

Digital Fuels Registry Operating Procedure

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Table of Contents

- Table of Contents 2
- Glossary 3
- 1. Introduction..... 5
- 2. Account Registration 6
 - 2.1 Participation in the Digital Fuels Registry 6
 - 2.2 Establishing a Login..... 6
 - 2.3 Registering an Account 6
 - 2.4 Registering Additional Users 6
- 3. Account Types and User Roles 7
 - 3.1 Account Access..... 7
 - 3.2 Account User Roles..... 7
- 4. Production Facility Registration and Management..... 8
 - 4.1 Registering a Production Facility 8
 - 4.2 Verification of Data Submitted During Production Facility Registration 8
 - 4.3 Updating Production Facility Data 8
 - 4.4 Misrepresentation of Production Facility Data..... 9
 - 4.5 Withdraw a Production Facility’s Participation in the Digital Fuels Registry 9
- 5. Issuance of Certificate 10
 - 5.1 Process, Timeline, and Data Requirements for Certificate Issuance 10
- 6. Transfer of Certificate 11
 - 6.1 Deposits to Accounts 11
 - 6.2 Transfers Between Accounts..... 11
- 7. Retirement of Certificate 12
 - 7.1 Beneficial Ownership..... 12
 - 7.2 Process to Retire Certificate 12
- 8. Reports..... 13
 - 8.1 Public Reports..... 13
 - 8.2 Account Holder Reports 13

Glossary

Account: An account in the Digital Fuels Registry. Specific Account types that an Account Holder can register in the Digital Fuels Registry are described in Section 3.

Account Holder: A party that has registered with the Digital Fuels Registry and has established an Account within the Digital Fuels Registry.

Account Manager: The user who initially registers the Account will automatically be given the role of the account manager. The account manager of an Account, having the ability to, among other things, set up and manage additional logins and login privileges for Users.

Beneficial Owner: The party having Beneficial Ownership Rights to a Certificate.

Beneficial Ownership Rights: With respect to any Certificate, Beneficial Ownership Rights means (i) any contractual or other right to direct or control the sale or other disposition of, or the Retirement of, such Certificate or (ii) any economic interest in such Certificate, including without limitation any contractual or other right to receive any proceeds from the sale or other disposition of such Certificate. Beneficial Owners can be created and represented in the Digital Fuels Registry for tracking purposes.

Buyer Account: This type of Account can hold Certificates, transfer Certificates (only incoming transfers), and retire Certificates either for its own organizational objectives or on behalf of third parties, referred to as Beneficial Owners. A Buyer Account cannot initiate outgoing Certificate transfers to other parties.

Carbon Dioxide Equivalent (CO₂e): Standard unit of measure used to compare the emissions of different greenhouse gases based on their global warming potential relative to that of CO₂.

Carbon Intensity Score: The quantity of life cycle GHG emissions per unit of fuel energy expressed in grams of carbon dioxide equivalent per megajoule (gCO₂e/MJ).

Certificate: A Certificate represents the environmental attribute of a low-carbon fuel, modeled after low-carbon fuel standards (LCFS), reflecting its lower emissions compared to a petroleum alternative. The unit of measurement is denominated in one (1) metric ton of Carbon Dioxide Equivalent.

CI Verification Report: A document describing the calculation of the Carbon Intensity Score required for facility registration and for the calculation of the issuance of Certificates.

Clean Fuels: Refers to the fuel types such as, but not limited to, ethanol, renewable diesel, and biodiesel reflecting lower emissions compared to a petroleum alternative.

Eligible Gallons Verification Report: A document describing the volume and characteristics of clean fuel processed by a specific Production Facility during a time period, for which a Certificate is created.

Market Participant Account: This type of Account can hold Certificates, transfer Certificates (incoming and outgoing transfers), and retire Certificates either for its own organizational objectives or on behalf of third parties, referred to as Beneficial Owners.

Methodology: Refers to the Transportation Emission Reduction methodologies for Biomass-Based Diesel for Transportation Applications and Ethanol, which outlines requirements for the generation of Transportation Emission Reduction Certificates from biodiesel, renewable diesel, and ethanol to be issued, traded, and retired on the Digital Fuels Registry.

