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COMMUNICATION FROM THE COMMISSION

**on the implementation of the ENERGY STAR programme in the European Union in the
period 2006 – 2010**

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1. INTRODUCTION

Information and communication technologies, including office equipment (i.e. computers, displays, imaging equipment, servers etc.), are one of the fastest growing electricity end-users in the EU and worldwide. Office equipment consumes 17%¹ of electricity used in the tertiary sector, while ICT equipment and services represent about 8% of total electrical power consumption in the EU. As new applications and functionalities appear on the market and ownership rates increase, the energy consumption of these devices is set to rise threefold by 2030². Existing technologies allowing significant decreases in power consumption are not fully implemented because of persistent market failures, such as lack of information or split incentives. Providing consumers with accurate, comparable, and clear information on the energy efficiency of office equipment helps to decouple growth in the functionality and use of ICT from its energy use.

Office equipment is traded globally. Although the manufacturing base is increasingly moving to Asia, a large share of research and development, marketing, and even manufacturing facilities are located in the EU and the US. The trade in this market segment between the EU and the US is falling but remains substantial. The US is our biggest export market for office equipment and the annual value of EU-US trade in this market segment exceeds EUR 10 billion (with about EUR 4 billion in exports to the US, and EUR 6 billion in imports to the EU)³.

The increasing energy consumption of office equipment and the global nature of the ICT market provide a strong rationale for international regulatory cooperation in this domain. It is against this background that the EU and the US signed an Agreement on the coordination of energy-efficiency labelling programmes for office equipment⁴ (hereafter the ‘Agreement’) in December 2000. The Agreement, which was renewed in 2006 for a second 5-year period, provides the basis for the implementation of the ENERGY STAR programme in the EU (hereafter ‘the programme’). ENERGY STAR is a voluntary energy-efficiency labelling programme run by the US Environment Protection Agency (hereafter ‘EPA’). It is implemented in several other economies, including Japan, Canada and Australia, through agreements similar to that with the EU.

¹ <http://re.jrc.ec.europa.eu/energyefficiency/publications.htm>

² Gadgets and Gigawatts — Policies for Energy Efficiency Electronics © OECD/IEA, 2009, [figure 127], [page 287], quoting Grochowski, E. and M. Annavaram (2006), Energy per Instruction Trends in Intel Microprocessors, Technology@Intel Magazine, March 2006.

³ http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-GI-10-001/EN/KS-GI-10-001-EN.PDF

⁴ OJ L 381, 28.12.2006, p. 26

‘Agreement between the United States of America and the European Community on the coordination of energy efficient labelling programs for office equipment’; OJ L 172, 26.06.2001, p. 3.

On the basis of the Agreement, the EPA and the Commission jointly manage the ENERGY STAR programme for office equipment. That includes cooperating on the development of product specifications and the mutual recognition of products registered in the EU and the US.

ENERGY STAR is an integral part of the EU's energy efficiency policy as set out in the Action Plan for Energy Efficiency⁵. It aims to 'pull' the office equipment market up towards greater efficiency and thus complements the Ecodesign Directive 2009/125/EC⁶, which acts to 'push' the market through mandatory or voluntary minimum efficiency requirements.

As the Agreement will expire in December 2011, this communication assesses the merits of its possible renewal (section 5) on the basis of:

- Experience in the implementation of the programme in the EU (section 2)
- An assessment of the effectiveness of the programme in improving the energy efficiency of office equipment (section 3)
- Planned modifications to the US Energy Star programme (section 4)

2. IMPLEMENTATION OF THE ENERGY STAR PROGRAMME IN THE EU

The programme has been implemented in the EU by "Council Decision 2006/1005/EC"⁷ and by "Regulation (EC) No 106/2008 on a Community energy-efficiency labelling programme for office equipment"⁸.

2.1. Main elements

The following key aspects for the implementation of the programme can be singled out:

- **Unity:** product specifications are jointly developed by the EPA and the European Commission assisted by Member States (EU Energy Star Board, EUESB). The specifications thus have the same levels of stringency in the US and the EU and essentially enter into force simultaneously in both. Moreover, products registered by one 'management entity' (EPA or EC) are recognised as meeting ENERGY STAR specifications on the territory of the other party to the Agreement.
- **Dynamism:** product specifications are regularly revised with the aim of setting a policy framework that continuously drives office equipment towards greater efficiency. Since 2000 the specifications have been revised 3 times, each time with more stringent energy efficiency levels. Under the current Agreement, product specifications aim to represent not more than 25 per cent of models for which data are available at the time the specifications are set.

⁵ COM(2006)_545 final

⁶ OJ L 285, 31.10.2009, p. 10.

