

Stationary ESS (Energy Storage System) Market in Japan: Key Research Findings 2015

◆ **Research Outline**

Yano Research Institute has conducted a study on the Stationary ESS (Energy Storage Systems) market with the following conditions:

1. Research period: From May to September, 2015
2. Research targets: Manufacturers of domestic leading stationary ESS and market players relating to storage systems
3. Research methodologies: Face-to-face interviews, surveys via email/telephone, and literature research

What are Energy Storage Systems?

Stationary ESS (Energy Storage Systems) in this research indicates the following five types of storage systems: Lead-acid batteries, LIBs (Lithium-ion batteries), nickel-hydrogen batteries, redox flow cells, and Na-S batteries. This research classified the stationary ESS market into the following five categories according to the installed place and segment.

- 1) For Residence: ESS installed mainly at detached houses. Those that are used at apartments and condominiums are included.
- 2) For Power Systems: ESS installed at power plants and substations, co-installed at recyclable energy power supplies, micro grid systems used in isolated islands, for ESS demands at new electric power companies.
- 3) For Industrial/Business Use: Electric storage devices to take measures of BCP (Business Continuity Plans), and Peak-shift/Peak-cut/Peak-backup ESS at facilities and other large companies.
- 4) For Public Facilities: ESS for schools and community centers.
- 5) Others: ESS installed for Railroad and others.

◆ **Key Findings**

■ **Domestic Stationary ESS (Energy Storage Systems) Market Size Projected to Attain 581,491kWh in 2015, and 1,195,708kWh by 2017, Driven by ESS for Residence**

The stationary ESS (energy storage systems) market in 2015 is likely to attain 581,491kWh, 194.1% of the size of the previous year, based on the shipment volume of manufacturers. More than 50% of the stationary ESS market share by sector is occupied by those for residence, which is driving the entire market.

The enterprises that handle ESS for residence are promoting packaged ESS with PV (Photovoltaic power generation) for future sales. They also propose the products for existing PV users, in view of the market beyond 2019, when 10-year contracts for the FIT programs for excessive electric power end. Although there is a concern that the market growth rate may slowdown in 2016 depending on the subsidies from the government, the above-mentioned promotions and proposals can prevent the market from slowing down and revitalize it. Backed by rising renewable energies and changes in the electric power market, the demands of ESS for power systems and for industrial/business use are likely to expand.

The stationary ESS market for 2017 is, therefore, expected to attain 1,195,708 kWh, based on the shipment volume of manufacturers.

■ **Domestic Stationary ESS Market Projected to Achieve 3,306,600 kWh by 2020, Three Times Larger than in 2017**

The stationary ESS (energy storage systems) market, based on the shipment volume of manufacturers, in 2020 is expected to achieve 3,306,600kWh, 276.5% of the volume in 2017. The market share by sector continues to be dominated by ESS for residence, which is expected to occupy 66.0%, followed by ESS for power systems accounting for 16.9% and for industrial/business 14.5%.

◆ **Report format:**

Published report: “Stationary ESS (Energy Storage Systems) Market 2015”

Issued on: September 25, 2015

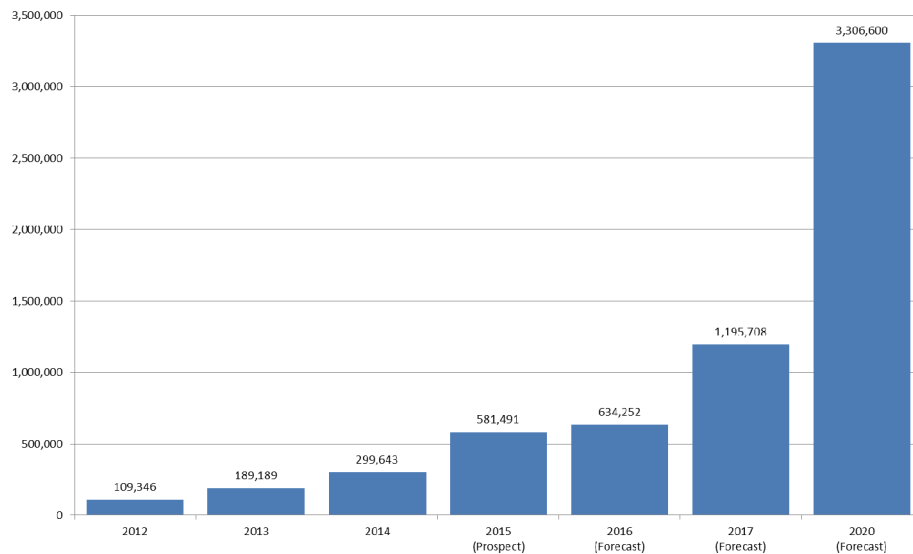
Language: Japanese

Format: 270 pages in A4 format

Price: 180,000 yen (The consumption tax shall additionally be charged for the sales in Japan.)