Net Volume: Represents the total denatured clean fuel sales minus excluded gallons as defined in the verifier report.

Operating Procedures: Means these Digital Fuel Registry Operating Procedures set forth herein, as amended from time to time by the Digital Fuels Registry Administrator.

Producer Account: This type of Account can register Production Facilities and have Certificates issued for its facilities. A Producer Account can hold Certificates, transfer Certificates (incoming and outgoing transfers), and retire Certificates either for its own organizational objectives or on behalf of third parties, referred to as Beneficial Owners.

Production Facility: A facility engaged in the production of clean fuels that complies with the Digital Fuels Registry's Methodologies.

Digital Fuels Registry Administrator: The entity with the authority to administer the Operating Procedures. APX, Inc., an Xpansiv company, serves as the administrator of the Digital Fuels Registry.

Registry or Digital Fuels Registry: Refers to the Digital Fuels Registry.

Retirement: The voluntary action where a Certificate is permanently recorded in the registry to show the environmental attributes have been claimed and cannot be sold again.

Transport Emission Reduction Certificates (TERCs): Digital Certificates representing the life cycle GHG emissions reductions from biomass-based fuels, modeled after an LCFS, and issued, traded, and retired on the Digital Fuels Registry. Also, the unit of measure used for the program is denominated in units of metric tons of carbon dioxide equivalent (CO₂e).

TERC – Biodiesel: TERC Category representing the Certificates created from biodiesel.

TERC Category: A specific classification for each type of fuel under which Transport Emission Reduction Certificates (TERCs) are generated. Each TERC Category corresponds to a unique fuel type, such as ethanol, biodiesel, or renewable diesel, and includes batches of TERCs with distinct identifiers. The program supports a variety of fuel types, and additional categories may be introduced as market demand and potential are assessed, promoting diverse pathways for reducing greenhouse gas emissions in the transportation sector.

TERC – Ethanol: TERC Category representing the Certificates created from ethanol.

TERC Program: A voluntary, market-based initiative aimed at reducing greenhouse gas emission associated with biofuel production and usage across the United States. The TERC Program is centered around the creation, verification, monitoring, trading, use, and continuous improvement of the TERC product.

TERC – Renewable Diesel: TERC Category representing the Certificates created from renewable diesel.

User: Any party that has been granted access by an Account Holder to an Account, which may include viewing information, performing transactions, and changing personal information.

Verification: A systematic, independent, and documented process for evaluating reported data to ensure compliance with specified requirements.

Verification Services: Services provided by a third-party verification body to confirm the accuracy and compliance of reported data during the verification process.

Verifier: An independent, accredited third-party entity that conducts reviews and provides verification of data and processes.

Vintage: The year associated with verification data; displayed as YYYY.

1. Introduction

The Digital Fuels Registry enables producers, operators, consumers, and other market participants to define, register and transact the environmental attributes of Clean Fuels.

The Digital Fuels Registry collects and tracks information regarding the generation, transfer, and Retirement of Certificates created according to programs available on the Digital Fuels Registry, such as the TERC Program. Certificates are issued, transferred, and retired on the Digital Fuels Registry. The Digital Fuels Registry will track the attributes associated with each Certificate, as reported by a Production Facility and validated by a Verifier prior to Production Facility registration.

Any Account Holder including Producer, Buyer, or Purchaser as described in Section 3, wishing to issue, hold, transfer, or retire Certificates, is required to establish an Account in the Digital Fuels Registry. All Account Holders must agree to follow these Operating Procedures and in the Digital Fuel Registry Terms of Use and any other documents and/or terms incorporated therein.

Public reports are accessible to anyone via the public page on the [website](#), and are intended to ensure transparency for Certificates issued and retired.

The Digital Fuels Registry Administrator will amend these Operating Procedures from time to time by publishing revisions and when practicable providing reasonable advance notice to Account Holders in accordance with the Terms of Use. Continued use and access of the Digital Fuels Registry by an Account Holder after modification of the Operating Procedures signifies an Account Holder's agreement to be bound by the modified Operating Procedures. Account Holder shall be solely liable for the acts and omissions of its Account Manager and Users.

