



United States Environmental Protection Agency
Energy Star Computers Program
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New MOU Agreement - Summary of Changes

PC/MONITOR

THE NEW MOU DOES NOT CHANGE:

- The new MOU does not change the 30 Watt target for PCs and Monitors.
- The new MOU does not change the program's structure.

THE NEW MOU DOES CHANGE THE FOLLOWING:

- Power management features must be activated before shipping with initial default times preset for between 15 and 30 minutes.
- Partners must inform and educate users about power management features (i.e. this PC goes to sleep & blanks the screen, how to change default times, savings associated with using the feature, etc.). Partner determines the best manner to accomplish this; acceptable approaches include: user's manual, on-line tutorial, special brochure in shipping box, etc.
- PCs must include one or more mechanisms to power down an Energy Star monitor.
- PCs must be able to "sleep" in any operating system pre-installed before shipping, unless clearly stated in product literature.
- It is preferred that PCs intended for use on a network will not be inadvertently disconnected when in sleep mode. Partners shall attempt to provide general guidelines to consumers regarding network compatibility. If a specific Energy Star model is not designed for use on a network, then Partner shall clarify this in user's manuals and datasheets.

WHEN THE NEW MOU TAKES EFFECT:

- In order to allow time for Partners to make necessary changes to their products, *the terms of the new MOU will apply to product models that begin shipping after October 1, 1995.* The new MOU is not retroactive - product models on the market before October 1, 1995, can retain their Energy Star designation.
- EPA will mail out a custom MOU to all PC & Monitor partners the first week in November. Companies can sign the new MOU as soon as they wish.

**Memorandum of Understanding between
The United States Environmental Protection Agency
and
(Computer / Monitor Company)**

I. Common Agreements and Principles

- A. This is a voluntary agreement between *(Computer / Monitor Company)* ("EPA Energy Star Partner" or "Partner") and the United States Environmental Protection Agency (EPA), by which *(Computer / Monitor Company)* joins the EPA Energy Star Program. The terms of this MOU shall apply to personal computers and monitors sold by Partner under its own brand name(s).
- B. EPA Energy Star Partner and EPA agree that the primary purpose of the EPA Energy Star Program is to promote the manufacturing and marketing of energy-efficient equipment, thereby potentially reducing combustion-related pollution.
- C. EPA Energy Star Partner and EPA agree that the use of energy-efficient equipment may also increase profits and competitiveness.
- D. EPA Energy Star Partner and EPA agree that the EPA Energy Star Program may also improve or enhance equipment's useful lifetime, customer satisfaction, and overall product quality.
- E. EPA Energy Star Partner and EPA agree that publicizing the EPA Energy Star Program is important to demonstrate the following: the concern of Partner for the environment, the vitality of the free enterprise system in reducing costs, and the capability of voluntary programs to achieve environmental goals.
- F. EPA Energy Star Partner and EPA agree that maintaining public confidence in the EPA Energy Star Program is critical to achieving the shared goals of Partner and EPA.
- G. EPA Energy Star Partner and EPA agree that membership in the EPA Energy Star Program is essential to the cooperative effort to achieve the shared goals stated above.

II. Definitions

- A. **Personal computer:** A commercial desk-top, desk-side, or smaller single-user unit manufactured and sold as a fully-operational model. To qualify, the unit must be capable of being powered from a wall outlet, but this does not preclude battery powered units. Exit outlets mounted on the system enclosure for the connection of peripheral equipment which impose no load on the system power supply are not included in the wattage calculation. Fans and other devices necessary for the operation of the unit are included in the wattage calculation. This definition is intended primarily to cover standard personal computers sold for use in businesses or homes. For purposes of this MOU, however, the following may also be considered personal computers: workstations, X-terminal controllers, Automatic Teller Machines (ATM's), and PC-based point-of-sale retail terminals.
- B. **Monitor:** A cathode-ray tube (CRT), liquid crystal display (LCD) or other display device and its associated electronics. A monitor may be sold separately or included in the computer casing. This

definition is intended primarily to cover standard monitors designed for use with personal computers. For purposes of this MOU, however, the following may also be considered a monitor: mainframe terminals (sometimes called "dumb" terminals) terminals with some processing power and designed for use in a client/server environment (sometimes called "smart" terminals), and physically separate display units for ATM's and point-of-sale retail terminals.

C. All-In-One System: This category covers systems where the personal computer and monitor are combined into a single unit. Such systems meet all of the following criteria: the display unit is included in the computer casing; it is not possible to measure the power consumption of the two components separately; and the system is connected to the wall outlet through a single power cable.

III. Entry into Force and Duration

A. Both parties agree that any previously executed MOU between both parties on the subject of Energy Star computers and monitors shall be terminated effective September 30, 1995.

