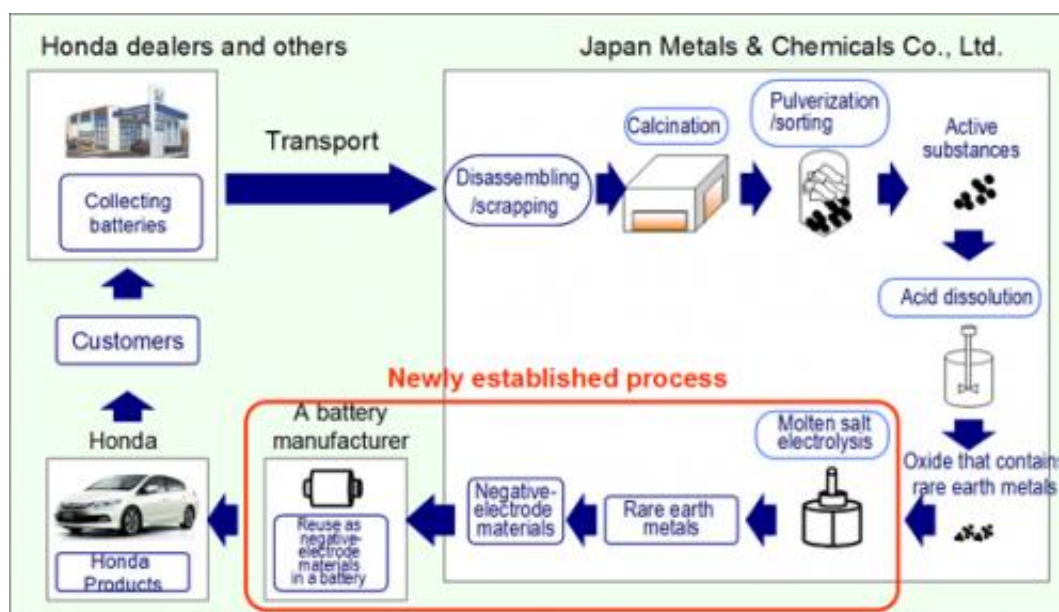


World's first process to reuse rare Earth metals extracted from nickel-metal hydride batteries for hybrid vehicles

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Honda's process for recycling nickel-metal hydride batteries.

Honda Motor established the world's first process to reuse rare earth metals extracted from nickel-metal hydride batteries for new nickel-metal hydride batteries to recycle precious resources.

So far, [Honda](#) has been extracting an oxide containing rare earth metals from used nickel-metal hydride batteries at the plant of Japan Metals & Chemicals Co., Ltd. (JMC). Now, by applying molten salt electrolysis to

this oxide, Honda has succeeded in extracting metallized rare earth that can be used directly as negative-electrode materials for nickel-metal hydride batteries. The rare earth metals extracted in this process has a purity of more than 99% which is as high as that of ordinary traded, newly mined rare earth metals. In addition, the new process enables the extraction of as much as above 80% of rare earth metals contained in nickel-metal hydride battery.

Under the newly established process, the extracted rare earth metals will be supplied from JMC to a battery manufacturer in early March, which will reuse them as negative-electrode materials for nickel-metal hydride batteries for [hybrid vehicles](#). This time, the rare earth metals were extracted from nickel-metal hydride batteries collected from 386 Honda hybrid vehicles that were stored prior to being on sale but became unusable by the Great East [Japan](#) Earthquake. Further, as soon as a sufficient volume is secured, Honda will begin applying the same process and recycle rare earth metals extracted from used nickel-metal hydride batteries collected by Honda dealers through battery replacement.

Honda strives to extract [rare earth metals](#) not only from nickel-metal hydride batteries but also from various used parts to achieve the further recycling of limited and precious resources. Honda will remain committed to reduce the environmental footprint of the mobility society as a whole by developing fuel-efficient vehicles including hybrid vehicles, and also by strengthening networks which lead to the reuse and recycling of Honda products.

Provided by Honda

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