2. Account Registration

2.1 Participation in the Digital Fuels Registry

Participation in the Digital Fuels Registry is voluntary. Any party that registers with the Digital Fuels Registry and pays the applicable fees (as described in the Fee Schedule) may seek to establish an account in the Digital Fuels Registry.

2.2 Establishing a Login

To establish a login for an Account, the User must create a User ID. Then, the User will provide a verification code, password and contact information for the User ID registration. Once the login has been successfully established, the User may complete and submit an Account registration on behalf of the Account Holder. The User who completes the Account registration will be designated as the Account Manager.

2.3 Registering an Account

Account registration consists of five steps, and each step requires the User to acknowledge or enter information to proceed to the next step.

1. Account Registration Overview
2. [Accept and Agree to the Xpansiv Digital Fuels Registry] Terms of Use
3. Select Account Type
4. Enter in Company and Contact Information
5. Know Your Customer Checks

The Digital Fuels Registry Administrator will review the Account registration and may request more information before, in its sole discretion, approving or rejecting the application. An Account will remain active until it is closed in accordance with these Operating Procedures or the Terms of Use. Account closure can be initiated by the Account Holder by notifying the Digital Fuels Registry Administrator. Administrator may, in its sole discretion, suspend or close an Account if an Account Holder fails to pay the Digital Fuels Registry fees (as described in the Fee Schedule) or is otherwise in default under the Operating Procedures or Terms of Use. The Terms of Use should be read and understood by anyone applying to be an Account Holder. All entities and Users participating in the Digital Fuels Registry must comply with the Operating Procedures and Terms of Use.

2.4 Registering Additional Users

An Account Manager may go to the Accounts tab to create additional Users and assign User roles to them. Additionally, the Account Manager may deactivate a User's access to the Account.

3. Account Types and User Roles

3.1 Account Access

The Account types available in the Digital Fuels Registry are:

- Producer Account
- Market Participant Account
- Buyer Account
- Verifier Account

An Account Manager opens or establishes an Account. The individual listed in the initial Account registration will be considered the Account Manager and will have the ability to set up and manage additional logins and login privileges for their organization. The Account Manager will have full access to the organization's Account. Login permissions can be designated to allow view-only access to information or to allow activities such as performing transfers and submitting or updating information. Additional logins can be set up at any time the Account Manager wishes to add additional Users to the Account. There is no fee for creating additional User logins or limit on the number of User logins that can be created. The current Account Manager or the Digital Fuels Registry Administrator can establish a new Account Manager for an Account if requested in writing by an authorized representative of the Account.

The Terms of Use and Operating Procedures shall apply to any User who receives access to a Digital Fuels Registry Account.

3.2 Account User Roles

When the Account Manager creates logins for additional Users, the Account Manager may assign one of the following User permissions for each User:

- Account Manager: authorized for all Account services
- Billing Manager: authorized for all Account services
- Contributor: authorized for all Account services except for Account and User management
- Reader: read-only access to Account features

Either the Account Manager or the Digital Fuels Registry Administrator can update User roles. If the Digital Fuels Registry Administrator is requested to update the User roles, an email must be sent with the authorization of the Account Manager in order to complete the request.

4. Production Facility Registration and Management

4.1 Registering a Production Facility

All Production Facilities that are registered in the Digital Fuels Registry must meet the requirements specified in the TERC Program and are owned or otherwise controlled by the Account Holder.

An Account Holder may contract with an agent to establish and access an Account on its behalf. To do so, a Declaration of Responsible Party form must be signed by both the principal Account Holder and the agent. The Declaration of Responsible Party form is available for download from the Digital Fuels Registry.