B. Both parties agree that the terms outlined in this new MOU shall become effective on October 1, 1995, though Partner may choose, at its discretion, to implement the new terms prior to this date.

C. Both parties agree to the following schedule for phasing in the new specifications contained in this MOU.

1. Computer and monitor models that Partner begins to ship prior to September 30, 1995 may be qualified under Section II.B. of the prior MOU. Once such models are qualified as Energy Star compliant, they may continue to bear the Energy Star logo until the models are phased out of the market (i.e., the new specifications will not apply retroactively to previously qualified products).

2. Computer and monitor models that Partner begins to ship on or after October 1, 1995 must be qualified under the new specifications outlined in Section IV.B., below.

D. Both parties agree that this agreement can be terminated by EPA Energy Star Partner or EPA at any time, and for any reason, with no penalty. However, both parties agree that termination for noncompliance would only occur in accordance with the procedures of Section VII., below.

IV. EPA Energy Star Partner's Responsibilities

A. EPA Energy Star Partner agrees to appoint a responsible representative of the company as liaison with EPA for the EPA Energy Star Program and to notify EPA within one month of any change in liaison responsibility. (See Attachment.)

B. Product Qualification for the EPA Energy StarSM Logo

EPA Energy Star Partner agrees to introduce one or more specific models of personal computer or monitor that meet the specifications outlined below.

1. **Monitors:** An Energy Star monitor shall have the capability to automatically enter a low-power mode of 30 watts or less after a period of user inactivity. Upon resumption of user activity (e.g., movement of the mouse or keyboard activity), the monitor shall automatically return to full operational capability. Monitors that always consume less than 30 W are also assumed to comply. If a special proprietary software other than Display Power Management Signalling ("DPMS") or an industry standard operating system is required to initiate a monitor's low-power mode, the software shall be shipped with the monitor.

2. **Computers:** An Energy Star computer shall satisfy the following conditions:

a. **Power Consumption**

A computer shall automatically enter a low-power "sleep" mode of 30 watts or less after a specified period of inactivity. In order to prevent any inconvenience to the user, a computer in the low-power mode shall automatically "wake up" upon resumption of system activity or receipt of external input (e.g., mouse movement, keyboard activity, typing of a password, modem interrupts, etc.). When the system is awakened, the user shall be returned automatically to the same situation that existed prior to activation of the sleep mode, i.e., all files and software packages in use at the time the sleep mode is triggered shall be returned to the screen in the same condition.¹ Computers that always maintain a level of power consumption less than or equal to 30 watts are also assumed to comply.

In order to ensure that the maximum number of users take advantage of the low-power sleep mode, manufacturers shall ship their computers with the power-management feature enabled, and the default time preset for between 15 and 30 minutes. The user shall have the ability to change or disable the time settings.

b. **Operating Systems**

The proper activation of a computer's low-power mode is typically contingent upon the installation and use of a particular operating system, e.g., DOS, Windows, OS/2, Unix, System 7. If a computer is shipped from the manufacturer with one or more operating systems pre-installed, the computer shall be capable of entering and fully recovering from the low-power sleep mode while running in those operating systems.² If the computer is not shipped with operating system software the

¹ In cases where a security code or password are required, the PC shall be able to return to its previous condition after the user enters the security code or password.

² If a particular product model qualified as Energy Star under this MOU is occasionally sold with an operating system that will not allow proper activation of the sleep mode, then the manufacturer must state this limitation clearly in product literature. For example, if a computer model that is typically shipped with DOS/Windows is occasionally shipped with UNIX then Partner should include a statement in the user's manual and datasheets such as "This computer is Energy Star compliant when used with DOS and Windows, but not when used with UNIX." In brochures or advertisements for these types of product models, Partners shall avoid

manufacturer shall clearly specify which operating systems will render the computer Energy Star compliant. The manufacturer shall include this information in user's manuals and datasheets. Brochures and advertisements shall be worded to avoid misleading interpretations. In addition, if any special software, hardware drivers, or utilities are necessary for the proper activation and recovery of the sleep mode, they must be installed in the computer.

c. Monitor Control

The computer shall include one or more mechanisms through which it can activate the low-power modes of an Energy Star Monitor (e.g., DPMS, special software or utilities, etc.). Partner shall clearly specify in product literature the manner in which its computer can control Energy Star monitors, and any special circumstances that must exist in order for monitor power management to be accomplished.

In order to increase the probability that the end user will utilize the monitor's low-power feature, Partner shall set the computer's default to activate the monitor's low-power state after between 15 and 30 minutes of user inactivity. Partner shall also set default times for successive levels of monitor power reductions, if supported, so that monitors can achieve their lowest power levels. The lowest power level shall be achieved within 70 minutes or less of user inactivity. The user shall have the ability to change or disable the time settings for the monitor control.

