%) in the evaluation scheme.

Advice and support

If you would like further assistance in using the information presented here in your own procurement actions or more information on Topten Pro please contact the Procura+ team at:

Procurement@iclei.org

+49 761 368 9244

An expression of interest form is also available on www.topten.eu/pro for public authorities who would support to apply these criteria in an upcoming procurement process.



What is Procura+?

Procura+ is an initiative designed to help support public authorities in implementing Sustainable Procurement. The campaign is run by ICLEI – Local Governments for Sustainability, the Topten partner for public authorities.