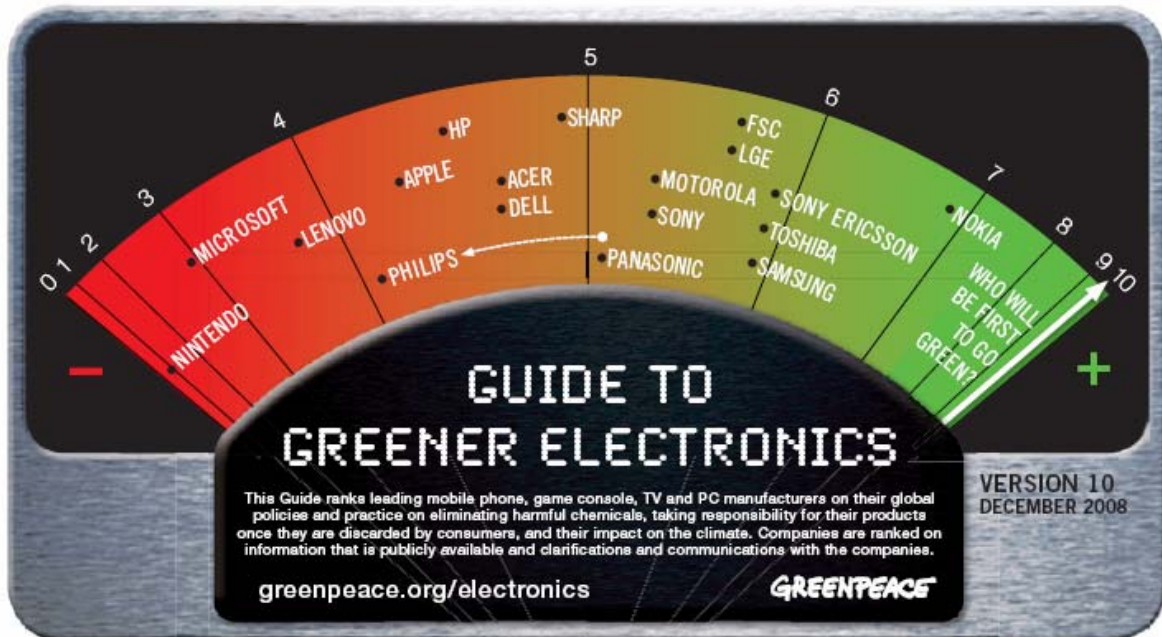


## คู่มือสินค้าอิเล็กทรอนิกส์สีเขียว – พฤษภาคม 2551 (ฉบับที่ 10)



### COMPANY: Nokia 6.9

Nokia stays in 1st place with a total score of 6.9, dropping slightly from 7. Although its score for its support of Individual Producer Responsibility has dropped, Nokia now scores maximum points for its comprehensive voluntary take-back programme, which spans 124 countries providing almost 5000 collection points for end-of-life mobile phones. However, its recycling rate of 3-5% is very poor and more information is needed on how Nokia calculates these figures.

Nokia scores very well on toxic chemical issues, launching new models free of PVC since the end of 2005 and aiming to have all new models free of brominated flame retardants and antimony trioxide by the end of 2009.

Nokia's energy score is boosted by sourcing 25% of its total energy needs from renewable sources in 2007 and by having a target to increase use of renewable energy to 50% by 2010. Nokia commits to reduce its energy use but loses a point for not providing a commitment to reduce greenhouse gas emissions. Top marks (doubled) are given for product energy efficiency as all its mobile phone chargers exceed the Energy Star requirements by 30-90%.

### COMPANY: Sony Ericsson 5.9

Sony Ericsson climbs to 2nd place with a score of 5.9, which it has achieved by announcing a new product 'environmental warranty', which embodies the principle of Individual Producer Responsibility by guaranteeing take-back and recycling for individual products regardless of location, although so far information for customers is limited to the US and Taiwan

# GREENPEACE

It is the first company to score almost top marks on the chemicals criteria, missing this target by having unreasonably high threshold limits for brominated flame retardants in products that are allegedly BFR-free. All SE products are already PVC-free. SE has already met the challenge of the new criterion on chemicals, by banning antimony, beryllium and phthalates from new models launched since January 2008.

