

**Abstract for CRADA between NETL and Gas Technology Institute
(AGMT-1199)**

Hydrogen has the potential to play an important role in decarbonizing energy-intensive sectors, and credible and open-source protocols are needed to vet the environmental credibility of a specific production pathway, given the variability even among the same technologies. Stakeholders and markets lack consistent, transparent, technical tools and protocols to assess the carbon intensity of hydrogen production at the asset level. Gas Technology Institute (GTI) and S&P Global Platts have launched the Open Hydrogen Initiative (OHI), a new collaboration focused on bringing industry within the hydrogen marketplace together to provide further transparency into the environmental greenhouse gas (GHG) impact of hydrogen production. As part of this initiative, GTI has invited NETL to participate in the effort because of NETL's deep expertise and capabilities in Life Cycle Analysis. Therefore, NETL is joining forces with the Gas Technology Institute (GTI) to build a measurement tool, accompanying protocols, and confidence score of the quality of the measurement. This CRADA effort provides the technical research collaboration support with GTI that will be used in the broader Open Hydrogen Initiative that can provide stakeholders the technical tools and protocols to decarbonize energy-intensive sectors.