

216B.812 FOSTERING USE OF HYDROGEN ENERGY.

Subdivision 1. **State purchase and use of renewable hydrogen technologies.** (a) The Department of Commerce, in coordination with the Department of Administration and the Pollution Control Agency, shall identify opportunities for deploying renewable hydrogen, fuel cells, and related technologies within state-owned facilities, vehicle fleets, and operations in ways that demonstrate their commercial performance and economics.

(b) The Department of Commerce shall recommend to the Department of Administration the purchase and deployment of hydrogen, fuel cells, and related technologies, when feasible, in ways that strategically contribute to realizing Minnesota's hydrogen economy goal as set forth in section 216B.8109, and which contribute to the following nonexclusive list of objectives:

- (1) provide needed performance data to the marketplace;
- (2) identify code and regulatory issues to be resolved;
- (3) foster economic development and job creation in the state;
- (4) raise public awareness of renewable hydrogen, fuel cells, and related technologies; or
- (5) reduce emissions of carbon dioxide and other pollutants.

(c) The Department of Commerce and the Pollution Control Agency shall also recommend to the Department of Administration changes to the state's procurement guidelines and contracts in order to facilitate the purchase and deployment of cost-effective renewable hydrogen, fuel cells, and related technologies by all levels of government.

Subd. 2. **Pilot projects.** (a) In consultation with appropriate representatives from state agencies, local governments, universities, businesses, and other interested parties, the Department of Commerce shall report back to the legislature by November 1, 2005, and every two years thereafter, with a slate of proposed pilot projects that contribute to realizing Minnesota's hydrogen economy goal as set forth in section 216B.8109. The Department of Commerce must consider the following nonexclusive list of priorities in developing the proposed slate of pilot projects:

- (1) deploy "bridge" technologies such as hybrid-electric, off-road, and fleet vehicles running on hydrogen or fuels blended with hydrogen;
- (2) lead to cost-competitive, on-site renewable hydrogen production technologies;
- (3) demonstrate nonvehicle applications for hydrogen;
- (4) improve the cost and efficiency of hydrogen from renewable energy sources; and
- (5) improve the cost and efficiency of hydrogen production using direct solar energy without electricity generation as an intermediate step.

(b) For deployment projects that do not involve a demonstration component, individual system components of the technology should, if feasible, meet commercial performance standards and systems modeling must be completed to predict commercial performance, risk, and synergies. In addition, the proposed pilots should meet as many of the following criteria as possible:

- (1) advance energy security;

- (2) capitalize on the state's native resources;
- (3) result in economically competitive infrastructure being put in place;
- (4) be located where it will link well with existing and related projects and be accessible to the public, now or in the future;
- (5) demonstrate multiple, integrated aspects of renewable hydrogen infrastructure;
- (6) include an explicit public education and awareness component;
- (7) be scalable to respond to changing circumstances and market demands;
- (8) draw on firms and expertise within the state where possible;
- (9) include an assessment of its economic, environmental, and social impact; and
- (10) serve other needs beyond hydrogen development.

Subd. 3. **Establishing multifuel hydrogen fueling stations.** The commissioner of commerce may accept federal funds, expend funds, and participate in projects to design, site, and construct multifuel hydrogen fueling stations that eventually link urban centers along key trade corridors across the jurisdictions of Manitoba, the Dakotas, Minnesota, Iowa, and Wisconsin.

These energy stations must serve the priorities listed in subdivision 2 and, as transition infrastructure, should accommodate a wide variety of vehicle technologies and fueling platforms, including hybrid, flexible-fuel, and fuel cell vehicles. They may offer, but not be limited to, gasoline, diesel, ethanol (E-85), biodiesel, and hydrogen, and may simultaneously test the integration of on-site combined heat and power technologies with the existing energy infrastructure.

The hydrogen portion of the stations may initially serve local, dedicated on- or off-road vehicles, but should eventually support long-haul transport.

History: 2005 c 97 art 13 s 2; 1Sp2005 c 1 art 4 s 120; 2007 c 57 art 2 s 17,22