The company scores relatively well on energy criteria because all of its products meet and exceed the Energy Star standard. It is now reporting CO2 emissions from its own manufacturing and product transportation.

## **COMPANY: Toshiba 5.9**

Toshiba climbs to 3rd place with a score of 5.9, gaining extra points on the energy criteria; it is now reporting its use of renewable energy (although it needs to commit to increase this with a timeline) and providing information on the percentage of TVs on the US market that meet the Energy Star standard. It continues to report that 93% of new PC platforms developed since July 07 can be configured to meet Energy Star 4. Toshiba supports global cuts in GHG emissions and greater cuts for industrialised countries; it also scores points for disclosing greenhouse gas emissions from its own operations and committing to an absolute reduction in GHG emissions.

Toshiba does well on chemicals, and gains a point for committing to introduce alternatives to phthalates, beryllium and antimony by 2012 in all its products. It has also launched models of laptops with circuit boards free from brominated flame retardants (BFRs), EcoMark-certified products without PVC, and makes other components and parts that are free from these harmful substances.

The company does not do as well on e-waste; although it reports a recycling rate of 12% for a group of 5 types of products that includes TVs, PCs and 3 types of home appliances, this rate is based on current (not past) sales and is only for Japan.

## **COMPANY: Samsung 5.9**

Samsung drops to 4th place but increases its score to 5.9, scoring well on chemicals and waste criteria.

Since November 2007, all new models of LCD panels are PVC-free, important in driving the market to phase out PVC, with Samsung being the #1 supplier globally. The company has launched partially BFR-free models of mobile phone and developed halogen-free memory chips and semiconductors for certain applications.

Samsung's scores well on e-waste; it reports recycling rates of 137% for TVs (based on past sales 10 years ago, the average life span, since when Samsung's TV sales have increased 10-fold), 12% for PCs (based on 7 year lifespan) and 9% for mobile phones (based on 2 year lifespan). However to score top marks, Samsung needs to put a reality check on the EU figures of e-waste recycled. It



also scores top marks on its use of recycled plastic, which is 16.1%, though only 0.2% is post-consumer plastic, with a goal to increase to 25% by 2008.

On energy, Samsung score improves, gaining points for disclosing total GHG emissions from its operations in Korea (the majority of its operations) and double points on the energy efficiency of its battery chargers, all of which meet and 99.4% of which exceed the Energy Star standard.

#### **COMPANY: Fujitsu Siemens Computers 5.7**

Fujitsu Siemens Computers increases its score to 5.7 points but drops to 5th place, just behind Toshiba and Samsung. FSC gains extra points for its use of renewable energy and commitment to increase this by 2020. On the other energy criteria, FSC gets top marks for its political support for global cuts of greenhouse gas emissions. It also scores points for reporting that 27% of consumer PCs meet the Energy Star 4 standard, 75% of Business Line professional notebooks and 58% of PCs meet ES4. Of these models, 100% exceed the Energy Star requirements by 26 – 57%.

FSC sells a range of green-certified products, which use halogen-free flame retarded plastics and halogen-free circuit boards for mainboard and power supply. FSC has finally put a timeline of end of 2010 for the complete elimination of PVC and BFRs in all its products.

FSC scores poorly on the e-waste criteria. The only voluntary take-back service offered by FSC is in South Africa. The company reports a recycling rate of 22.5% for Germany based on past sales, using a 7-year average lifespan of a computer, and over 30% in 13 other countries where its products are sold.

#### **COMPANY: LG Electronics 5.7**

LG Electronics remains in 6th position, but increases its score to 5.7, gaining extra points for energy efficiency of its products; LGE reports that 100% of its chargers exceed the Energy Star standard (v.1.1) by 50%, and data provided for energy efficiency of TVs is for models introduced since the latest Energy Star standard, which came into effect July 2005.

LGE has launched new models of mobile phones with halogen-free housings, packaging and main printed wiring board. It now provides a timeline of 2012 for eliminating phthalates and antimony – but only in new models of mobile products.