This monitor control requirement does not apply to all-in-one systems. However, portable or laptop computers that are marketed and sold as part of a docking system shall have the ability to automatically control the power of an externally-connected monitor.

d. Network Compatibility

Many computers are purchased for use in a network environment. Therefore, it is preferred that the power management function of an Energy Star computer be designed to ensure that, when used according to manufacturer instructions, it will not be inadvertently disconnected from a network while in the low-power sleep mode. To limit potential problems for users, Partner shall attempt to provide general guidelines and information to consumers regarding the effective use of Energy Star computer models on Network environments. For example, a Partner might include in product literature statements regarding network environments and network cards that are compatible with the computer's low-power mode. If a specific Energy Star computer model is not designed or intended for use in a network environment, then Partner shall clarify this situation in user's manuals and datasheets. Advertisements and brochures should be worded to avoid misleading interpretations.

3. All-In-One Computer-Monitor Combinations

The all-in-one system must automatically enter a low-power sleep mode of no more than 60 watts after a specified period of inactivity. Partner shall ship the all-in-one system with the power-

statements that would be misleading or incorrect.

management feature enabled, and the default time set for between 15 and 30 minutes. The user shall have the ability to change or disable the time settings. All-in-one systems that always maintain a level of power consumption less than or equal to 60 watts are also assumed to comply. All of the above criteria for computers shall also be satisfied, except for the section on Monitor control.

C. Partner agrees to perform tests, as necessary, to determine which products comply. Based on the results of these tests, Partner shall self-certify those products that it determines are compliant with the specifications outlined above. Partner may submit information to EPA on compliant products on a voluntary basis.

D. Power consumption shall be measured from the outlet or power supply source, to the product under test. Partner must measure the configurations that it ships to the customer, but the partner does not need to consider power consumption changes that may result from component additions made by the ultimate computer user. See EPA's testing procedure guidelines for more information.

E. Customer Education

1. Product Literature.

It is important that consumers understand the power-management feature of their equipment. Accordingly, Partner shall provide general information to users regarding the Energy Star features of the personal computer or monitor. This information might include the following: a description of the method for changing the power management settings or default times, a description of the Energy Star Program, and a discussion of the savings associated with using the power-management feature. Partner may determine the best manner through which to disseminate this general information to users. Examples of acceptable approaches include: user's manual, on-line tutorial, special brochures included in the shipping box, etc.

For personal computers, Partner shall include in product literature information on the subjects outlined in Sections 2.b., 2.c., and 2.d. above, i.e., compatible operating systems, monitor control, and network compatibility. Partner shall include clear statements addressing these subjects in both the user's manual and on datasheets. Brochures and advertisements shall be worded to avoid misleading interpretations.

For monitors, Partner shall include in product literature specific information regarding the system control features or mechanisms that are necessary in order for the monitor to achieve the 30 W target, e.g., Display Power Management Signalling ("DPMS"), Screen blanking software, special proprietary software, etc. This information shall be clearly specified in both user's manuals and datasheets. Brochures and advertisements shall be worded to avoid misleading interpretations.

2. Logo Usage

In order to help educate users and inform them of the energy saving features of their Energy Star computer or monitor, Partner shall consider placing the Energy StarSM logo on all compliant

products, as well as on their associated shipping cartons, brochures, data sheets and advertisements.

F. EPA Energy Star Partner agrees to provide information about the Energy Star Program to all of its employees whose jobs are relevant to the development, marketing, sales, and service of Energy Star products.

G. At EPA's request, Partner will attempt to locate customers who have profited from the program and are willing to share information about performance and savings, as well as employees who have contributed in its success. This customer or employee supplied information is to be without reference or endorsement of specific Partner, specific products, or other supply sources.

H. EPA Energy Star Partner understands that participation in the EPA Energy Star Program does not constitute EPA endorsement of Energy Star Partner or its models.

V. EPA's Responsibilities

A. EPA agrees to designate a single liaison point for the EPA Energy Star Program, and to notify Partner within one month of any change in liaison responsibilities. Please send signed MOU and other correspondence to this person. (See Attachment.)

B. EPA agrees to accept the test data as submitted by Partner, whether it is self-determined or determined by an independent third party. EPA will not officially approve any individual test reports submitted by Partner. Therefore, Partner shall not include misleading statements in product literature that imply a product is approved or certified by the EPA, i.e., Partner shall not make claims such as "this computer is EPA approved," or "this monitor is EPA certified." While this is a self-certifying process, EPA reserves the right to conduct tests on products bearing the EPA Energy StarSM logo from either the open market or other available sources, or voluntarily received from Partner.