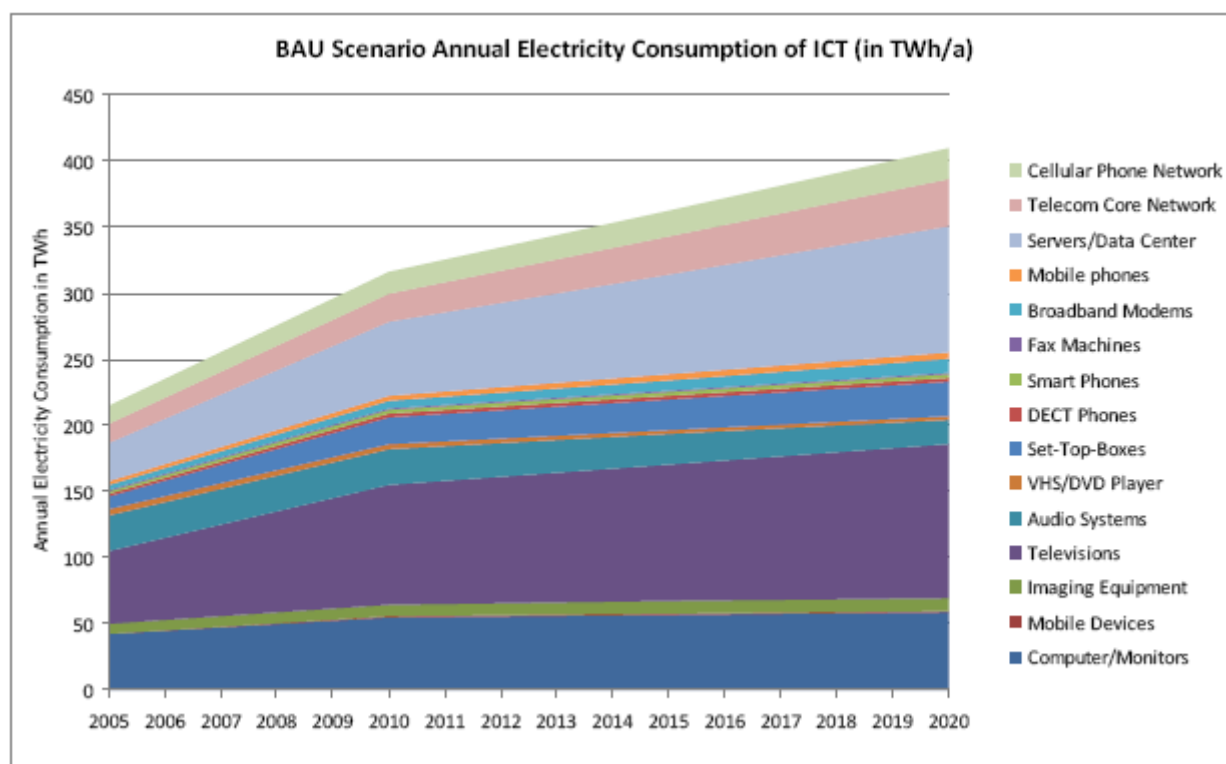
⁷ Council Decision 2006/1005/EC of 18 December 2006 concerning the conclusion on behalf of the Community of the Agreement between the Government of the United States of America and the European Community on the coordination of energy-efficient labelling programmes for office equipment; OJ L 381, 28.12.2006, p. 24.

⁸ OJ L 39, 13.02.2008, p. 1.

- **Incentives:** In 2008 the programme was significantly strengthened with the inclusion of an obligation for the central government authorities of Member States and the European institutions to specify, for public procurement, energy efficiency requirements ‘not less demanding’ than ENERGY STAR criteria⁹. Public procurement is the primary driver for product registration in the EU.

2.2 Scope

Since the beginning of the Agreement, ENERGY STAR has included specifications for computers, monitors/displays and imaging equipment (copiers, printers, scanners, etc.). The specifications have already been revised 3 times to adjust to technological progress and drive greater efficiency. The first specifications for servers are expected to enter into force in the first quarter of 2011. In addition, the EPA and the Commission are currently cooperating on the development of criteria for three further product groups (data centre storage, uninterruptible power supplies and small network equipment). These 7 product groups, taken together, are estimated to cover practically all the electricity consumption of office equipment. The graph below (which covers consumer electronics as well as office equipment) indicates that products covered by the Agreement are, together with television sets, the largest electricity end-users within the combined ICT/consumer electronics sector. It also shows that while the power consumption associated with some products, such as computers, will stabilise, power consumed by other equipment, such as servers and data centre storage, will grow significantly. These are therefore the products on which future attention should focus.



⁹ OJ L 39, 13.02.2008, p. 3, Article 6.