LGE scores well on e-waste by starting a take-back programme for its products in the US, including LG, Zenith and GoldStar brands of TVs. It also reports its use of (post-industrial) recycled plastic across all LGE products as 11%, with plans to increase this to 25%, but without a timeline. The company has compiled figures for e-waste recycling in Europe, Asia and North America and reports a recycling rate in relation to current sales for all regions. Globally, the recycling rate for total IT and telecom equipment is 13.2% and consumer equipment (that includes TVs) is 13.7%. However, LGE fails to disclose the source of EU recycling data or how it was calculated.



### **COMPANY: Motorola 5.3**

Motorola climbs to joint 7th place, up from 15th, with a score of 5.3 points, gaining points on chemicals by finally setting a goal to eliminate PVC and BFRs in all products introduced after 2010, joining the other mobile phone brands in the ranking that make this commitment. Motorola also scores relatively well on the other chemicals criteria; it has launched 59 models of mobile phone with BFR free circuit boards.

It also gained points on energy efficiency for providing information that approximately half of all new external power adapters (chargers) met the Energy Star requirements and 100% of these exceed the requirements for standby/no-load modes by 50%, since the standard came into force. On the other energy criteria Motorola scores relatively well for disclosing greenhouse gas emissions, committing to cuts and reporting a 5.4% renewable energy use (as proportion of all electricity purchased) in 2007, although it needs to commit to increase the use of renewable energy with a timeline.

On waste issues, Motorola scores well for its take-back and recycling service in 73 countries, representing over 90% of global mobile phone unit sales. It reports a global take-back rate of 3% of total handsets sold in 2005.

### **COMPANY: Sony 5.3**

Sony drops to joint 7th place with the same total score of 5.3. Sony does relatively well on chemicals, its score boosted by having models on the market that are partially free of PVC and BFRs, including three models of video recorders and many models of the Personal Computer VAIO, "WALKMAN", Camcorder and Digital camera.

On waste issues, Sony scores relatively well for its voluntary take-back and recycling of the e-waste generated by its branded products, although not much in non-OECD countries. It reports a recycling rate of 53% based on past sales of TVs and PCs, but this information is only for Japan.

On energy Sony still has room for improvement; it scores points for disclosing externally-verified greenhouse gas emissions for over 200 sites, reporting on its use of renewable energy (1.02% as a proportion of total electricity use) in 2006 and committing to absolute cuts in GHG emissions. Sony is now reporting on energy efficiency: all AC adapters of "VAIO" PCs meet the requirements of California's Energy Efficiency Regulations. However, the reporting period for energy efficiency of PCs is incorrect and Sony has yet to report on compliance with the Energy Star standard for all of its TV models, put on the market since July 2005.

### **Panasonic 5.1**

Panasonic increases its score to 5.1 points and rises up the ranking to 9th place from 11th, because it now scores maximum points for energy efficient products; 100% of External Power Supplies for mobile phones for the Japanese market, which are only sold in Japan, meet the Energy Star requirement and exceed it in no load mode by approx. 85%. For TVs 99.2% of its main models launched in



2005 meet Energy Star and 64% exceed by 50%; 100% of PCs launched since 2007 meet the latest Energy Star standard and 30% exceed. Panasonic discloses externally-verified greenhouse gas (GHG) emissions from its own operations and commits to absolute reduction in emissions.

It earns most of its points on chemicals issues; its many models of PVC-free products include DVD players and recorders, home cinemas, video players and lighting equipment. Panasonic gives two examples of products free of BFRs – fluorescent ceiling lamps and a kitchen lamp. Despite putting these PVC-free and BFR-free products on the market, Panasonic has yet to commit to fully eliminating all PVC and BFRs in its full product portfolio.

The company scores poorly on all the e-waste criteria. Voluntary take-back so far does not cover all of Panasonic's product groups but this will be partly addressed by voluntary take-back for TVs in the USA which will eventually be nationwide.

#### **Sharp 4.9**

Sharp climbs up the ranking from 16th place with a score of 3.1 to 10th with 4.9 points.

