

**To:** Office of Planning and Research  
 PO Box 3044  
 1400 Tenth Street, Room 113  
 Sacramento, CA 95812-3044

**From:** California Energy Commission  
 1516 Ninth Street, MS-48  
 Sacramento, CA 95814

**Project Applicant:** Technology & Investment Solutions, LLC

**Project Title:** Hy2green - Electrolytic Hydrogen Energy Storage Using Novel Metal Hydrides

**Project Location – Specific:** 17900 Sheep Creek Rd

**Project Location – City:** El Mirage 92301      **Project Location – County:** San Bernardino

**Description of Nature, Purpose and Beneficiaries of Project:**

The grant for this project will fund the establishment of a green electrolytic hydrogen energy storage system. The project focuses on field testing and optimizing a small scale (less than 10kW) electricity in/electricity out Hy2green hydrogen energy storage system. The integrated Hy2green hydrogen energy storage system includes a pressurized alkaline electrolyzer (40bar), metal hydride hydrogen storage, and fuel cell electrical regeneration. The Hy2green hydrogen energy storage system testing primarily focuses on optimization of the thermal management systems and validating the performance of the metal hydride hydrogen storage. The Hy2green hydrogen energy storage system will be connected behind the meter at an existing Anaerobic Digestion facility. Electricity generated from an existing grid-connected solar photovoltaic system at the site will be converted to hydrogen, stored in metal hydrides, and then converted to back to electricity. The data collected will validate the Hy2green hydrogen energy storage system's long duration energy storage performance, and potential future customer cost savings.

**Name of Public Agency Approving Project:** California Energy Commission

**Name of Person or Agency Carrying Out Project:** Technology & Investment Solutions, LLC

**Exempt Status:** *(check one)*

- Ministerial Exemption (Pub. Resources Code § 21080(b)(1); Cal. Code Regs., tit. 14, § 15268);
- Declared Emergency (Pub. Resources Code § 21080(b)(3); Cal. Code Regs., tit. 14, § 15269(a));
- Emergency Project (Pub. Resources Code § 21080(b)(4); Cal. Code Regs., tit. 14, § 15269(b)(c));
- Categorical Exemption. State type and section number  
Cal. Code Regs., tit. 14, § 15301 ; Cal. Code Regs., tit. 14, § 15303 ; Cal. Code Regs., tit. 14, § 15304
- Statutory Exemptions. State code number.
- Common Sense Exemption. (Cal. Code Regs., tit. 14, §15061(b)(3))

**Reasons why project is exempt:**

Cal. Code Regs., tit. 14, Section 15301 Existing Facilities provides that the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing structures, facilities, mechanical equipment or topographical features involving negligible or no expansion of use beyond that existing are categorically exempt from the provisions of CEQA. This project involves the field testing of a small scale (less than 10kW) skid mounted integrated Hy2green hydrogen energy storage system that includes electrolysis, metal hydride hydrogen storage at 40bar, fuel cell electrical regeneration, to be connected to an existing grid-connected solar photovoltaic system. The design work, component manufacturing and system assembly will mostly take place in the existing

offices and manufacturing facilities of the Recipient and subcontractors. Therefore, this project is exempt under California Code of Regulations, title 14, section 15301, Existing Facilities.

Cal. Code Regs., tit. 14, sec. 15303 provides that projects which consist of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure, are categorically exempt from the provisions of CEQA. This project involves installation and commissioning of a Hy2green hydrogen energy storage system that will be mounted on a movable skid. The skid will be placed on a concrete slab on previously disturbed ground adjacent to the Meadowbrook anaerobic digester and associated green park facility in El Mirage, California. The Hy2green hydrogen energy storage system will be connected to the site electrical and water services on the customer's side of the meter. Fire and explosion safety precautions will be taken regarding hydrogen storage and other project components. Therefore, the project falls within section 15303 and will not have a significant effect on the environment.


Cal. Code Regs., tit. 14, sect. 15304 provides that projects which consist of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry and agricultural purposes are categorically exempt from the provisions of CEQA. The project will require minor alterations in the condition of land, water, and/or vegetation for trenching and backfilling for the installation of an electrical cable within conduit (approximate trench dimensions: 1000 feet in length, 1 foot in width and 3 feet in depth), as well as the installation of a concrete slab for supporting the skid mounted Hy2green hydrogen energy storage system (approximate dimensions: 40 feet in length, 12 feet in width and less than 1 foot in thickness). The trench and concrete slab will be installed on previously disturbed land with a gradient less than 10%, the trench will be backfilled, the surface restored, and the work will not involve the removal of any trees. Therefore, this project is exempt under California Code of Regulations, title 14, section 15304: Minor Alterations to Land.

**Lead Agency**

**Contact Person:** Robin Goodhand **Area code/Telephone/Ext:** 916-776-0766

**If filed by applicant:**

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project?  Yes  No

**Signature:**  **Date:** April 15, 2021 **Title:** EGSS 1

**Signed by Responsible Agency**

**Signed by Lead Agency**

**Signed by Applicant**

**Date received for filing at OPR:** \_\_\_\_\_