Graph 1. ICT total electricity consumption in the EU by 2020 under a business-as-usual scenario (including the impact of existing policy measures, including ENERGY STAR)¹⁰

The current **Computer** specifications have been effective since July 2009 and have been revised twice since 2006. They cover a broad spectrum of products (desktops, laptops, workstations, thin clients, small-scale servers). The latest specifications set levels approximately 40% more stringent than the previous levels. The new criteria for **imaging equipment** also entered into force in July 2009. Here, in addition to requirements strictly linked to energy efficiency, the criteria include provisions on duplexing (i.e. double-sided printing), which is important due to the significant environmental impact of paper use. The new criteria for **displays**, which entered into force in October 2009 will speed up the transition to new, more energy-efficient technologies such as LED backlights.

The work on **servers** and **data centre storage** is focuses on data collection with the aim of understanding the relationship between hardware and software configuration and energy performance in both active and idle states. The development of specifications on **uninterruptible power supplies** (UPS) benefits from EU experience acquired in this product group acquired thanks to the development of a Code of Conduct on UPS by the Joint Research Centre (JRC). The final product group, **small network equipment**, includes such items as modems and routers. Here again, synergies will be sought with the EU Code of Conduct on Broadband Equipment managed by the JRC.

2.3 Promotion and registration of ENERGY STAR products and partners

The dedicated portal www.eu-energystar.org provides information for the relevant actors, including e.g. programme participation guidelines for manufacturers, an interface for searching the database of ENERGY STAR registered products on the EU market, advice on the proper configuration and use of power management, etc. The average number of visits per day increased between 2006 and 2010 by approximately 25%.

The number of manufacturers participating in the programme has increased significantly, from 16 companies in 2006 to 74 in 2010. This sharp rise can be attributed to the provisions on public procurement that were introduced in 2008. Indeed, 60% of programme participants indicated public procurement as the primary driver for their participation. The provision of common public procurement specifications across the EU appears to be important, as 65% of respondents to a survey addressed to programme participants¹¹ indicated that they take part in public tenders in Member States other than where they are established.

There are no data on the percentage of consumers familiar with the ENERGY STAR logo. However, it can be assumed to be relatively low as only 27% of participating manufacturers indicated consumer information as the primary driver for their participation. This is not surprising as the programme targets office equipment, and therefore not private consumers but the tertiary sector. Hence, public procurement remains the strongest driver for participation in the programme.

¹⁰ Impacts of Information and Communication Technologies on Energy Efficiency, Bio Intelligence Service, September 2008

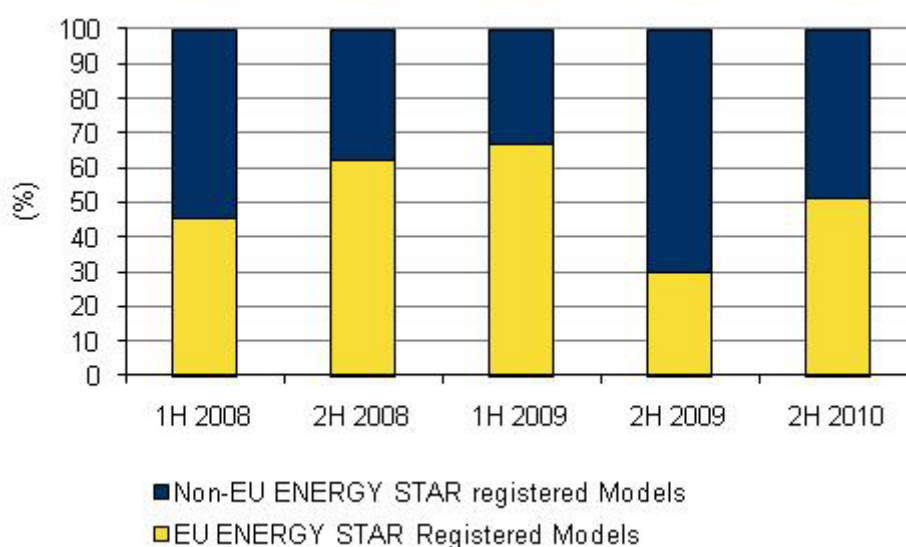
¹¹ Of the 74 partner companies, 30 responded to the survey.

3. IMPACTS

This section aims to quantify the impact of the ENERGY STAR programme in the EU by (a) assessing how fast the market is moving towards greater efficiency, (b) estimating how accurate the data reported by manufacturers are, and (c) evaluating the impact of the programme on energy savings. This analysis is primarily based on a continuous market survey conducted between 2008 and 2010¹².

3.1 Penetration of ENERGY STAR products on the market

In order to assess how fast the market is moving toward efficiency levels specified under ENERGY STAR an analysis of the market has been conducted on a regular basis. Graph 2 below shows the percentage of total models on the market meeting ENERGY STAR specifications.