<p>Contacts: Public Relations Yano Research Institute Ltd. (URL: http://www.yanoresearch.com) Phone: +81-3-5371-6912 E-mail: press@yano.co.jp</p>

■ **Figure & Table 1: Transition and Forecast of Stationary ESS (Energy Storage Systems) Market Size**



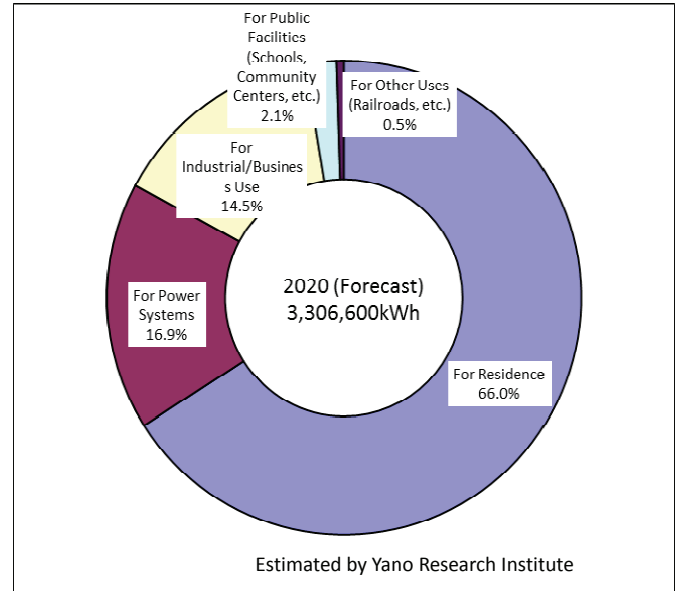
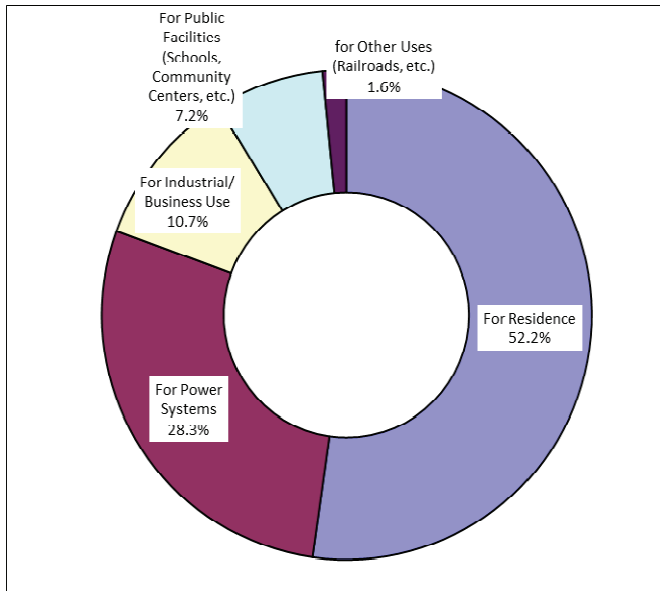
	2012	2013	2014	2015 (Prospect)	2016 (Forecast)	2017 (Forecast)	2020 (Forecast)
Stationary ESS Market Size	109,346	189,189	299,643	581,491	634,252	1,195,708	3,306,600
Y-o-Y	—	173.0%	158.4%	194.1%	109.1%	188.5%	276.5%

Estimated by Yano Research Institute

Notes:

1. The market size is based on the shipment volume (kWh) of manufacturers.
2. The values in 2015 are prospects, and in 2016 and beyond are forecast.
3. Y-o-Y value in 2020 is the value compared from that in 2017.

■ **Figure2: Estimated Composition Ratio of Stationary ESS (Energy Storage Systems) Market in 2015 (Prospect) and 2020 (Forecast) by Sector**



Notes:

4. The market size is based on the shipment volume (kWh) of manufacturers.
5. The figures of 2015 are prospect, and those of 2020 are forecast.