An owner of a qualified Production Facility wishing to generate a Certificate must first establish a Producer Account within the Digital Fuels Registry and then register the Production Facility. A Production Facility is registered by an Account Holder by entering Production Facility data into the Digital Fuels Registry, including but not limited to data related to Production Facility location, Carbon Intensity Score, Verifier and data from the Verifier reports. The Digital Fuels Registry Administrator can approve or reject the Carbon Intensity Score based on the underlying documents the Account Holder provides. The CI Verification Report and Eligible Gallons Verification Report must also be uploaded at the time of Production Facility registration. This form must be reviewed and signed by the Verifier that issued the Certificate covering the Production Facility. Production Facility registration is subject to approval by the Digital Fuels Registry Administrator. Once the Production Facility is approved, Account Holders may request a Certificate for the Production Facility as described in Section 5.

4.2 Verification of Data Submitted During Production Facility Registration

Upon completion of the Production Facility registration process, the Digital Fuels Registry Administrator will review the CI Verification Report and Eligible Gallons Verification Report provided to the Digital Fuels Registry by the Account Holder for Verification and approval, and which Verification and approval shall be in Administrator's sole discretion.

In the event data submitted is found to be in error or if there is a discrepancy between the data submitted during the registration process and the materials provided to verify the data, the Digital Fuels Registry Administrator will notify the registrant in writing that the data cannot be verified. The applicable unverified report may then be corrected or withdrawn, or the Account Holder may submit additional documentation verifying the data, until the Digital Fuels Registry Administrator is satisfied in its sole discretion that the data provided is accurate.

4.3 Updating Production Facility Data

After initial Production Facility registration and Verification in the Digital Fuels Registry, Account Holders shall ensure that all Production Facility data remains accurate, complete, and current at all times.

Account Holders must notify the Digital Fuels Registry Administrator in writing of any changes to Production Facility data, including but not limited to:

- Changes in Production Facility status.
- Changes in Production Facility ownership, and the date on which the change occurred. A change in ownership must be confirmed by a letter signed by both the prior and new owners of the Production Facility and provided to the Digital Fuels Registry Administrator. The Digital Fuels Registry Administrator may request additional information in its sole discretion.
- Any other changes that may affect eligibility, verification status, or Certificate issuance.

Failure to timely update Production Facility data, including negligent or inadvertent errors, may result in corrective action, withholding of Certificate issuance, suspension, or other remedies pursuant to Section 4.5.

4.4 Misrepresentation of Production Facility Data

Account Holders may be removed from the Digital Fuels Registry, and Production Facilities suspended or withdrawn, by the Digital Fuels Registry Administrator for cause in accordance with the Operating Procedures and Terms of Use, including, without limitation:

- The submission of inaccurate, incomplete, or misleading Production Facility data
- Failure to promptly update Production Facility data as required under Section 4.4
- Failure to cooperate with reasonable requests for clarification, correction, or verification of Production Facility data

The Digital Fuels Registry Administrator reserves the right to withhold issuance of Certificates, suspend Production Facilities, deactivate or close accounts, or terminate participation where such inaccuracies are material or may compromise Registry integrity, regardless of whether such misrepresentation was intentional or unintentional.

4.5 Withdraw a Production Facility's Participation in the Digital Fuels Registry

A Production Facility that holds the applicable Producer Account may request to withdraw a Production Facility's participation in the Digital Fuels Registry by notifying the Digital Fuels Registry Administrator and providing the date the Production Facility should be withdrawn. Following withdrawal, the Production Facility will still appear in Digital Fuels Registry reports with "withdrawn" status. Certificates may be issued to the Production Facility up until the date the Production Facility is withdrawn from the Registry.

5. Issuance of Certificate

5.1 Process, Timeline, and Data Requirements for Certificate Issuance

The Digital Fuels Registry Administrator, in its sole discretion, can approve or reject the issuance request based on the underlying documents the Account Holder provides at any time across the Certificates' lifecycle within the Registry. Certificates are issued in whole numbers only. Fractional generation will be rounded down to the whole credit number.

The table below identifies the serial number format used in the Digital Fuels Registry.

