

08. Mar, 2010

**SANYO Adds “eneloop lite” to “eneloop” Rechargeable Battery Family**

*Industry-Leading! Recharge up to Approx. 2,000 times<sup>\*1</sup> Ready to Use even after 3 Years of Storage<sup>\*2</sup>*



Tokyo, March 8, 2010 – SANYO Electric Co., Ltd. (SANYO) is pleased to announce “eneloop lite”, the latest addition to the “eneloop” rechargeable battery product line, continuing the vision to promote “a lifestyle that values reusing and recycling.” The new “eneloop lite” rechargeable battery is ideal for use in low-to-medium power consumption devices, such as remote controls and alarm clocks. The product will be released on June 22, 2010 in Japan<sup>\*3</sup> and will be available in AA- and AAA-sizes, at 780 yen (AA) and 640 yen (AAA). SANYO also aims to release the new battery globally in the future.

Today, with people’s mounting environmental and economic awareness, interest in rechargeable batteries is increasing. At the same time, dry cell users desire an “attractive price” and “shorter charging time.” In response, in December 2008, SANYO launched initial sales in limited areas of Asia of lower-priced lower-capacity rechargeable battery models based on a concept similar to that of “eneloop,” in order to facilitate diffusion of rechargeable batteries. Now, to meet these demands more proactively, SANYO is adding the new “eneloop lite” in sizes AA and AAA to its product lineup as entry model rechargeable batteries. Coming pre-charged to ensure dry-cell equivalent user-friendliness by being usable immediately out of the box, and with low self-discharge properties allowing the batteries to be ready to use even after 3 years of storage, “eneloop lite” is also a rechargeable battery with smaller capacity than the “eneloop”, is attractively priced and carries the industry leading number of cycles, being rechargeable up to approximately 2,000 times<sup>\*1</sup>. Just as the “eneloop,” the batteries are pre-charged at the factory using electric power generated from solar energy as part of the “Green Power Certification System<sup>\*4</sup>.” While following the original “eneloop” design concept, the “eneloop lite” is designed to be distinguishable from the “eneloop” already available.

SANYO will continue to expand the “eneloop” series throughout the world so that people can comfortably adopt a new “lifestyle that values reusing and recycling.”

Product	Nickel-metal Hydride Rechargeable Battery	
Product Name	eneloop lite	
Product Number	HR-3UQ-2BP AA-size 2-unit pack	HR-4UQ-2BP AAA-size 2-unit pack
MSRP (incl. tax)	780 yen	640 yen
Release Date	June 22, 2010 (Japan) <sup>*3</sup>	

<sup>\*1</sup> General estimate based on the JIS C8708 2007 (7.4.1.1) testing conditions (The number of times a battery can be recharged changes according to the use conditions and equipment used.)

<sup>\*2</sup> A fully-charged battery will be capable of discharging 75% of its initial capacity after 3 years of storage at room temperature. (Size AA: 200mA discharge current, 1.0V/cell discharge cutoff voltage)

<sup>\*3</sup> This product will be available in Japan only as of the Release Date (June 22, 2010)

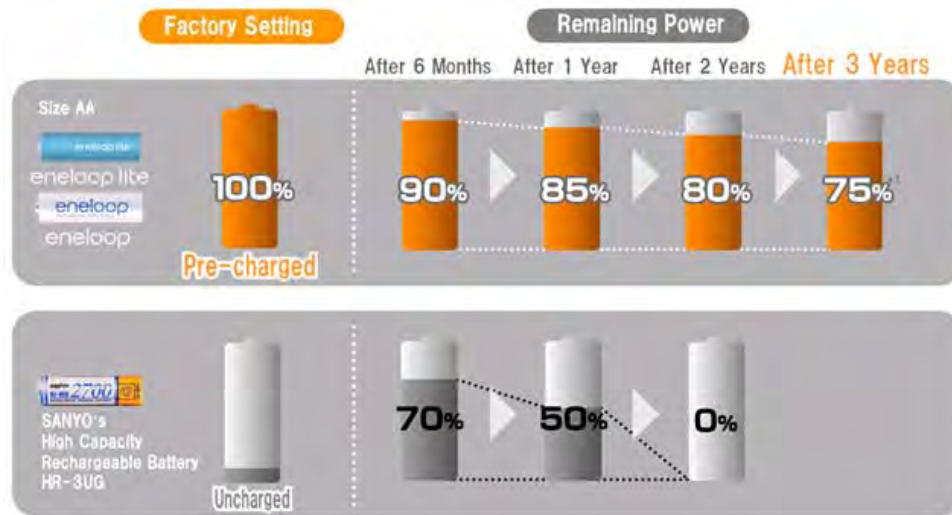
<sup>\*4</sup> Through the Green Power Certification System, the amount of energy equivalent to that used for factory pre-charging is covered by “Green Power” generated from solar energy.

