

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: Catalytic Dry Reforming of Biogas to High Purity Hydrogen Using Waste Heat

Project Location – Specific: 17900 Sheep Creek Rd

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

Description of Nature, Purpose and Beneficiaries of Project:

Under grant Agreement PIR-21-005, the California Energy Commission will provide a grant of \$1,926,287 to Technology & Investment Solutions, LLC (in conjunction with the University of Southern California) to design, build, test, and demonstrate a technology that produces hydrogen from synthetic natural gas from anaerobic digestion.

The technology will advance the development of sustainable organic waste biomass utilization and hydrogen (H2) production technologies. This will be accomplished through the combined use of advanced anaerobic digestion (AD) technology together with a novel catalytic reformer system and purification process to produce affordable low carbon. This agreement will provide cost-efficient low carbon hydrogen supply from reliable local biogas sources, lower costs of hydrogen production, and reduced GHG emissions.

Beneficiaries will include the food waste composting operator, investor-owned utility, and users of hydrogen.

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, § 15303
- Statutory Exemptions. State code number.
- Common Sense Exemption. (Cal. Code Regs., tit. 14, §15061(b)(3))

Reasons why project is exempt:

Section 15303, “New Construction or Conversion of Small Structures,” covers construction and location of limited numbers of new, small facilities or structures; and installation of small new equipment and facilities in small structures. The project includes preparing and installing a pilot technology demonstration constructed on a skid-mount (mobile trailer) less than 200 square feet in size. The skid-mount will sit on disturbed land near the existing food waste composting digester within the existing facility footprint.

Authority cited: Sections 21083 and 21110, Public Resources Code. Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

According to the recipient, the unit(s) are self-contained, with minimal fluids. The system is operated by electricity, and breaks down synthetic natural gas into hydrogen and carbon monoxide. Any odor emissions will be controlled by an odor filter or similar device. Hydrogen gas storage safety protocols will be followed. The Mohave Desert Air Quality Management District has issued a construction permit. Based on these characteristics, the project is exempt under Section 15303.

Lead Agency

Contact Person: Baldomero Lasam **Area code/Telephone/Ext:** 916-776-0784

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: B. Lasam **Date:** 05/12/2022 **Title:** _____

Signed by Responsible Agency

Signed by Lead Agency

Signed by Applicant

Date received for filing at OPR: _____