Identifier	Description
Facility ID	Facility ID
Vintage	The year associated with verification data; displayed as YYYY
Issuing Registry and Fuel Type	Digital Fuels registry name and type of fuel evidenced by the Certificate
Batch ID	Registry-generated ID representing the unique issuance batch
Block Start	Start of issuance sequence
Block End	End of the issuance sequence

Account Holders will have the ability to select which Verification data from which they issue Certificates. To issue a Certificate, the Registry requires a valid Carbon Intensity Score be entered for a Production Facility that corresponds to a specific Verification data reporting period. Account Holders can continue to report Verification data to the Registry without issuing a Certificate. Reporting Verification data to the Registry is a separate activity from making an issuance request to create a Certificate.

Once an Account Holder submits a Certificate issuance request to the Registry, the Digital Fuels Registry Administrator will receive an automated electronic notification of the issuance request. All submitted Verification data for the Production Facility will be reviewed by the Digital Fuel Registry Administrator for final approval or rejection. If the Verification data matches the data provided by the Verifier, the Digital Fuel Registry Administrator will approve the issuance request. An issuance request creates an invoice, which is sent to the Account Holder for payment. After the payment has been received by the Digital Fuels Registry Administrator, the Certificates will be created for the Account Holder. If no payment is received, the Certificates will not be issued.

6. Transfer of Certificate

6.1 Deposits to Accounts

Certificates may be deposited into Accounts in the following ways:

- Certificates may be issued by a Production Facility and deposited into the associated Account.
- An Account Holder may accept a transfer of Certificates from another Account Holder.

6.2 Transfers Between Accounts

The Account Holder will select the recipient of the Certificate transfer. After the transfer has been initiated, the Certificate will be marked as pending in the Account Holder's outbox. Once this occurs, Certificates will not be movable unless the transfer is withdrawn by the Account Holder or rejected by the recipient. The Certificates will remain pending in the Account Holder's Account until the recipient accepts or rejects the transfer, or the transfer is withdrawn by the Account Holder. The Account Holder may withdraw the pending transfer at any time up until the recipient accepts the transfer.

Once the transfer is initiated, the Digital Fuels Registry will send an automated electronic notification of the transfer request to the recipient. Likewise, once the recipient has accepted or rejected the transfer, the Digital Fuels Registry will send an automated electronic notification to the Account Holder indicating the action taken by the proposed recipient. If the transfer is withdrawn, the Digital Fuels Registry will send an automated electronic notification to the recipient of the action. Certificates cannot be exported to another registry at this time.

7. Retirement of Certificate

7.1 Beneficial Ownership

A Beneficial Owner must be declared by an Account Holder in the Digital Fuels Registry. A Beneficial Owner can be the Account Holder, or an Account Holder may hold, buy, sell, or retire Certificates on behalf of a third-party entity. The Beneficial Owner claims the environmental benefit of the Certificate. An Account can have more than one Beneficial Owner declared, however, when retiring a Certificate, the Digital Fuels Registry only allows one Beneficial Owner to claim a Certificate.

7.2 Process to Retire Certificate

An Account Holder selects the Certificate(s) to retire. Once a Certificate is retired, it cannot be moved or transferred to any other Account or Account Holder.

8. Reports

8.1 Public Reports

Public reports are available on the Digital Fuels Registry website.

8.2 Account Holder Reports

Account Holder reports will only be accessible to Users of the Account and the Digital Fuels Registry Administrator. Account Holders will be provided with various Account Holder reports that will contain applicable information on their Production Facilities, issuance, transfer history, and retirement.

Digital Fuels Registry Administrator does not make any representations or warranties as to the eligibility, fitness for use, or quality of Certificates. Account Holder hereby waives, releases, indemnifies and agrees to defend and hold harmless the Digital Fuels Registry Administrator, its directors, officers, employees, members, partners, agents and representatives from and against any and all losses, claims, liabilities, suits, proceedings, awards, damages, costs, expenses, fees, penalties and fines related to the issuance, allocation, transfer, use or retirements of Certificates or the Digital Fuels Registry Administrator's administration of the Digital Fuels Registry except to the extent any of the foregoing is caused by, or is the direct result of, gross negligence, fraud or willful misconduct