## Main Features

### 1. Dry-cell equivalent convenience through “eneloop’s” original self-discharge control technology: “usable immediately after purchase” and “a charged battery ready to use even after 3 years of storage”<sup>\*2</sup>

Just as the “eneloop,” SANYO’s industry-leading “self-discharge control technology” is used for the “eneloop lite.” Batteries are fully pre-charged at the factory to offer dry-cell equivalent user-friendliness by “being usable immediately after purchase” without initial charging. A fully-charged battery is capable of holding 75%<sup>\*2</sup> of its initial capacity even after 3 years of storage, which is convenient for users who use batteries only every once in a while.

Remaining Power of Rechargeable batteries



### 2. Industry-leading rechargeable battery, rechargeable “approximately 2,000 times”<sup>\*1</sup>

Battery characteristics, such as “capacity” and “number of times rechargeable,” are a trade-off. Based on the longer life technology acquired through the development of the “eneloop” etc. and by adjusting the material constitution and making the battery capacity smaller than the “eneloop,” SANYO realized the “eneloop lite,” an industry-leading rechargeable battery reusable “approximately 2,000 times”<sup>\*1</sup>. Compared to disposable dry cells, the “eneloop lite” is highly economical and environmentally friendly. In addition, it eliminates the hassle of going out to get new ones when the stock of dry cells run out and helps to reduce waste batteries.

### 3. “User-friendly rechargeable battery – lightweight; attractive price; and shorter recharging time

Through reviewing the battery design and reducing the amount of materials used, attractive prices have been realized, approximately 30% less than the “eneloop.” In addition, reduced capacity leads to faster charging, for example, the charging time of a size AA “eneloop lite” battery is half compared to that of a size AA “eneloop.”

Further, the “eneloop lite” is lighter than the “eneloop.” For example, a size AA “eneloop lite” weighs approximately 19g which is approximately 30%<sup>\*5</sup> lighter than a size AA “eneloop” (approx. 27g) and approximately 15%<sup>\*5</sup> lighter than a SANYO size AA alkaline manganese dry cell (approx. 22.5g). Lighter batteries are especially convenient for devices that use multiple batteries and when many batteries need to be carried.

The specifications are such that the “eneloop lite” is attractive for first-time rechargeable battery users.

## Other Features

-While maintaining the design concept of the “eneloop” already available, a new name and new design adopted to make the distinction.



- Pre-charged at the factory using electric power generated from solar energy as part of the "Green Power Certification System"<sup>4</sup>
- Outer covering label used to prevent damage from repeated mounting/dismounting.
- "Antibacterial finishing"<sup>6</sup> ideal for business places, schools, and hospitals where one battery is handled by multiple people.
- Can be recharged anytime without worrying about memory effect.

