



## ARIZONA STATE SENATE

### *Fifty-Fifth Legislature, Second Regular Session*

#### AMENDED FACT SHEET FOR S.B. 1396

##### hydrogen study committee

###### Purpose

An emergency measure that establishes the Hydrogen Study Committee (Study Committee) and outlines Study Committee requirements.

###### Background

*Alternative fuel* is: 1) electricity; 2) solar energy; 3) liquefied petroleum gas, natural gas, hydrogen or a blend of hydrogen with liquefied petroleum or natural gas used in an engine that meets U.S. Environmental Protection Agency (U.S. EPA) standards; or 4) a combination of at least 75 percent alternative fuel and not more than 30 percent petroleum based fuel that operates in an engine that meets the U.S. EPA Low Emission Vehicle Standard and that is certified by the engine manufacturer to consume at least 70 percent alternative fuel during normal vehicle operations ([A.R.S. § 1-215](#)).

The Energy Policy Act of 2005 established the Hydrogen and Fuel Cell Technical Advisory Committee to advise the U.S. Department of Energy Secretary on: 1) the implementation of programs and activities; 2) the safety, economical and environmental consequences of technologies for the production, distribution, delivery, storage or use of hydrogen energy and fuel cells; and 3) a coordinated plan for programs directly related to fuel cells or hydrogen ([P.L. 109-58, 109<sup>th</sup> Congress, 2005](#)).

There is no anticipated fiscal impact to the state General Fund associated with this legislation.

###### Provisions

1. Establishes the Study Committee, consisting of:
  - a) three Senate members appointed by the Senate President, not more than two of whom are members of the same political party;
  - b) three House of Representatives (House) members appointed by the Speaker of the House, not more than two of whom are members of the same political party;
  - c) the Arizona Land Commissioner or the Commissioner's designee;
  - d) the Arizona Department of Water Resources (ADWR) Director or the Director's designee;
  - e) the Arizona Department of Transportation (ADOT) Director or the Director's designee;
  - f) the Arizona Department of Administration (ADOA) or the Director's designee; and
  - g) the Arizona Commerce Authority (ACA) Chief Executive Officer (CEO) or the CEO's designee.

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2. Requires the Senate President and the Speaker of the House to each designate a Cochairperson from the appointed members.
3. Requires the Study Committee to:
  - a) investigate and evaluate existing state and federal laws, regulations and funding sources and recommend legislation related to the production, distribution, use and storage of hydrogen;
  - b) study:
    - i. the production of hydrogen from any fuel source, consistent with Arizona's natural resources, including groundwater impacts;
    - ii. the construction of a dedicated hydrogen pipeline or network of pipelines to serve users of hydrogen in Arizona, including residential and commercial use, power generation, transportation, manufacturing and mining;
    - iii. the construction of facilities that result in the blending of hydrogen into existing natural gas transmission and distribution systems that serve residential, commercial and industrial customers in Arizona;
    - iv. carbon capture and sequestration, including the long-term liability and responsibility for sequestered carbon and potential pipeline transportation infrastructure and the regulation of underground sequestered carbon;
    - v. streamlined permitting processes for hydrogen facilities and infrastructure, including other carbon use applications, and any other issues that the Study Committee deems necessary; and
    - vi. cost-effective industrial rates for hydrogen production and flexible energy generation configurations to maximize federal funding for hydrogen facilities;
  - c) review the safety standards regarding the production, distribution, storage and use of hydrogen by state agencies, including the Arizona Department of Homeland Security, ADEQ, ADWR and the Department of Forestry and Fire Management (DFFM);
  - d) make recommendations with consultation from:
    - i. the Arizona State Land Department;
    - ii. the Bureau of Land Management;
    - iii. the Arizona Corporation Commission;
    - iv. the ACA;
    - v. DFFM;
    - vi. ADEQ;
    - vii. ADOT;
    - viii. ADWR;
    - ix. ADOA;
    - x. stakeholder businesses;
    - xi. at least one environmental group;
    - xii. at least one professor specializing in the study of hydrogen;
    - xiii. at least one Arizona university;
    - xiv. at least one labor or workforce group; and
    - xv. the Indian tribes in Arizona;
  - e) submit, by September 1, 2023, a report regarding the Study Committee's recommendations to the Senate President and the Speaker of the House and send a copy of the report to the Secretary of State.

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4. Requires the Study Committee report to include an economic impact analysis of the potential hydrogen value chain in Arizona.
5. Allows state agencies to take into consideration any applicable international and national codes, regulations and standards after the Study Committee's review, including from:
  - a) the American Institute of Aeronautics and Astronautics;
  - b) the American National Standards Institute;
  - c) the American Society of Mechanical Engineers;
  - d) ASTM International;
  - e) the Compressed Gas Association;
  - f) the CSA Group;
  - g) the International Code Council's building, fire, mechanical and fuel gas codes;
  - h) the National Fire Protection Association NFPA 2 Hydrogen Technologies Code;
  - i) the National Fire Protection Association NFPA 1 Uniform Fire Code;
  - j) SAE International;
  - k) the Pipeline and Hazardous Materials Safety Administration;
  - l) the Council on Environmental Quality;
  - m) the U.S. Department of Energy; and
  - n) Underwriters Laboratories.
6. Terminates the Study Committee on October 1, 2024.
7. Becomes effective on signature of the Governor, if the emergency clause is enacted.

Amendments Adopted by Committee of the Whole

1. Adds representatives of six state agencies as nonvoting Study Committee members.
2. Removes the requirement that the Study Committee study enhanced oil recovery.
3. Requires the Study Committee to:
  - a) consult specified additional stakeholders;
  - b) include an economic impact analysis in its report; and
  - c) recommend legislation related to the use of hydrogen.
4. Allows state agencies to consider additional codes, regulations and standards following the Study Committee's review.
5. Elaborates on required areas of study.
6. Makes technical and conforming changes.
7. Adds an emergency clause.

Amendments Adopted by the House of Representatives

- Adds an emergency clause.

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Senate Action

NREW 2/9/22 DP 7-2-0  
3<sup>rd</sup> Read 3/2/22 19-8-3  
(W/O emergency)

House Action

COM 3/22/22 DPA 9-0-0-1  
3<sup>rd</sup> Read 4/11/22 53-4-3

Prepared by Senate Research  
April 12, 2022  
RC/slp