

RESHAPING RENEWABLES INVESTMENTS WITH 45Q CREDIT RISK TRANSFER

Over the past 20 years, the US energy market has experienced a surge in renewable energy investment driven by climate change concerns and evolving regulatory and market environments. Government-sponsored financial incentives – such as tax credits – and legislative updates are facilitating the transition to a greener economy, making these projects more lucrative for investors. Recent regulatory changes have heightened interest in carbon capture, utilization and storage (CCUS) projects and their associated tax credits, drawing attention from firms looking to deploy capital into green assets.

BACKGROUND ON SECTION 45Q

Section 45Q of the Internal Revenue Code grants tax credits for CCUS projects, which is crucial for securing financing from banks and investors. The Internal Revenue Code was amended in 2008 through the Energy Improvement and Extension Act to include Section 45Q, encouraging investment in CCUS technologies by offering businesses a flat-rate credit per metric ton of carbon dioxide (CO₂) sequestered.

In 2018, the Bipartisan Budget Act expanded the credit amounts, broadened the scope to cover sequestration of all carbon oxides and lowered minimum sequestration capacity requirements for qualified facilities. In 2022, the Inflation Reduction Act (IRA) further increased the credit amount to \$85 per metric ton for permanent storage and \$60 for enhanced oil recovery or other qualified uses. The IRA also introduced two new monetization mechanisms – direct pay and transferability – creating more efficient avenues for developers to realize the value of their credits.

POTENTIAL RISKS WHEN UTILIZING 45Q CREDITS

Because 45Q credits play such an integral role in securing financing and ensuring long-term profitability for CCUS projects, a proper risk management framework is key to overall success.

There are several risks developers and tax equity investors must consider when deploying capital into a project meant to generate 45Q credits. These include challenges to credit allocation in a tax equity structure, compliance with credit qualification requirements, credit recapture through a leakage event and eligibility for credit transfer.

A successful challenge by the IRS in any of these areas can prove to be a minor hurdle at best and catastrophic at worst. Since IRA guidance was handed down, the tax insurance market has stepped in to alleviate these concerns for developers and investors by crafting a 45Q-focused insurance product.



MANAGING RISKS WITH TAX INSURANCE

The tax insurance market has always played a role in securing investments in credit-generating assets. While solar and wind projects have been a mainstay in the tax insurance market, insurer appetite has since expanded to include newer products such as clean hydrogen production, advanced manufacturing and, of course, CCUS.

A 45Q policy mitigates the aforementioned risks and effectively shifts the exposure to an insurance company. Policies are bespoke in nature and can be tailored to meet the needs of any particular project. In terms of policy size, the tax insurance market can absorb up to \$1 billion in limits on a specific project. Policies are generally priced at a 2% – 5% rate-on-line – or \$20,000 – \$50,000 per \$1M in coverage – and can usually cover a period of up to 10 years.

Purchasing a 45Q insurance policy serves to de-risk a project, help facilitate indemnification negotiations amongst counterparties and provide added comfort to lenders providing debt financing. This strategy is an innovative solution and should be an essential part of every developer and investor's toolkit when they consider deploying capital in the space.

COMPREHENSIVE INSURANCE SOLUTIONS FOR CCUS PROJECTS

In addition to tax insurance, an adequate property and casualty insurance program is necessary for managing risk in CCUS projects. These insurance solutions cover a broad spectrum of risks, ensuring financial stability and project viability.

Business Interruption Insurance for 45Q Tax Credit Revenue Protection

Business interruption insurance is designed to cover the loss of income that a business suffers after a disaster or unexpected event that disrupts its operations. For CCUS projects, this type of insurance ensures that the revenue streams tied to the 45Q tax credits are protected against various risks.

- **Coverage of Business Income:** Business interruption insurance would cover the income that would have been generated from capturing and sequestering CO₂, which determines the value of the 45Q tax credits.
- **Operational Downtime:** Downtime can occur due to maintenance issues, technical failures or accidents. If a carbon capture facility experiences downtime, the amount of CO₂ captured is reduced, leading to a decrease in 45Q tax credits. Business interruption insurance can compensate for the lost income during this downtime.
- **Equipment Failures:** CCUS projects rely heavily on specialized equipment for capturing and storing CO₂. Failures or malfunctions in this equipment can significantly impact the facility's operational capacity. Insurance can cover the income loss resulting from such equipment failures.
- **Supply Chain Disruptions:** Delays in the delivery of essential components or raw materials can disrupt operations and reduce the amount of CO₂ captured. Insurance can cover the business income loss caused by these delays.
- **Natural Disasters and Force Majeure Events:** Events like hurricanes and earthquakes can cause substantial physical damage to the facility and disrupt operations. Business interruption insurance typically covers income loss due to these events.
- **Regulatory Changes and Compliance Issues:** Business interruption insurance can cover income loss due to unforeseen regulatory changes that temporarily halt operations or require modifications to the facility.
- **Technological Risks:** CCUS projects often employ cutting-edge technology. Risks associated with new or experimental technologies can lead to operational inefficiencies or failures. Insurance can cover the loss of income if these technological risks materialize.