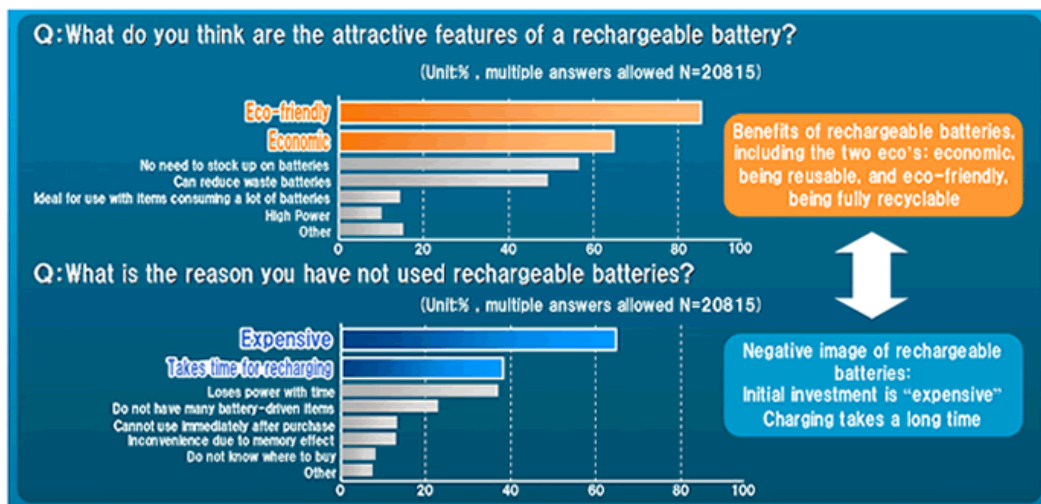
## Outline and Background

Since its first release in November 2005, the "eneloop" has received high market appraisal for its dry-cell equivalent user-friendliness: "usable immediately after purchase and a charged battery ready to use even after 3 years of storage" and for its economic and environmental benefits by being rechargeable for repeated use. The "eneloop" is sold in over 60 countries worldwide and more than 110 million cells have been shipped in total (as of January 31, 2010). In Japan, the current recognition rate is approximately 77%<sup>7</sup> and the diffusion rate approximately 25%<sup>7</sup>. As its popularity grows, use of the "eneloop" is expanding from digital cameras and game consoles to low-to-medium power consumption devices which have commonly been driven by dry cells, such as remote controls, clocks, and flashlights.-

At the same time, while dry cell users recognize the appealing features of the rechargeable battery: "economic," "eco friendly," and "convenience of not having to stock up on batteries and no need to discard waste batteries," they desire an "attractive price" and "shorter charging time."

In December 2008, SANYO launched initial sales in limited areas of Asia of lower-priced lower-capacity rechargeable battery models based on a concept similar to that of "eneloop," in order to facilitate diffusion of rechargeable batteries. SANYO is adding the "eneloop lite" in sizes AA and AAA to its product lineup as an entry model rechargeable batteries reusable "approximately 2,000 times." The "eneloop lite" is first being released in Japan with a view to global release in the future.

Attitudes toward rechargeable batteries of people who have not purchased rechargeable batteries  
(SANYO Internet Survey)



## Specifications

Product	Nickel-Metal Hydride Rechargeable Battery	
Product Name	eneloop lite	
	Size AA	Size AAA

Product Number	HR-3UQ	HR-4UQ
Nominal Voltage	1.2V	
Rating Capacity (min.)* <sup>8</sup>	950mAh	550mAh
Dimensions	14.35mm (diameter) x 50.4mm (height)	10.5mm (diameter) x 44.5mm (height)
Weight	Approx. 19g	Approx. 11g

\*1 General estimate based on the JIS C8708 2007 (7.4.1.1) testing conditions (The number of times a battery can be recharged changes according to the use conditions and equipment used.)

\*2 A fully-charged battery will be capable of discharging 75% of its initial capacity after 3 years of storage at room temperature. (Size AA: 200mA discharge current, 1.0V/cell discharge cutoff voltage)

\*3 This product will be available in Japan only as of the Release Date (June 22, 2010)

\*4 Through the Green Power Certification System, the amount of energy equivalent to that used for factory pre-charging is covered by "Green Power" generated from solar energy.

\*5 Comparison with SANYO size AA eneloop (HR-3UTGA) and SANYO size AA alkaline manganese dry cell (LR-6D)

\*6 Type of antibacterial agent: Inorganic antibacterial agent; Processing method: Printing; Processing site: Outer covering; Testing institute: Japan Spinners Inspecting Foundation; Antibacterial activity ratio: 2.6 or higher

\*7 Based on SANYO's Internet survey conducted in January 2010, covering 30,000 persons

\*8 Minimum (min.) battery capacity based on the JIS C8708 2007(7.2.1) testing conditions