Yano Research Institute

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RESEARCH SUMMARY

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Global Idle Reduction System Market: Key Research Findings 2015

◆ Research Outline

Yano Research Institute has conducted a study on the global idle reduction system market with the following conditions:

1. Research period: From July to September, 2015
2. Research targets: Auto manufacturers, vehicle electronics system manufacturer, and etc.
3. Research methodologies: Face-to-face interviews, telephone and mail-in surveys in combination with literature research

What is the Idle Reduction System Market?

An idle reduction system is a technology that automatically stops the engine when the vehicle stops and automatically restarts it when the vehicle starts moving again, aiming to minimize the amount of time drivers idle their engines. This research targets all passenger automobiles and commercial vehicles equipped with particular sectors of the idle reduction system market, which are engine restart, power management and etc.

Note that an idle reduction function within a hybrid car largely differs from an idle reduction system in that the latter requires engines as its sole power source whereas a full-hybrid car is able to run using only motors. Therefore, this research does not include such a function within hybrid cars. Also note that 48V systems are not included in the global number of idle-reduction-system introduced vehicles.

◆ Key Findings

- **14,330 Thousands Vehicles Equipped with Idle Reduction Systems were Sold in 2014, Projected to be 39,700 Thousands by 2020 and 53,700 Thousands by 2025, Driven by Markets in North America and China**

  Global number of vehicles equipped with idle reduction systems sold reached 14,330 thousands in 2014. The market is currently driven by European and Japanese markets. However, considering that the vehicles in these regions have already adopted the system at high rates, and that such conventional internal-combustion-engine vehicles are likely to decrease toward the future, the idle reduction system market is likely to be driven by the markets in North America and China where the vehicles have low adoption rate of idle reduction systems.

- **Expanding are High-Value-Added Systems in Japan and Europe, and Dual-Power Supply Types**

  Since increasing number of vehicles with idle reduction systems of high values such as regenerative controls and inertia traveling or even motor assists for higher efficiency are expected, and those single power-supply types equipped with DC-DC converters are likely to be replaced by dual power-supply types with a sub battery. Those vehicles with dual power-supply types reached 3,200 thousand as of 2014, and likely to expand to 11,250 thousand by 2020.

■ **48V-Introduced Vehicles Projected to Expand to 2,380 Thousands by 2020, 8,950 Thousands by 2025**

48V systems, kinds of advanced type of idle reduction systems, are gaining ground in the European markets where some measures against the fuel regulations are needed. The global number of vehicles installed with 48V systems sold are likely to attain 2,380 thousands by 2020, after which the markets in China and other Asian and emerging countries follow suit to expand the number to 8,950 thousands by 2025.

◆ Report format:

Published report: "Idle Reduction System Market 2015"
Issued on: September 30, 2015
Language: Japanese
Format: 156 pages in A4 format
Price: 130,000 yen (The consumption tax shall additionally be charged for the sales in Japan.)

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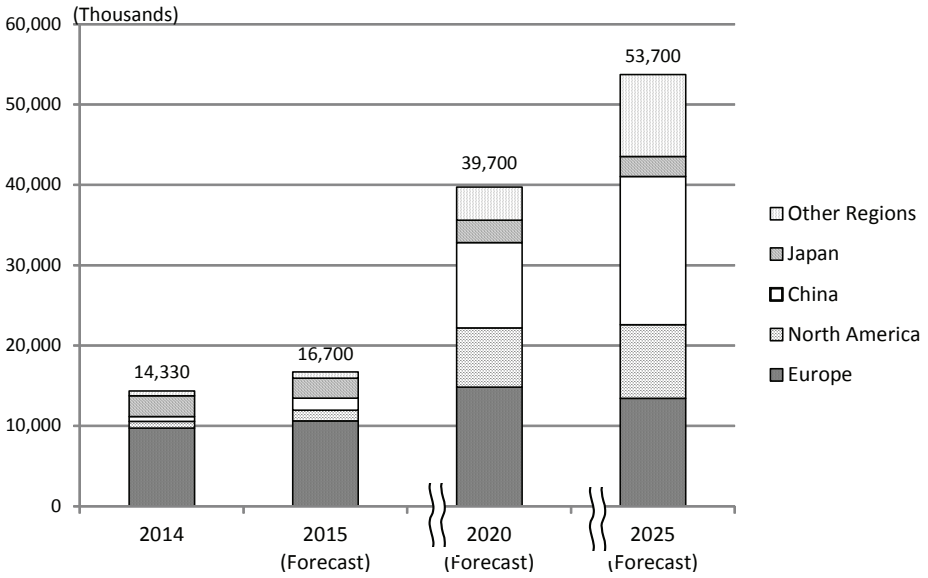
■ **Figure & Table 1: Forecast of Global Number of Idle-Reduction-System Installed Vehicles Sold by Region**