C. EPA agrees to make an effort to encourage consumer acceptance of products introduced under this agreement and bearing the EPA Energy StarSM logo.

D. EPA agrees to provide Partner with recognition for its public service in protecting the environment by performing analyses about the pollution prevented by corporate participants, and providing this and other program information to appropriate news media sources for publication.

E. EPA agrees to promote energy-efficient equipment, and to inform consumers about the EPA Energy Star Program and EPA Energy StarSM logo by writing articles and/or cooperating with the news media by sharing information, where appropriate.

F. EPA agrees to work with Partner independently and/or in conjunction with other Partners to coordinate the placement of advertisements to promote energy-efficient equipment, educate consumers about the EPA Energy Star Program and logo, and provide Partner with due recognition for its public

service in protecting the environment.

VI. Use of the EPA Energy StarSM Logo

- A. EPA agrees to loan partner, at no charge, materials from which Partner can reproduce the Energy StarSM logo.
- B. Partner may associate the Energy StarSM logo with products that Partner has determined meet the specifications outlined in section IV.B. Partner may place the logo directly on qualified products, as well as on associated packaging, literature, and advertisements for qualified products. See EPA's Logo usage guidelines for more details and specific examples.
- C. It is the responsibility of the Partner to associate EPA, the EPA Energy StarSM logo, and the EPA Energy Star Program only with those specific models, in their configuration as shipped from the Partner, that qualify under the terms and conditions of this MOU
- D. When the EPA Energy StarSM logo is used, Partner agrees that it shall be accompanied by the following statement: "As an Energy Star Partner, (*Computer / Monitor Company*) has determined that this product meets the Energy Star guidelines for energy efficiency." If the Energy StarSM logo is applied directly to the product or product packaging, Partner may place this statement in the user's manual.
- E. Partner shall not utilize the logo in a manner that might imply EPA endorsement of the Partner or of Partner's products.
- F. EPA Energy Star Partner agrees not to alter the EPA Energy StarSM logo.
- G. If either EPA or Partner terminates this Agreement, Partner will no longer be entitled to apply the EPA Energy StarSM logo to newly manufactured products, and will no longer make reference to the EPA Energy Star Program so as to construe continuing involvement in the program.

VII. Conflict Resolution

- A. Each party agrees to assume good faith as a general principle for resolving conflicts under the EPA Energy Star Program.
- B. Both parties agree to informally notify each other if any problems or issues arise and to work together to provide maximum public confidence in the program.

C. Procedure for Addressing Noncompliant Products.

1. If EPA receives information that one or more products certified by Partner as Energy Star compliant may not meet all of the terms of this MOU, then EPA will immediately notify Partner and attempt to address and resolve the problem informally.

2. If these informal discussions do not produce a mutually agreeable resolution, EPA shall notify Partner in writing that Partner shall be terminated from the program unless it undertakes the specific corrective actions sought by EPA. Partner agrees to reply to EPA in writing within 20 business days of receiving EPA's letter. At that time, Partner shall agree to do one of the following: (a) undertake in a timely and effective manner, the corrective actions sought by EPA; or (b) voluntarily terminate this agreement. If Partner does not respond to EPA's letter within 20 business days, or responds but does not agree to either (a) or (b), then this agreement is terminated.

D. If EPA Energy Star Partner believes that EPA is not meeting all of its commitments, Partner agrees to formally notify EPA in writing. EPA agrees to respond in writing within 20 business days of receiving Energy Star Partner's letter. At that time, EPA will do one of the following: (a) undertake the corrective actions sought by Partner, or (b) explain why such corrective actions can not be undertaken.

VIII. Freedom of Information Act and Confidential Business Information

Both parties understand that information provided by Partner to EPA will be treated pursuant to EPA's public information regulations under 40 Code of Federal Regulations, Part Two.

* * * * *

As representatives of EPA and (*Computer / Monitor Company*), we, the undersigned, do hereby execute this Memorandum of Understanding on the latter of the dates indicated below.

For the U.S. Environmental Protection Agency (EPA):

Signature: _____ Date: _____

Name: Paul Stolpman
Title: Director, Office of Atmospheric Programs

For (*Computer / Monitor Company*):

Signature: *sample - sample - sample* _____ Date: _____

Name: _____

Title: _____

TO JOIN THE PROGRAM, please fill out this form (print neatly or type), attach a brief product line description, and fax it to 202-233-9578 to receive a customized Computer/Monitor Memorandum of understanding. Custom Agreements are sent by mail so please allow 5-10 business days for it to arrive.

Company name exactly as you would like it to appear on the agreement:

Name of contact person:

Company Address: