



# KRIHS Policy Brief

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## Recommendations on mobility policies towards safe hydrogen society

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### Summary

- 1> In January, 2019, the government announced a 'roadmap to promote hydrogen economy' to create a new engine for innovative growth and combat fine dust and began to implement measures to shift into hydrogen society in earnest
- 2> To achieve the hydrogen economy, expanding hydrogen mobility and securing hydrogen fueling system are necessary. However, the pace of implementation of related projects is slow compared to that of plans
- 3> A series of explosions in hydrogen charging facilities occurred both at home and abroad (Gangneung in May, 2019, and Oslo in June of the same year) and concerns over the safety of hydrogen energy are increasing while the government is actively promoting the use of hydrogen energy
- 4> Currently, Korea lacks laws and regulatory regimes to deal with hydrogen energy including the criteria for safety management of hydrogen energy, design guidelines
- 5> There is an urgent need to establish policies and regulations for risk management of hydrogen infrastructure based on foreign policies that demonstrated the management and safety of hydrogen energy before to achieve the hydrogen society



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## Policy implications

① (Establish supply system based on the infrastructure in local hubs) Control the energy supply and ensure the safety by installing charging stations in restrictive local hubs for efficient safety management of hydrogen infrastructure in the early stage of the shift into the hydrogen society

- Use local infrastructure such as key motorway service stations, bus terminals, logistics complexes

② (Phased expansion of hydrogen mobility) Provide measures to spread and expand hydrogen mobility by stage starting from large and public hydrogen public vehicles allowing the prediction of routes and operation control in response to the installation of hydrogen charging stations, of which control is available to ensure the safety

- Express buses and long-distance trucks → intercity buses → small-sized passenger vehicles (taxi-automobile)

③ (Establish legal system for safety management) Reorganize the system and institutions to ensure the safety of hydrogen society in the national level such as installation of a special safety management agency in charge of construction and management of hydrogen infrastructure and improvement of public awareness and acceptance, etc.

- Install a control tower responsible for the hydrogen safety including 'Hydrogen Safety Act' and safety management guidelines for hydrogen charging infrastructure in response to hydrogen mobility