

EcoEngineers: Your Trusted Partner for 45V and 45Z Tax Credit Services

At EcoEngineers, an LRQA company, we are dedicated to guiding organizations through the global energy transition and decarbonization journey. Since 2009, we have helped clients navigate complex carbon regulations, support compliance, and succeed in an evolving climate policy landscape through our clean energy consulting, auditing, and advisory services, delivering clarity, confidence, and measurable results.

Backed by LRQA's global platform operating in more than 150 countries and accredited by over 45 independent bodies, our combined team of more than 1,000 auditors conducts thousands of sustainability, biofuel, and greenhouse gas (GHG) audits annually.

Our work has been recognized by Environmental Finance's Environmental Market Rankings, where we were named Best Verification Company in North America, Best Verification Company in Renewable Identification Numbers (RINs), and Best Verification Company in Renewable Natural Gas (RNG) Markets in 2026, as well as a Top 10 Sustainable Consulting Firm by Sustainability Magazine and a Top 10 Energy Consulting Company by Energy Digital in 2025.

As policy frameworks continue to evolve, EcoEngineers helps clients navigate regulatory

Eco's 45V and 45Z Tax Credit Services:

- Education
- Modeling Support
- Due Diligence
- Comprehensive Auditing
- Compliance Support

requirements and position your data, documentation, and compliance approach to support defensible claims and maximize asset value.

Understanding 45V and 45Z Tax Credits

To accelerate the adoption of clean fuels, the U.S. Internal Revenue Service (IRS) offers two critical tax credits: Section 45V, the Clean Hydrogen Production Tax Credit, rewards producers of low-carbon hydrogen; and

Section 45Z, the Clean Fuel Production Tax Credit, supports the production of qualifying low-carbon fuels. Both credits require tax filers to maintain detailed calculations of carbon intensities (CI) and production volumes of fuel production, and to demonstrate compliance with all regulatory requirements.

EcoEngineers supports you in meeting these needs through our broad experience across technical, regulatory, transactional, and audit services.

Our Services for Sections 45V and 45Z Success

- **Education:** We provide in-depth education on the structure and mechanics of the 45V and 45Z tax credits, including CI inputs, the provisional emissions rate (PER) process, and verification requirements, helping you understand compliance considerations and evaluate potential pathways.

- **Modeling Support:** To ensure robust and defensible CI calculations, we assist with Greenhouse gases, Regulated Emissions, and Energy use in Technologies (GREET) model development, carbon data management, and scenario analysis. We also support development of PER calculations for pathways that do not align with default calculator values.
- **Due Diligence:** We conduct thorough due diligence on modeling, including review of CI methodologies, data inputs, and system boundaries. Our team evaluates data collection and management processes, identifies gaps and risks, and assesses alignment with applicable regulatory frameworks and emerging guidance. Through pre-verification assessments, gap analyses, and documentation review, we help ensure your approach is technically sound, defensible, and positioned for successful verification.
- **Comprehensive Auditing:** We deliver third party audits, pre-verification, and gap analyses, along with reasonable assurance verification of facility data, controls, and documentation. Our team supports internal methodology development and ensures alignment with regulatory and International Organization for Standards (ISO) GHG requirements.



- **Verification:** We verify taxpayer claims under the latest regulatory guidance for Sections 45V and 45Z using established frameworks such as ISO 14064 3 and recognized industry standards. Our verification supports required attestations under final regulations and is designed to meet evolving IRS expectations.
- **Independent PER Reviews:** For both 45V and 45Z, we perform PER reviews and pre-submission technical assessments. Our reviews include evaluation of CI inputs, system boundaries, and pathway assumptions to support U.S. Department of Energy (DOE) filings, reduce downstream risk, and align engineering data with tax credit strategies.
- **Compliance Support:** By aligning data, documentation, and reporting processes with established frameworks, we help you ensure compliance with applicable regulatory programs and emerging tax credit requirements. Our team helps assess readiness, organize and confirm documentation, identify and resolve gaps, and implement robust measurement, reporting, and verification (MRV) practices to ensure ongoing compliance and defensible claims across evolving regulatory environments.

Accreditations and Industry Recognition

EcoEngineers is accredited by the American National Standards Institute (ANSI) National Accreditation Board (ANAB) as a GHG Validation and Verification Body (VVB) under ISO/IEC 17029:2019, ISO 14065:2020, and ISO 14064-3:2019.

Our scope includes project-level verification of GHG emission reductions and removals from fuel combustion and land use/forestry groups, as well as verification of applications and reports under Canada's Clean Fuel Regulations (CFR) for renewable, low-CI fuels and green hydrogen sectors. We are also accredited by the California Air Resources Board (CARB)

for Low Carbon Fuel Standard (LCFS), Mandatory GHG Reporting Regulation (MRR) and Compliance Offset Verification Programs; the Oregon Department of Environmental Quality (DEQ) Clean Fuels Program (CFP); the Washington State Department of Ecology Cap-and-Invest Offsets Program; and are an approved Roundtable on Sustainable Biomaterials (RSB) certification body through LRQA.

The Value of Partnering with EcoEngineers

At EcoEngineers, our goal is to safeguard your clean energy assets, strengthen your market position, and advance your decarbonization ambitions. We combine technical rigor, regulatory fluency, and global

assurance infrastructure to provide a seamless experience.

- **Accuracy and Consistency:** Our methodologies deliver precise CI calculations, supported by defensible data and industry-leading standards.
- **Credibility:** Our independent, science-based verification builds trust with corporate buyers, tax equity investors, and regulators, enhancing the value of verified tax credits in credit transactions and asset sales.
- **Risk Mitigation:** We protect clients from reputational and financial risks, including IRS disputes and overstatement penalties, through rigorous compliance and quality assurance, demonstrating that all reasonable steps have been taken to substantiate claims.
- **Streamlined Compliance:** Our process ensures smooth transaction execution and comprehensive compliance documentation, reducing administrative burden and uncertainty.

Let's Connect

We can help you unlock the full value of 45V and 45Z tax credits, navigate evolving regulations, and achieve your sustainability goals with confidence. To discuss your project, explore partnership opportunities, and take the next step toward a low-carbon future, contact us at clientservices@ecoengineers.us.





About EcoEngineers

EcoEngineers, an LRQA company, is a consulting, auditing, and advisory firm with an exclusive focus on the energy transition. From innovation to impact, EcoEngineers helps its clients navigate the disruption caused by carbon emissions and climate change. EcoEngineers helps organizations stay informed, measure emissions, make investment decisions, maintain compliance, and manage data through the lens of carbon accounting. Its team of engineers, scientists, auditors, consultants, and researchers live and work at the intersection of low-carbon fuel policy, innovative technologies, and the carbon marketplace. EcoEngineers was established in 2009 to steer low-carbon fuel producers through the complexities of emerging energy regulations in the United States. Today, EcoEngineers' global team is shaping the response to climate change by advising businesses across the energy transition. Recently, EcoEngineers was named one of the top ten global sustainable consulting companies by Sustainability Magazine.