

**International Civil Aviation Organization (ICAO) Carbon Offsetting and Reduction
Scheme for International Aviation (CORSA)**

**Application Form for Emissions Unit Programmes
seeking eligibility to supply units to
the CORSA first phase (2024 – 2026 compliance period)**

(Version 5, January 2023)

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SECTION I: ABOUT THIS ASSESSMENT

Background

ICAO Member States and the aviation industry are implementing the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Together with other mitigation measures, CORSIA will help achieve international aviation's aspirational goal of carbon neutral growth from the year 2020.

Aeroplane operators will meet their offsetting requirements under CORSIA by purchasing and cancelling CORSIA eligible emissions units. The ICAO Council determines CORSIA eligible emissions units upon recommendations by its Technical Advisory Body (TAB) and consistent with the CORSIA Emissions Unit Eligibility Criteria (EUC).

In March 2019, the ICAO Council unanimously approved the ICAO Document *CORSIA Emissions Unit Eligibility Criteria* for use by TAB in undertaking its tasks¹. TAB's assessment of emissions units programmes is undertaken annually². ICAO Council decisions that take account of these recommendations are contained in the ICAO Document *CORSIA Eligible Emissions Units*³.

ICAO invites emissions unit programmes⁴ interested to apply for the 2023 cycle of assessment by the TAB, to determine eligibility to supply CORSIA-Eligible Emissions Unit for the 2024-2026 compliance period (first phase). The assessment process will involve collecting information from each programme through this programme application form and supplementary materials and requested evidence.

TAB will no longer consider new applications for the 2021-2023 compliance period (pilot phase) only. However, where TAB recommends that Council approve a Programme as eligible for a forthcoming compliance cycle, it may also recommend that the Programme be eligible to supply emissions units for the previous compliance cycle that has not yet elapsed.

Through this assessment, the TAB will develop recommendations on the list of eligible emissions unit programmes (and potentially project types) for use under the CORSIA first phase, which will then be considered by the ICAO Council.

This form is accompanied by, and refers to, Appendix A "*Supplementary Information for Assessment of Emissions*

¹ Available on the ICAO CORSIA website: <https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx>

² Recommendations from 2019 TAB assessment cycle: <https://www.icao.int/environmental-protection/CORSIA/Pages/TAB2019.aspx>

Recommendations from 2020 TAB assessment cycle: <https://www.icao.int/environmental-protection/CORSIA/Pages/TAB2020.aspx>

Recommendations from 2021 assessment cycle: <https://www.icao.int/environmental-protection/CORSIA/Pages/TAB2021.aspx>

Recommendations from 2022 assessment cycle: <https://www.icao.int/environmental-protection/CORSIA/Pages/TAB.aspx>

³ Available on the ICAO CORSIA website: <https://www.icao.int/environmental-protection/CORSIA/Pages/CORSIA-Emissions-Units.aspx>

⁴ "Emissions Unit Programme", for the purposes of TAB's assessment, refers to an organization that administers standards and procedures for developing activities that generate offsets, and for verifying and "issuing" offsets created by those activities. For more information, please review the TAB FAQs on the ICAO CORSIA website: <https://www.icao.int/environmental-protection/CORSIA/Pages/TAB.aspx>

Unit Programmes”, containing the EUC and *Guidelines for Criteria Interpretation*. These EUC and Guidelines are provided to inform programmes’ completion of this application form, in which they are cross-referenced by **paragraph number**.⁵

This form is also accompanied by Appendix B “*Programme Assessment Scope*”, and Appendix C “*Programme Exclusions Scope*”, which request all applicants to identify the programme elements⁶ they wish to submit for, or exclude from, TAB’s assessment.

CORSIA Eligible Emissions Units Programmes must also complete Appendix D of this application, “*Emissions Unit Programme Registry Attestation*” in line with the instructions contained in Appendix D. Applicant organizations are strongly encouraged to submit this information by the deadline for submitting all other application materials for the current assessment cycle.

This form also requests *evidence of programme procedures or programme elements*. These evidentiary documents enable TAB to a) confirm that a given procedure or program element is *in place*, b) more fully comprehend the programme’s summary responses, and c) archive the information as a reference for potential future assessments. Programme responses to this application form will serve as the primary basis for the assessment. Such assessment may involve e.g. clarification questions, live interview(s) with TAB, and a completeness check of the application, as further requested.

Translation: The working language of the assessment process is English. Translation services are not available for this process. If the programme documents and information are not published in English, the programme should fully describe in English (*rather than summarize*) this information in the fields provided in this form, and in response to any additional questions. Where this form requests *evidence of programme procedures*, programmes are strongly encouraged to provide these documents in English, to provide for accuracy and comprehension. Where this is not possible due to time constraints or document length, the programme may provide such documents in their original language in a readily translatable format (e.g., Microsoft Word). Those programmes that need to translate documents prior to submission may contact the ICAO Secretariat regarding accommodation.

