



Hydrogen Fuel Cell Powered Train Projects as of October 2021

HFC-Powered trains in CA:

- Santa Cruz County Regional Transportation Commission (SCCRTC): [California-based, HFC-powered street car manufacturer, TIG-m, is likely to furnish the rolling stock and plans a demonstration in October 2021.](#)
- The Tri-Valley-San Joaquin Valley Regional Rail Authority: [Valley Link Project documentation states, “hydrogen powered vehicles have been identified as being highly effective in meeting Board Sustainability Policy Guidance.”](#)
- The San Bernardino County Transit Authority (SBCTA): [SBCTA has purchased HFC-powered train sets from Swiss manufacturer Stadler Rail. The SBCTA will operate the HFC train sets on the San Bernardino to Redlands route beginning 2024.](#)

HFC-Powered Train Projects in the Works:

- [Canadian Pacific \(CP\) will use fuel cell modules from Ballard Power Systems for its first hydrogen fuel cell \(HFC\)-powered linehaul freight locomotive-](#) Expected operational by the end 2022
- [The US' California Energy Commission has granted nearly \\$4m to Sierra Northern Railway and GTI to fund the design, integration and testing of a hydrogen fuel cell switching locomotive. Ballard will be providing the hydrogen fuel cell modules.](#)
- Siemens Mobility, which currently produces the [Mireo Plus H commuter train](#) which uses a hybrid HFC drive and lithium-ion battery, is developing [liquid organic hydrogen carrier technology \(LOTC\)](#) that should substantially bring the cost of storing and transporting hydrogen