Graph 2. Percentage of total models on the market meeting ENERGY STAR specifications between 2008 and 2010

The graph shows that ENERGY STAR is effective in moving the market towards greater efficiency — the percentage of products meeting the specifications increases year on year by 20 percentage points and more. Between the first half of 2008 and the first half of 2009, for all products combined (i.e. computers, displays and imaging equipment), the percentage of models meeting the specifications increased from 45% to as much as 66%. Then, in the second half of 2009 with the introduction of new, more demanding specifications this number decreased significantly to 30%, but started increasing sharply again.

The penetration of ENERGY STAR models has grown faster in some product areas than others. It has typically been high in the monitor and imaging equipment products market where ENERGY STAR model penetration is generally high. After reaching between 60 and 80% of the market, the penetration of ENERGY STAR models stagnates, which shows that some market segments are not reached by the Programme.

¹² EU ENERGY STAR Final Report, IDC, October 2010. In order to count the total number of models on the market IDC used the following sources: (a) distributor and channel resell information, (b) vendor information, (c) IDC tracker database

3.2 Compliance and accuracy of reported data

In line with the Agreement, each management entity (i.e. the Commission and the US EPA) is responsible for enforcing the provisions of ENERGY STAR on its territory, including tracking non-compliance. Article 12 of Regulation (EC) No 106/2008 gives the Commission and Member States joint responsibility for enforcing the programme in the EU. Whereas Member States are responsible for ensuring conformity with the Regulation on their own territory, the Commission has a coordinating role and has to take corrective action in cases of abuse.

As part of its tasks, the Commission has conducted an inquiry to check the accuracy of data reported by manufacturers. The inquiry was not based on the testing or measuring of products but rather on a comparison of the reported values with the values reported for the same models elsewhere. Although the analysis revealed a visible improvement in the quality of the various criteria recorded in the EU ENERGY STAR database over the last three years, there were discrepancies between the values reported under ENERGY STAR and elsewhere for a relatively large number of criteria/products.

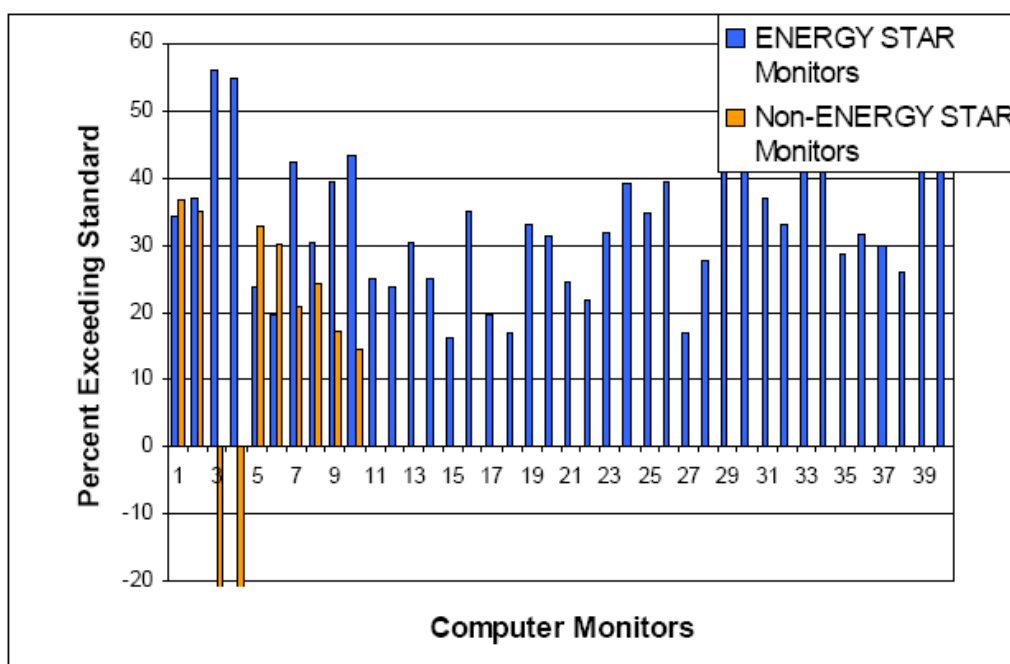
However, the results of this survey cannot be the basis for assessing the scale of non-compliance under ENERGY STAR, which can be done only through actual product testing. Such testing performed by the EPA in 2009¹³ on a sample of 120 products revealed that:

- 100% of tested ENERGY STAR computer monitors and 95% of ENERGY STAR printers met ENERGY STAR criteria;
- 80% of tested non-ENERGY STAR computer monitors and 40% of non-ENERGY STAR printers also met the ENERGY STAR criteria.