Contingent Business Income Insurance

Contingent business income insurance covers losses arising from disruptions not directly tied to the insured's operations but due to issues affecting their suppliers or partners. This type of insurance is crucial for CCUS projects, where the supply chain and external dependencies are critical.

- **Supplier Disruptions:** Issues such as component supply delays or raw material shortages can cause production halts or slowdowns, reducing CO2 capture and tax credit income.
- **Service Provider Issues:** Disruptions in logistics or the operations of partners responsible for specific stages of the capture and storage process can affect the project's operational capacity.

Delay in Startup Insurance

Delay in startup insurance covers financial losses due to delays in project commencement, protecting business income related to 45Q tax credits.

- **Construction Delays:** Delays in equipment delivery, permitting, regulatory approvals or contractor performance issues can impact the project start.
- **Force Majeure Events:** Natural disasters and health crises can cause significant delays.
- **Financial and Market Conditions:** Market conditions causing delays in procuring necessary materials and components.

MANUSCRIPTED INSURANCE POLICIES FOR 45Q TAX CREDIT PROJECTS

Given the evolving risks around carbon capture, many business interruptions, contingent business income and delay in startup policies may need to be manuscripted — custom-tailored to fit the specific needs and risk profile of a project.

- **Tailored Coverage:** Manuscripted policies can be designed to cover unique aspects of CCUS projects, such as specific equipment, technology risks and the intricate regulatory environment of 45Q tax credits.
- **Custom Terms and Conditions:** Allows for the inclusion of tailored terms and conditions that may not be available in standard policies, providing more precise and relevant coverage.
- **Enhanced Protection:** Addresses gaps in standard coverage, ensuring comprehensive risk mitigation.

By utilizing manuscripted insurance policies, CCUS project developers can ensure that their specific risks and needs related to 45Q tax credits are comprehensively covered. These bespoke policies offer enhanced protection and flexibility, ensuring financial stability and resilience against a wide range of potential disruptions. This approach not only secures the anticipated income from 45Q tax credits but also supports the overall success and viability of CCUS projects.

CLAIM EXAMPLES

To illustrate the practical application and benefits of tax insurance and comprehensive business interruption policies, here are a few claim examples.

Claim Example 1: Equipment Failure and Business Interruption

A CCUS facility experienced a major failure in its CO2 capture equipment, causing a complete halt in operations for three months. During this period, the facility could not capture the projected 100,000 metric tons of CO2, resulting in a significant loss of 45Q tax credits.

Insurance Solution: The facility had business interruption insurance, which covered the lost income from the tax credits during the downtime. The policy compensated the facility for the equivalent of the lost tax credits, ensuring financial stability and allowing them to repair and restart operations without facing severe economic strain.

Claim Example 2: Supply Chain Disruption and Contingent Business Income

A CCUS project relied heavily on a specific supplier for critical components. Due to unforeseen geopolitical tensions, the supplier faced a significant delay in delivering these components, halting the project's progress and delaying the capture operations by four months.

Insurance Solution: The project had a contingent business income insurance policy that covered losses arising from disruptions affecting suppliers. The insurance compensated the project for the delay, covering the lost income from the expected tax credits and additional costs incurred due to the delay.

Claim Example 3: Construction Delay and Delay in Startup

A CCUS project was in the final stages of construction when a hurricane struck, causing extensive damage to the site and delaying the start-up by six months. This delay impacted the project's timeline for capturing CO2 and claiming the 45Q tax credits.

Insurance Solution: The project had delays in startup insurance, which covered the financial losses due to the delayed start. The policy provided compensation for the lost income from the tax credits that would have been generated during the delay period, allowing the project to recover and begin operations as soon as repairs were completed.

Claim Example 4: Regulatory Change and Business Interruption

A regulatory change required a CCUS facility to upgrade its equipment to meet new compliance standards. The upgrade process required the facility to shut down operations for two months, affecting the capture of CO2 and the corresponding 45Q tax credits.

Insurance Solution: The facility's business interruption insurance covered the income loss resulting from the regulatory shutdown. The policy compensated for the tax credits lost during the downtime, ensuring that the facility could implement the necessary upgrades without suffering financial hardship.

45Q AND RISK MANAGEMENT RECAP

It is crucial for companies within the energy value chain and industrial manufacturers seeking to reduce their carbon footprint with CCUS technologies to understand the challenges and solutions for claiming 45Q credits. Whether addressing concerns around credit qualification and transferability, ringfencing leakage recapture risk or financing or indemnification requirements, a 45Q tax insurance policy provides a cost-effective way to transfer project risks to a highly rated insurance counterparty.

As capital continues to flow into the space and new assets come online, the insurance market will remain a valuable partner to investors and developers working toward a lower-carbon future.

QUESTIONS? CONTACT:

Seth Michaelson

VP, Energy Practice

713.347.1994

seth.michaelson@nfp.com

Mike Sharkey

VP, Transaction Liability, Private Equity Group

516.398.6357

michael.sharkey@nfp.com