Sharp scores well for its policy and practice on toxic chemical issues and gains a point for providing a timeline of 2010 for eliminating phthalates and antimony. It has launched many models of LCD TVs and solar modules that are free of PVC (except accessories) and has committed to eliminating phthalates from all products by the end of 2010.

On e-waste criteria, Sharp is now supporting Extended Producer Responsibility – though not Individual Producer Responsibility. It also gains points for reporting its recycling rate in Europe. Sharp provides information to consumers in a few countries on what to do with their discarded Sharp branded products and reports on the use of small amounts of recycled plastic.

Sharp's sharp rise up the ranking is primarily due to improvements in its energy score. It scores top marks for supporting global cuts in greenhouse gas (GHG) emissions of 50% by 2050 and at least 30% in industrialised countries by 2020. Sharp discloses third party verified GHG emissions from its own operations and reports that 0.2% of the electricity generated at its Japanese production sites in 2007 and 85% of electricity used at its US sites came from renewable energy sources. Sharp's reporting of energy efficiency of its products continues to be weak.

#### **COMPANY: Acer 4.7**

Acer increases its score slightly to 4.7 points but drops to 11th place. It scores most points for its efforts on toxic chemicals with a commitment to phase out all phthalates, beryllium and compounds and antimony and compounds in all new products by 2012, although it does not yet have any products that are free of PVC and BFRs on the market.

Acer scores poorly on e-waste even though it is reporting a recycling rate of 31.7% based on past sales, for desktops and notebooks, but only those sold and recycled in Taiwan. It loses a point for failing to operationalise and do more lobbying for Individual Producer Responsibility.



On energy, Acer gains points for supporting global cuts in greenhouse gas (GHG) emissions of 50% by 2050 and 30% by 2020 from industrialised countries (compared to 1990 levels). It provides data on its GHG emissions in Taiwan and for reporting on the energy efficiency of its products; since 20 July 2007, 75% of Acer's notebook PCs, 10% of desktop PCs and 100% of LCD monitors have been verified as Energy Star compliant.

**COMPANY: Dell 4.7**

Dell has been dropping down the ranking from 5th place in v.8, to 8th in v.9 and now is in 12th position, albeit with the same score of 4.7 points.

On chemicals, the company earns points for putting on the market the first 'Halogen-Reduced' products, including a desktop with a motherboard containing halogen free laminates and halogen free chassis, a notebook with motherboard made of halogen-free laminates, halogen-free chassis plastics and fan housings and several Monitors with halogen free boards and chassis. However, Dell loses points for withdrawing from its commitment to eliminate all PVC plastic and brominated flame retardants (BFRs) by the end of 2009.

On waste, Dell loses a point for failing to operationalise the principle of Individual Producer Responsibility. It reports a recycling rate of 12.4%, based on sales 7 years ago.

On energy Dell gets points for reporting that over 42 % of laptops and 57 % of desktops (consumer and client) introduced since 20 July 2007 offer configurations that meet or exceed Energy Star requirements. Dell also scores points for disclosing its GHG emissions from global operations, gaining an extra point for getting the emissions third party verified. Dell is now reporting that in 2008 approximately 3.7% of its directly purchased electricity globally was from renewable sources – but the information is buried in its reply to the Climate Disclosure Project (CDP) questionnaire.

**COMPANY: HP 4.5**

HP drops to 13th place because its score has dropped to 4.5 points, losing points on e-waste for failing to operationalise the principle of Individual Producer Responsibility and for its weak voluntary take-back programme, which is mainly oriented towards its business rather than individual customers. The company gains points for reporting a reuse and recycling rate in 2007 of 15% of relevant sales and some use of recycled plastics.

On chemicals, although HP provides a timeline for eliminating polyvinyl chloride (PVC) plastic and all brominated flame retardants (BFRs) by 2009, it is only in computing equipment – not for its entire product portfolio. HP has yet to put on the market products that are entirely free from the worst substances.

HP discloses externally verified greenhouse gas emissions from its own operations and estimates the supply chain greenhouse gas emissions of 80% of their first tier suppliers. It scores top marks for its goal to reduce GHG emissions of operations and products to 25 percent below 2005 levels by 2010. HP gains a point for



reporting its use of renewable energy as 2% of global energy consumption and for reporting that more than 87% of HP Notebook PC platforms and 32% of Desktop PC platforms offer Energy Star compliant configurations.

**COMPANY: Apple 4.3**

Apple's score increases slightly to 4.3 points, but the company drops to 14th position. Apple scores well for putting products on the market whose key components are free of brominated flame retardants (BFRs) and PVC vinyl plastic. Apple's latest iPods - the iPod Touch, Nano and Classic - are now free of both PVC and BFRs and the MacBooks, MacBook Pro and MacBook are almost free of these substances. While Apple has now positioned itself amongst the leaders in the electronics industry on phasing out toxic substances, to score more points the complete phase-out of PVC and BFRs in its iPods should be consistent across all other future product ranges. Apple also needs to commit to phasing out additional substances with timelines, improve its policy on chemicals and its reporting on chemicals management.

Apple scores poorly on most e-waste criteria, except for reporting a recycling rate in 2006 of 18% as a percentage of sales 7 years ago.

It does slightly better on energy criteria for disclosing the carbon footprint of every model of product – although not exactly what is being evaluated in the criterion. Apple scores top marks (doubled) for all desktops computers, portable PCs and displays complying with Energy Star 4.0 and their iPod and iPhone power adapters exceeding the Energy Star standard, despite making this information difficult to access.

**COMPANY: Philips 4.1**

Philips drops from 12th place to 15th, scoring 4.1, reduced from its overall score of 5.1 points because it keeps the penalty point incurred in v.8, due to regressive lobbying against the principle of Individual Producer Responsibility in an EU consultation on the revision of the WEEE Directive. Philips previously incurred a penalty point for its membership of the Electronic Manufacturers' Coalition for Responsible Recycling in the US. This coalition has now been dissolved. Philips also scores zero on most of the other e-waste criteria, but gains a point for reporting on the recycling rate of the e-waste it collects in Europe.

Philips scores well on both toxic chemical and energy issues. On chemicals, Philips has committed to eliminating all phthalates and antimony by December 31 2010. Beryllium and its compounds are already restricted and arsenic is to be phased out of TV glass and other display products from 2008.

Philips score on energy drops by a point because the figure of "approximately 10%" renewable energy in its total electricity mix in 2007 is too vague. The company supports mandatory cuts in greenhouse gases by industrialised countries of at least 30%. It continues to score the highest marks of all the ranked brands on energy criteria, disclosing externally verified carbon dioxide equivalent emissions and committing to absolute cuts in its operational carbon footprint by 25% by 2012 (using a baseline year of 2007). Although Philips scores well on energy efficiency, reporting that some 71% of all TV models put on the US market after 2005 met the



Energy Star standard, these data are only for US models and not all their new models globally.

**COMPANY: Lenovo 3.7**

Lenovo drops from 14th position to 16th as its score drops to of 3.7 points, mostly lost on the e-waste criteria. Lenovo now has a take-back programme in the US and reports a recycling rate of 2.16% of the weight of products shipped in 2007 and 7.74% of the weight of products shipped in 2000. However, Lenovo loses a point as almost 80% of that data is based on the amount of EU e-waste whose recycling was financed by Lenovo – by current market share – and may bear no relation to the amount of Lenovo branded e-waste actually recycled. It also loses a point for failing to provide information to individual customers about its take-back & recycling programme, which is mostly aimed at business customers, while its competitors continue to improve their services to individual customers.

Lenovo scores well on most of the toxic chemical criteria. Although it has recently put on the market a monitor largely free of brominated flame retardants and PVC vinyl plastic, this one model is insufficient to score a point. It also needs to commit to the phase out of beryllium (including alloys and compounds), antimony and its compounds and all phthalates.

Lenovo scores poorly on the energy criteria; it discloses greenhouse gas (GHG) emissions from global operations in 2007, although these are not externally verified. It also scores points on energy efficiency, for having all global models of notebook, desktop and monitor introduced since the effective date of Energy Star 4 meeting the current Energy Star requirements, either in the basic models or as an option. However, Energy Star compliance is not supplied as standard for all models; for some models, customers can opt for non-Energy Star compliant PCs.

**COMPANY: Microsoft 2.7**

Microsoft remains in 17th position with an improved score of 2.9 points, which it earns mainly on the toxic chemicals criteria. The company has committed to removing PVC vinyl plastic and brominated flame retardants (BFRs) from its hardware products by or before 2010, and phthalates by the end of 2010.

On e-waste, Microsoft scores only on its weak support for Individual Producer Responsibility and on reporting that it financed the collection and recycling of e-waste equivalent to 17% of worldwide sales in 2007, without elaborating on how the figure was calculated. On energy, the company gets points for reporting its total carbon dioxide equivalent emissions from its own operations, and that in 2007, 24.4% of all the electricity used was from renewable sources.

**COMPANY: Nintendo 0.8**

Nintendo remains in last place with a pitiful 0.8 points out of 10, scoring zero on all e-waste criteria. The company has banned phthalates and is monitoring use of antimony and beryllium and although it is endeavouring to eliminate the use of PVC, it has not set a timeline for its phase out.

# GREENPEACE

Nintendo discloses carbon dioxide (CO<sub>2</sub>) emissions from its own operations and commits to cutting CO<sub>2</sub> emissions and other greenhouse gases by 2% over each previous year. However, Nintendo admits that an increase in business led to a 6% rise in CO<sub>2</sub> emissions in 2006.

## ตารางแสดงการประเมินผู้ผลิตสินค้าอิเล็กทรอนิกส์ในแต่ละเกณฑ์ จากคู่มือฉบับที่ 10

v. 10 final scores, 13/11/08					
Position	Company	Chems	Waste	Energy	Total/51
1	NOKIA	15	8	12	35 6.9/10
2	Sony Ericsson	17	5	8	30 5.9/10
3	TOSHIBA	14	6	10	30 5.9/10
4	Samsung	12	11	7	30 5.9/10
5	Fujitsu-Siemens (FSC)	13	7	9	29 5.7/10
6	LGE	12	10	7	29 5.7/10
7	Motorola	12	7	8	27 5.3/10
7	Sony	12	8	7	27 5.3/10
9	Panasonic	11	5	10	26 5.1/10
10	SHARP	13	4	8	25 4.9/10
11	Acer	12	5	7	24 4.7/10
12	DELL	9	8	7	24 4.7/10
13	HP	8	6	9	23 4.5/10
14	Apple	10	5	7	22 4.3/10
15	Philips	12	1	13	26 5.1/10 – pp = 4.1
16	Lenovo	9	7	3	19 3.7/10
17	Microsoft	10	2	3	15 2.9/10
18	Nintendo	2	0	2	4 0.8/10

## ตารางแสดงอันดับผู้ผลิตสินค้าอิเล็กทรอนิกส์สีเขียว จากคู่มือฉบับที่ 1-9

# GREENPEACE

อันดับ	พฤษภาคม 2551	กันยายน 2551	มิถุนายน 2551	มีนาคม 2551	ธันวาคม 2550	กันยายน 2550	มิถุนายน 2550	มีนาคม 2550	ธันวาคม 2549	สิงหาคม 2549
1	<b>NOKIA</b> ↔ 6.9	Nokia ↑ 7	Sony Ericsson ↑ 5.1	Samsung ↑ 7.7	Sony Ericsson ↑ 7.7	Nokia ↔ 8	Nokia ↑	Lenovo ↑	Nokia ↔	Nokia 7
2	<b>Sony Ericsson</b> ↑ 5.9	Samsung ↑ 5.7	Sony ↑ 5.1	Toshiba ↑ 7.7	Samsung ↑ 7.7	Sony Ericsson ↑ 7.7	Dell ↑	Nokia ↓	Dell ↔	Dell 7
3	<b>TOSHIBA</b> ↑ 5.9	FSC ↑ 5.5	Nokia ↔ 4.8	Nokia ↑ 7.3	Sony ↑ 7.3	Dell ↓ 7.3	Lenovo ↓	Sony Ericsson ↑	Fujitsu-Siemens ↑	HP 5.7
4	<b>Samsung</b> ↓ 5.9	Sony Ericsson ↓ 5.3	Samsung ↓ 4.5	Sony ↓ 7.3	Dell ↓ 7.3	Lenovo ↑ 7.3	Sony Ericsson ↓	Dell ↓	Motorola ↑	Sony Ericsson 5.3
5	<b>Fujitsu-Siemens (FSC)</b> ↑ 5.7	Sony ↑ 5.3	Dell ↔ 4.5	Dell ↓ 7.3	Lenovo ↓ 7.3	LGE ↑ 7	Samsung ↔	Samsung ↑	Sony Ericsson ↓	Samsung 5
6	<b>LGE</b> ↔ 5.7	LGE ↑ 4.9	Toshiba ↓ 4.3	Lenovo ↓ 7.3	Toshiba ↑ 7	Sony ↑ 7	Motorola ↔	Motorola ↓	HP ↓	Sony 4.7
7	<b>Motorola</b> ↑ 5.3	Toshiba ↓ 4.7	Acer ↑ 4.3	Sony Ericsson ↓ 6.7	LGE ↓ 7	Fujitsu-Siemens ↑ 7	Toshiba ↑	Fujitsu-Siemens ↓	Acer ↑	LGE 4.3
8	<b>Sony</b> ↓ 5.3	Dell ↓ 4.7	Panasonic ↑ 4.3	LGE ↔ 7	FSC ↓ 7	Samsung ↓ 6.7	Fujitsu-Siemens ↓	HP ↓	Lenovo ↑	Panasonic 3.3
9	<b>Panasonic</b> ↑ 5.1	HP ↑ 4.7	Motorola ↑ 4.3	Apple ↑ 6.7	Nokia ↓ 6.7	Motorola ↓ 6.7	Acer ↔	Acer ↓	Sony ↓	Toshiba 3
10	<b>SHARP</b> ↑ 4.9	Acer ↓ 4.5	HP ↑ 4.3	FSC ↓ 6.7	HP ↑ 6.7	Toshiba ↓ 6	Apple ↑	Toshiba ↑	Panasonic ↓	Fujitsu-Siemens 3
11	<b>Acer</b> 4.7 ↓	Panasonic ↓ 4.5	Apple ↓ 4.1	HP ↔ 6.7	Apple ↑ 6	Acer ↓ 5.7	HP ↓	Sony ↓	LGE ↓	Apple 2.7
12	<b>DELL</b> ↓ 4.7	Philips ↑ 4.3	Sharp ↑ 3.9	Motorola ↑ 6.3	Acer ↓ 5.7	Apple ↓ 5.3	Panasonic ↑	LGE ↓	Samsung ↓	Acer 2.3
13	<b>HP</b> ↓ 4.5	Apple ↓ 4.1	Lenovo ↓ 3.9	Acer ↓ 5.7	Panasonic ↑ 5	HP ↓ 5.3	LGE ↓	Panasonic ↓	Toshiba ↓	Motorola 1.7
14	<b>Apple</b> ↓ 4.3	Lenovo ↓ 4.1	Philips ↑ 3.7	Sharp ↑ 5	Motorola ↓ 5	Panasonic ↓ 5	Sony ↓	Apple ↔	Apple ↓	Lenovo 1.3
15	<b>Philips</b> ↓ 4.1	Motorola ↓	FSC ↓ 3.7	Panasonic ↓	Sharp 4.7					

# GREENPEACE

		3.7		4.7						
<b>16</b>	<b>Lenovo</b> ↓ <b>3.7</b>	Sharp ↓ 3.1	LGE ↓ 3.3	Microsoft ↑ 4.7	Microsoft 3					
<b>17</b>	<b>Microsoft</b> ↔ <b>2.9</b>	Microsoft ↔ 2.2	Microsoft ↓ 2.15	Philips ↔ 4.3	Philips 2					
<b>18</b>	<b>Nintendo</b> ↔ <b>0.8</b>	Nintendo ↔ 0.8	Nintendo ↔ 0.8	Nintendo ↔ 0.3	Nintendo 0					