## Transition to Hydrogen Cities in Korea and Japan

Authors : Minhee Son, Kyung Nam Kim

**Abstract :** This study explores the plan of the Korean and Japanese governments to transition into the hydrogen economy. Two motor companies, Hyundai Motor Company from Korea and Toyota from Japan, released the Hydrogen Fuel Cell Vehicle to monopolize the green energy automobile market. Although, they are the main countries which emit greenhouse gas, hydrogen energy can bring from a certain industry places, such as chemical plants and steel mills. Recent, the two countries have been focusing on the hydrogen industry including a fuel cell vehicle, a hydrogen station, a fuel cell plant, a residential fuel cell. The purpose of this paper is to find out the differences of the policies in the two countries to be hydrogen societies. We analyze the behavior of the public and private sectors in Korea and Japan about hydrogen energy and fuel cells for the transition of the hydrogen economy. Finally we show the similarities and differences of both countries in hydrogen fuel cells. And some cities have feature such as Hydrogen cities. Hydrogen energy can make impact environmental sustainability.

Keywords : fuel cell, hydrogen city, hydrogen fuel cell vehicle, hydrogen station, hydrogen energy

Conference Title : ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

Conference Dates : December 12-13, 2020

1