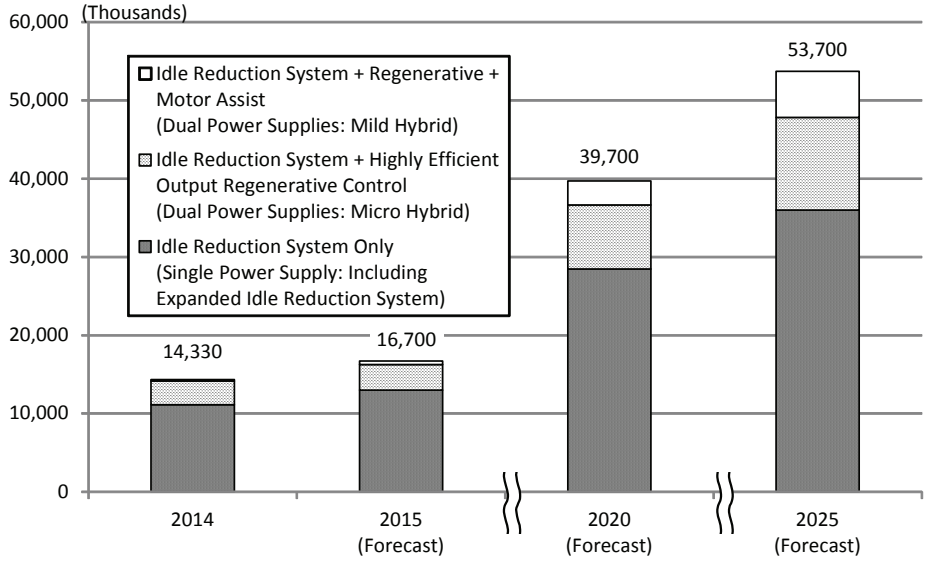


By Region	2014	2015 (Forecast)	2020 (Forecast)	2025 (Forecast)
Europe	9,700	10,600	14,800	13,400
North America	850	1,350	7,400	9,200
China	600	1,500	10,600	18,400
Japan	2,600	2,500	2,800	2,500
Other Regions	580	750	4,100	10,200
Global Number of Idlee-Reduction-System Installed Vehicles Sold (Total)	14,330	16,700	39,700	53,700

Notes:
1. The figures are based on the number of new vehicles installed with the system.
2. No 48V systems are included.

Estimated by Yano Research Institute

■ **Figure & Table 2: Forecast of Global Number of Idle-Reduction-System Installed Vehicles Sold by Function**



By Function	2014	2015 (Forecast)	2020 (Forecast)	2025 (Forecast)
Idle Reduction System Only (Single Power Supply: Including Expanded Idle Reduction System)	11,140	13,000	28,450	36,000
Idle Reduction System + Highly Efficient Output Regenerative Control (Dual Power Supplies: Micro Hybrid)	3,010	3,260	8,200	11,800
Idle Reduction System + Regenerative + Motor Assist (Dual Power Supplies: Mild Hybrid)	180	440	3,050	5,900
Global Number of Idlee-Reduction-System Installed Vehicles Sold (Total)	14,330	16,700	39,700	53,700

Estimated by Yano Research Institute

Note:

3. The figures are based on the number of new vehicles installed with the system.

4. No 48V systems are included.