## List of Eco Symbol Star Products (Hardware)

## FY 2013/3 Eco Symbol Star Products

Certified Products		Criteria	Results and Strengths (Note: At the time the Eco Symbol Star mark is obtained)
TV transmitter for digital terrestrial broadcasting	DTU-50E series	Global warming: Industry-first use of technology to reduce customer's CO <sub>2</sub> emissions	Achieves a 40% reduction in power consumption compared with transmitters used in Tokyo Tower. This is the first time NEC has successfully used a Doherty amplifier* in a digital TV transmitter in Japan or overseas. *An amplifier that uses a technique that improves the amplification efficiency. The amplifier consists of a carrier amplifier and a peaking amplifier connected in parallel.
VPN router for corporate use	UNIVERGE IX2215	Global warming: Achievement of a CO <sub>2</sub> emissions reduction rate of 50% or higher	Consumes 75% less power than previous product (UNIVERGE IX2025, released in FY 2010/3) (on a 100 Mbps VPN*). Provides the best energy performance (VPN performance per watt of power) of all comparable products on the Japanese market The first router in the industry to incorporate an Eco Schedule feature that allows users to control the speed of the Ether port in the router itself and all network devices connected to it according to the time, date, and day on which energy savings are required. *Virtual private network A VPN is a service that enables a public network to be used as if it was a private network. VPNs are used because they are less expensive than installing private networks.
Hardware virtualization technology	ExpEther	Technological superiority: This NEC technology overwhelmingly contributes to a reduction in environmental impact.	The ExpEther system has reduced the power consumed in the classrooms at Osaka University to one-twentieth of previous amounts, generates less heat and noise, and provides significant space savings. The ExpEther Client won a Good Design Award in 2012 for its original design promoting power savings and contributing to a sustainable society. In a world-first achievement, ExpEther enables the conventional PCI Express interface found in most computers to be expanded over a network. ExpEther improves the efficiency of air conditioning in datacenters and optimizes systems to lower power consumption, helping reduce the environment impact of all IT devices. Also by enabling hardware devices to be shared, ExpEther raises the efficiency of IT systems, leading to reduced CO <sub>2</sub> emissions from IT devices.

Certified Products		Criteria	Results and Strengths (Note: At the time the Eco Symbol Star mark is obtained)
MultiSync Series public display	MultiSync LCD- X401S	Technological superiority: This NEC technology overwhelmingly contributes to a reduction in environmental impact.	This flat-screen (5 cm max.) 40-inch public display has a world-beating luminance of 700cd*/m2 and features a low profile, light weight, narrow frame, and low power consumption. The optimum luminance is set automatically by adjusting to ambient brightness and darkness through ambient light control (open air sensor), reducing wasteful power consumption. Achieves a 24% reduction in power consumption compared with LCD-P402 (released in FY 2012/3). *Unit used to express light intensity
Business PCMate Series	Type MC	Global warming: Achievement of a CO <sub>2</sub> emissions reduction rate of 50% or higher Technological superiority: This NEC technology overwhelmingly contributes to a reduction in environmental impact.	Achieves a 57% reduction in power consumption compared with PC- MK31M/B-D (released in FY 2012/3). Provides a battery to reduce power consumption while the computer is idling and on standby. The battery charges slowly, suppressing surges in power consumption and enabling smoothing at power consumption levels similar to when the computer is idling. The large-capacity in-built battery allows a desktop computer to provide full-time peak shifting over an entire 9-hour work shift for the first time in the industry, contributing to office energy savings.
MultiSync Series public display MultiSync LCD- V552		Global warming: Achievement of a CO <sub>2</sub> emissions reduction rate of 50% or higher Technological superiority: This NEC technology overwhelmingly contributes to a reduction in environmental impact.	Achieves a 50% reduction in power consumption compared with LCD-V551 (released in FY 2012). This 55-inch public display features the one of the best energy efficiency ratings in the world in its class (100 W during normal operation).
MultiSync Series public display	<ul> <li>MultiSync LCD-V652</li> <li>MultiSync LCD-V463</li> <li>MultiSync LCD-V423</li> </ul>	Technological superiority: This NEC technology overwhelmingly contributes to a reduction in environmental impact.	Has an OPS*-compliant option slot and is one of the thinnest and lightest public displays in the world in its class. *Open pluggable specification A control module and slot specification for digital signage applications, released by Intel in October 2010.



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Uncooled infrared sensor	HX0841	Resource conservation: Industry-first application of new technology Recognition: Received public award	<ul> <li>Adopts a Peltier-less temperature control method in which the high-power-consuming Peltier element used to control the sensor's temperature is replaced by an energy-efficient heater and sensor controller, reducing the power consumption by 42% compared to the HX0839 (released in FY 2009/3).</li> <li>Received the Science and Technology Prize (Development Category) at the FY 2012/3 Minister of Education, Culture, Sports, Science and Technology Awards in recognition of its contribution to solutions in a wide range of fields related to helping society, such as environment measurement applications (for monitoring the status of global warming).</li> <li>*A thermoelectric element used in electronic devices. Peltier elements are advantageous in terms of saving space in electronic equipment, but have the disadvantage of discharging a large amount of heat themselves, creating the need for a high-power-consuming cooling mechanism.</li> </ul>

The following are products that have been certified as successor products.

Business PCMate Series	Type MG	Successor model to Type MG* * Acquired Eco Symbol Star certification in FY 2012/3
Server Express5800 seriesK	Express5800/R110e-1E Express5800/GT110e Express5800/GT110e-S	Successor model to Express5800/R110-d-1E, GT110d, GT110d-S* * Acquired Eco Symbol Star certification in FY 2012/3
WiMAX mobile router	AtermWM3800R	Successor model to AtermWM3600R* * Acquired Eco Symbol Star certification in FY 2012/3

\* Includes products no longer on the market