These results show that the level of compliance is high within the ENERGY STAR programme. At the same time, the high percentage of non-ENERGY STAR products that meet the criteria of the programme suggests that these criteria have to be revised more often in order to ensure that the programme differentiates efficient from inefficient products. Depending on the product group, compliance with the new specifications becomes routine for a significant part of the market 2 to 4 years after their introduction (more so in the case of monitors, less so in the case of imaging equipment, and especially computers). At that point the specifications no longer represent state of the art energy efficiency. As the graph below shows, a significant proportion of both ENERGY STAR products and non-ENERGY STAR products can have efficiency levels significantly above the ENERGY STAR criteria.

¹³

EPA Evaluation Report: ENERGY STAR Program Integrity Can Be Enhanced Through Expanded Product Testing, Report No. 10-P-0040, November 30, 2009 <http://www.epa.gov/oig/reports/2010/20091130-10-P-0040.pdf>.



Graph 3. Results of testing 40 computer monitors against ENERGY STAR criteria.¹⁴

This leads to the following conclusions:

- According to the available test results, compliance rates are high enough to preserve the integrity of the programme. The sample of tested products was relatively low, however, so such tests should be performed more regularly, by both management entities, in order to ensure that any trend towards low compliance is detected.
- After a certain time, as energy efficiency levels in general improve, ENERGY STAR does not single out the most efficient products on the market, so the criteria have to be revised regularly.

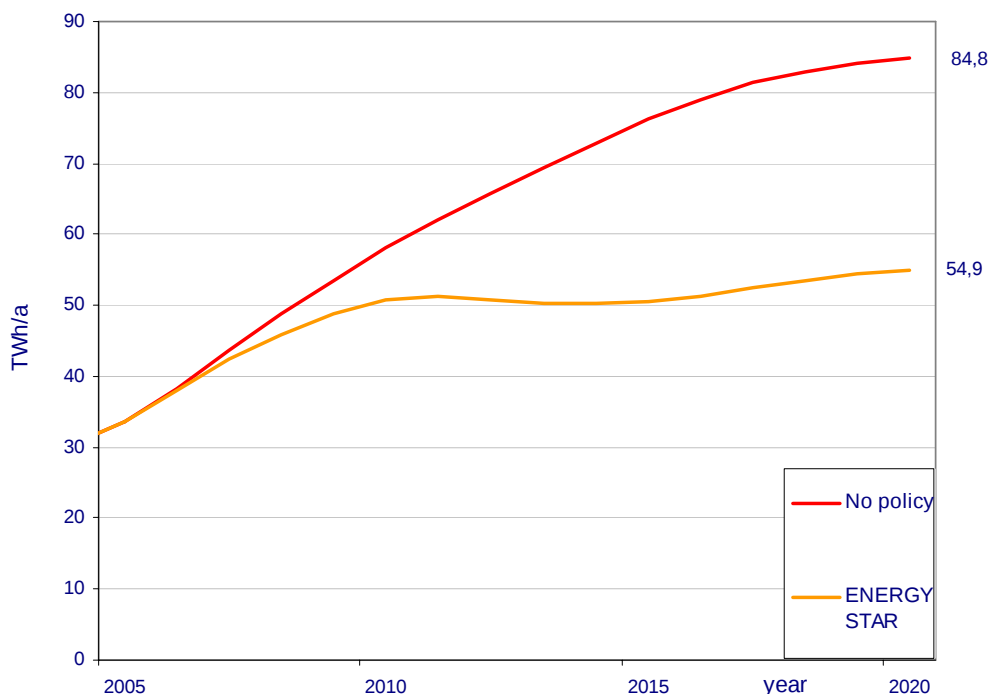
3.3 Energy savings

The assessment of the energy savings associated with ENERGY STAR was based on sales data from Eurostat (Prodcom), vendors and other sources, as well as data from the ENERGY STAR database on the energy consumption of products, Ecodesign preparatory studies, the UK Market Transformation Programme, etc. Sales-based savings calculations¹⁵ are approximate as these depend upon assumptions about how the market would be structured without ENERGY STAR. With that caveat, these calculations indicate that the impact of ENERGY STAR is relatively significant. It is estimated that without ENERGY STAR the electricity consumption of new office equipment sold in the EU in the last three years would have been approx. 67 TWh. ENERGY STAR succeeded in reducing this by around 11 TWh, i.e. by approx. 16%. This translates into more than EUR 1.8 bn saved on energy bills and 3.7 Mt of avoided CO₂ emissions. It needs to be noted that these numbers represent a ‘snapshot’,

¹⁴ EPA Evaluation Report: ENERGY STAR Program Integrity Can Be Enhanced Through Expanded Product Testing, Report No. 10-P-0040, November 30, 2009 <http://www.epa.gov/oig/reports/2010/20091130-10-P-0040.pdf>. The term 'Percent Exceeding Standard' on the y axis should be understood as meaning 'percent by which standard is exceeded'.

¹⁵ The calculation only took into account ENERGY STAR specifications in force between 2008 and 2010, and only the savings achieved with those specifications within this three-year period.

i.e. they do not take into account the current impact of earlier (pre-2008) specifications, or the future impact of current specifications. If these two elements are taken into account, it is estimated that ENERGY STAR will succeed by 2020 in reducing the energy consumption of the installed base of computers, displays and imaging equipment in the EU by more than 30%. The graph below depicts this trend for computers and displays.



Graph 4. Expected impact of ENERGY STAR on the electricity consumption of computers and displays by 2020¹⁶

Precise estimates of the remaining saving potential linked to a revision of existing specifications is not available yet as this process has only been initiated recently, but it can be assumed that it remains significant. Indeed the ENERGY STAR database includes products that consume less than a quarter of the current ENERGY STAR threshold. In addition, as shown on Graph 1 the energy consumption of products that are not yet covered by the Agreement will rise sharply in the coming years, and therefore needs to be addressed too.

4. PLANNED MODIFICATIONS TO THE US ENERGY STAR PROGRAMME AND THEIR EXPECTED IMPACT ON THE AGREEMENT

As of February 2011, the EPA requires all products seeking certification under the programme in the US to be tested in third-party certified laboratories and to be systematically checked after their qualification. This overhaul is the result of an inquiry by the federal auditing authority (General Accounting Office), which showed that there is potential for fraud due to insufficient surveillance (although no fraud was uncovered).

¹⁶ These estimates were made as part of an Impact Assessment for a Regulation implementing Directive 2009/125/EC with regard to Ecodesign requirements for computers, servers and displays. The model did not take into account the impact of specifications that were introduced between 2000 and 2005.

The Commission aims at ensuring that these changes do not breach the Agreement and do not negatively impact EU manufacturers participating in the programme. The issue was extensively discussed in the framework of the EU-US Energy Council and the High Level EU-US Regulatory Cooperation Forum. As a result the EPA confirmed that under the current Agreement products registered in the EU will still be recognised in the US, and therefore will not have to be third-party certified¹⁷. Beyond the current Agreement this solution would not be acceptable to the US as the EPA considers it would lead to a permanent 'leakage' of their product-registration system (manufacturers would register in the EU to avoid the cost and time necessary to get third-party certification). This chapter will therefore consider possible options for the future of ENERGY STAR in the EU, taking into account their expected impact on manufacturers, their ability to transform the market towards greater efficiency and their exposure to fraud.

4.1. Option 1: introduce third-party certification in the EU

Under this option the ENERGY STAR Agreement would be extended for another 5 years and the EU would introduce third-party certification. It is expected that this approach would have the following consequences:

- The compliance rate would go up. However, given that the latest tests of office equipment showed a 95% compliance rate with self-certification, the additional gains are expected to be minimal.
- The cost of product registration would go up, in a way that would unevenly impact different market operators. The internal laboratories of major manufacturers are already today accredited to the international standards that form the basis of the new US requirements. Furthermore for such companies, due to the scale of their operations, the cost of external certification can be relatively easily absorbed. For this market segment, feedback received from two major manufacturers indicates a 30% increase in the cost of product registration. For SMEs, however, the additional burden of new requirements would be proportionally greater. Given that ENERGY STAR is the basis for public procurement, the new requirements would create unequal conditions in access to public tenders.
- The number of programme partners would decrease. 60% of companies participating in the EU ENERGY STAR that provided feedback to a questionnaire on these issues indicated that they would drop out if third-party certification was introduced.
- The new testing requirements will add at least one month to the process of product registration. The industry points out that, due to the short product development cycle for IT equipment, this may lead to a situation where the approval to use the label will come after a given model is launched on the market.

It follows from these points that third-party certification would be disproportionate in the EU and could negatively impact the programme decreasing its impact on the market. This conclusion is in line with the outcome of a consultation of Member States and stakeholders as part of the EU Energy Star Board carried out in June 2010.

¹⁷ As the new US certification requirements apply only to newly registered products, those products in receipt of a certification in the EU before the expiry of the current agreement will not need to be re-registered in the US after the current agreement expires.

4.2. Option 2: maintain self-certification in the EU

Maintaining self-certification in the EU would mean that the next Agreement would no longer be uniform for both parties: the principle of mutual recognition would need to be dropped, and there would therefore be two distinct product registration systems. An important consideration in this case is the impact on EU manufacturers.

Although 85 % of office equipment imported to the EU comes from Asia, EU-US trade in this market segment remains significant. The value of EU office equipment exports to the US in 2008 was close to 4 billion euros (around half of it computers), compared to 13 billion euros for electrical machinery and 20 billion euros for passenger cars. As indicated above, even though exports to the US are systematically falling (from 24 % of exports in 2004 to 15 % in 2008), it remains the EU's biggest export market for office equipment

In the light of the above numbers the principle of mutual recognition would at first appear to be a vital part of the ENERGY STAR Agreement. However, among those that provided feedback on its future, only one manufacturer participating in the EU ENERGY STAR programme indicated that it registers products in the EU that are then exported to the US. This indicates that the partners in the EU programme almost entirely focus on the domestic EU market. It can be therefore assumed that EU exports to the US come mainly from big companies that have so far registered their products directly in the US and can better absorb the cost of new US registration requirements. It can also be assumed that a large part of EU exports in this market segment comes from niches where the EU industry has a strong position and which are not covered by ENERGY STAR specifications, such as telecommunication equipment or specialised software.

This conclusion is reinforced by the structure of the EU ICT industry. Whereas in certain sub-segments of this industry EU companies rank among the biggest players worldwide (notably in telecoms, specialised electronics e.g. automotive or medical, specialised software), they are absent among the biggest manufacturers of office machinery and computers¹⁸. EU employment in this latter sub-segment of the ICT industry is systematically falling, whereas in related sub-segments, notably telecoms and computer services, it has witnessed spectacular increases¹⁹. That being said there remains a manufacturing base located in the EU which is divided into two distinct tiers. Tier one is composed of subsidiaries of foreign multinationals. Almost a dozen large US and Japanese manufacturers have manufacturing sites located in EU Member States (usually EU15). Tier two is mainly composed of SMEs which are more dispersed geographically than multinationals with a significant presence in EU10. These companies tend to focus on the desktop market. Their business is centred either around building PCs from components sourced locally, or adding value to the value chain (e.g. creating software for specialised applications), or simply reselling products bought outside of the EU. Due to the limited scale of their operations these companies do not compete with the large multinationals on price on global markets but rather on creating customised solutions adapted to the local market. Therefore the bulk of the revenues of these companies often comes not from selling hardware but servicing it. Most of these manufacturers compete in the low price market segment and their profit margin can be relatively low (around 5%). This is the typical profile of partners in the EU ENERGY STAR Programme.

¹⁸ OECD Information Technology Outlook: 2008
- OECD © 2008 - ISBN 9789264055537

¹⁹ Mapping the ICT in EU Regions: Location, Employment, Factors of Attractiveness and Economic Impact, JRC- IPTS, 2008

Therefore from the point of view of EU manufacturers, maintaining a lightweight product registration system is more important than keeping mutual recognition. ‘Tier one manufacturers’ will need to go through third-party certification in the US irrespectively of the approach chosen in the EU, whereas ‘tier two manufacturers’ are focused on the domestic EU market and from their perspective maintaining a light product registration system is vital.

At the same time it needs to be ensured that the same conditions for acquiring the ENERGY STAR label in the US are applied to US and non-US manufacturers. The US originally planned to require that Certification Bodies (through which the product registration system will be run) have a ‘significant North American presence’. Further to objections raised by the EU and Korea this condition was withdrawn and the requirements were harmonised with international standards. As a result US ENERGY STAR Certification Bodies are now present in several Member States.

Finally, although tests of ENERGY STAR office equipment showed high compliance rates, sticking to self-certification would require a thorough enforcement of the programme. It is believed that the integrity of ENERGY STAR could be ensured through spot checks combined with direct consequences for fraudulent products. The Commission will seek to assist Member States in the proper enforcement of the programme.

4.3 Option 3: replace ENERGY STAR with alternative regulatory instruments

ENERGY STAR has been successful in driving the market towards greater efficiency. At the same time the changes planned by our US partners will, if not implemented in the EU, void the principle of mutual recognition and take away some of the rationale for concluding a new agreement. Accordingly, this section briefly discusses the alternative to ENERGY STAR, i.e. mandatory energy labelling under Directive 2010/30/EC²⁰.

ENERGY STAR is a component of a wider policy mix targeting the energy efficiency of products. This framework also includes the Ecodesign Directive and Energy Labelling Directives mentioned above. Whereas Ecodesign ‘pushes’ the market by setting minimum efficiency requirements, Energy Labelling and Energy Star ‘pull it’ by providing manufacturers with an incentive to compete on the energy efficiency of their products. Ecodesign therefore complements the two labelling instruments by ensuring a faster and more complete market transformation. It can also impact those market segments where labelling instruments are not effective. This is for example the case of gaming PCs, where energy efficiency is not an important consideration in consumer purchasing decisions. Ecodesign is therefore not an alternative to ENERGY STAR but a complement to it, although it has to be applied carefully to such fast-evolving equipment as ICT.

A possible alternative to ENERGY STAR is the Energy Label. The comparative A-G label which is displayed at the point of sale is widely recognised by consumers in the EU and has led to a spectacular increase in the efficiency of products covered.

Compared to ENERGY STAR, the energy label may be seen as having the following advantages and drawbacks:

Advantages

²⁰ OJ L 153/1, 18.06.2010, p. 1

– It is mandatory. This ensures that the energy efficiency of all products on the market can be compared. It also allows all market segments to be reached, whereas with ENERGY STAR manufacturers do not have an incentive to drive efficiency in certain segments. – It is widely recognised by EU consumers. In the case of office equipment, however consumer recognition appears to play a smaller role than, for example, public procurement requirements.
Drawbacks
– Unlike ENERGY STAR, it is not linked at EU level to mandatory public procurement provisions. – The legislative process is slower and less flexible which can be a problem in the case of such fast-evolving and complex products as ICT. Although the revised Energy Labelling Directive provides for some intrinsic dynamism (empty classes ‘above A’ to be populated as the market evolves), the development cycle of Ecodesign and Energy Labelling requirements typically takes 3-4 years compared to 1 year in the case of ENERGY STAR. This is due to the fact that in the case of mandatory instruments such aspects as the impact on the different market segments or the comparability of the different applications have to be considered much more carefully than in the case of a voluntary scheme. Because of this the development of mandatory instruments often cannot keep pace with the ever-shortening ICT product development cycles. In addition, in the case of ICT the development of a mandatory label applicable to all products would be extremely complex due to the heterogeneity of product configurations, applications and use patterns (e.g. ENERGY STAR is based on a use pattern typical for the office environment and not representative of household applications). – A move from ENERGY STAR to the Energy Label would fragment the international regulatory framework resulting in additional costs to the industry and to the public sector. This should be avoided given the global nature of this market.

Although the energy label has certain advantages compared to ENERGY STAR, the latter appears to be better suited for office equipment. ENERGY STAR currently offers a readily-available solution for addressing the energy efficiency of office equipment. However, the validity of this conclusion will be continuously monitored and the arguments listed in this section will be assessed for specific products covered by the Agreement, depending on market and technology developments.

4.4. Conclusion

The dynamism and voluntary nature of ENERGY STAR make it a policy tool particularly well suited for ICT products. A part of the programme's success can be attributed to its lightweight product registration process. A switch to third-party certification would put SMEs at a disadvantage compared to bigger companies. This should be avoided as the Programme is linked to mandatory public procurement and SMEs constitute the majority of its participants. It could also lead to a decrease of the number of partners and hence decrease the impact of ENERGY STAR on the market. An analysis of the profile of manufacturers participating in the Programme and of the office equipment market in the EU in general shows that mutual recognition is not a key component of the EU-US Agreement. The aim should be to preserve

the core element of the Programme and its principal aim - product specifications jointly developed and implemented by the EU and the US that provide an incentive to continuously drive the energy efficiency of office equipment. This would be ensured by Option 2 identified above. Under this option the EU would maintain its impact on the development of ENERGY STAR specifications, which are *de facto* the global standard for the energy efficiency of ICT.

5. CONCLUSION: RECOMMENDATION FOR RENEWAL OF THE AGREEMENT

The agreement presently in force expires in December 2011. During the last 4 years the programme has helped make office equipment more energy-efficient and save consumers money. Its impact on the market has amplified as it has grown more popular with manufacturers. It is strongly supported by the industry as it provides a flexible and dynamic policy framework, particularly well suited for such fast-evolving products as ICT. At the same time, the changes planned by the US present a challenge for the future of the Agreement. It is therefore recommended that the European Union continue participating in the ENERGY STAR programme, albeit with certain necessary adjustments. More specifically, the following suggestions for the prolongation of the Agreement are made:

- The EU and the US should still cooperate on the development of product specifications, i.e. the same level of requirements would be introduced approximately at the same time by both entities.
- Given the resolve of the US to introduce third-party certification to the programme, the Agreement should continue under two distinct product registration systems. The end of the mutual recognition principle can be deplored, but it is not expected to negatively impact manufacturers participating in the EU programme. The Commission will nonetheless take appropriate steps to ensure that the US requirements do not put EU exporters at a disadvantage.
- Given that public procurement has been indicated by manufacturers as the primary driver for their participation in the programme, and also considering that a significant proportion of them participate in public tenders in Member States other than where they are established, the public procurement clause in Regulation (EC) No 106/2008 should be kept. The possibility of extending it beyond central government authorities should be explored.
- In the light of evidence that, due to the rapid evolution of the market and technology, ENERGY STAR does not always designate the most efficient products on the market, specifications should be regularly and frequently revised.
- Although available data shows a high degree of compliance the Commission and Member States should closely cooperate on the thorough enforcement of the Programme and should review the effectiveness of this enforcement no later than 18 months after the conclusion of the Agreement.
- The Commission will continuously monitor the impact of the changes proposed by the USA and of the ENERGY STAR Programme on energy savings and manufacturers at least one year before the expiry of a new Agreement it will analyse possible future options for addressing the energy consumption of office equipment, including replacing ENERGY STAR with alternative policy instruments.