Disclaimer: The information contained in the application, and any supporting evidence or clarification provided by the applicant including information designated as “business confidential” by the applicant, will be provided to the members of the TAB to properly assess the programme and make recommendations to the ICAO Council. The application and such other evidence or clarification will be made publicly available on the ICAO CORSIA website for the public to provide comments, except for information which the applicant designates as “business confidential”. The applicant shall bear all expenses related to the collection of information for the preparation of the application, preparation and submission of the application to the ICAO Secretariat and provision of any subsequent clarification sought by the Secretariat and/or the members of the TAB. Under no circumstances shall ICAO be responsible for the reimbursement of such or any other expenses borne by the applicant in this regard, or any loss or damages that the applicant may incur in relation to the assessment and outcome of this process.

⁵ For further information on how TAB interprets the EUC in light of the *Guidelines*, refer to the document Clarifications of TAB’s Criteria Interpretations Contained in TAB Reports available on the ICAO TAB website: https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/TAB%202022/Clarifications_TABs_Criteria_Interpretations.pdf

⁶ At the “activity type” level (e.g., sector(s), sub-sector(s), and/or project “type(s)”)

SECTION II: INSTRUCTIONS

Submission and contacts

A programme is invited to complete and submit the form, including accompanying evidence and with required appendices, through the ICAO CORSIA website no later than close of business on **24 March 2023**. Within seven business days of receiving this form, the Secretariat will notify the programme that its form was received.

If the programme has questions regarding the completion of this form, please contact ICAO Secretariat via email: officeenv@icao.int. Programmes will be informed, in a timely manner, of clarifications provided by ICAO to any other programme.

Form basis and cross-references

Questions in this form are derived from the CORSIA emissions unit eligibility criteria (EUC) and any *Guidelines for Criteria Interpretation* introduced in Section I (above). To help inform the programme's completion of this form, each question includes the paragraph number for its corresponding criterion or guideline that can be found in [Appendix A “Supplementary Information for Assessment of Emissions Unit Programmes”](#).

Application Form completion

The programme is expected to respond to all questions in this application form at the time of application submission. TAB cannot initiate its assessment of applications in which this information is not provided in full as requested in this section. Failure to provide complete information may result in delays to the application's assessment.

A “complete” response involves three components: 1) a written summary response; 2) supporting evidence; and 3) programme revisions, where an applicant is considering or undertaking revisions to a programme procedure in question.

- 1) **Written summary responses:** The programme is encouraged to construct written summary responses in a manner that provides for general comprehension of the given programme procedure, independent of supporting evidence. TAB will confirm each response in the supplementary evidence provided by the programme. Please note that written summary responses should be provided in all cases—supporting evidence (described in *c*) below) should not be considered as an alternative to a complete summary response..
- 2) **Supporting evidence:** Most questions in this form request *evidence of programme procedures or programme elements*. Such evidence may be found in programme standards, requirements, or guidance documents; templates; programme website or registry contents; or in some cases, in specific methodologies. To help manage file size, the programme should limit supporting documentation to that which directly substantiates the programme's statements in this form.

Regarding such requests for evidence, programmes are expected to substantiate their responses in any of these ways (**in order of preference**):

- a) web links to supporting documentation included along with the written summary response to each given question; with instructions for finding the relevant information within the linked source (i.e. identifying the specific text, paragraph(s), or section(s) where TAB can find evidence of the programme procedure(s) in question);
- b) copying/pasting information directly into this form (no character limits) along with the written summary response;

- c) attaching supporting documentation to this form at the time of submission, with instructions for finding the relevant information within the attached document(s);

EXAMPLE of preferred approach to providing supporting evidence that could meet expectations for complete responses to a question:

“The Programme ensures its consistency with this requirement by requiring / undertaking / etc. the following:

[Paragraph(s) introducing and summarizing specific programme procedures relevant to question]

The full contents of these procedures can be found in [Document title, page X, Section X, paragraphs X-X]. This document is publicly available at this weblink: [weblink].”

3) **Programme revisions**: Where the programme has any plans to revise the programme (e.g., its policies, procedures, measures, tracking systems, governance or legal arrangements), including to enhance consistency with a given criterion or guideline, please provide the following information in response to any and all relevant form question(s):

- a) Proposed revision(s);
- b) Process and proposed timeline to develop and implement the proposed revision(s);
- c) Process and timeline for external communication and implementation of the revision(s).

Application and assessment scope

The programme may elect to submit for TAB assessment all, *or only a subset*, of the activities supported by the programme. The programme is requested to identify, in the following Appendices, the activities that it wishes to submit for, or exclude from, TAB’s assessment:

In **Appendix B** “*Programme Assessment Scope*”, the programme should clearly identify, at the “activity type” level (e.g., sector(s), sub-sector(s), and/or programme/project “type(s)”), elements that the programme **is submitting for TAB’s assessment** of CORSIA eligibility; as well as the specific methodologies, protocols, and/or framework(s) associated with these programme elements; which *are* described in this form.

In **Appendix C** “*Programme Exclusions Scope*”, the programme should clearly identify, at the “activity type” level (e.g., sector(s), sub-sector(s), and/or programme/project “type(s)”), any elements the programme **is not submitting for TAB’s assessment** of CORSIA eligibility, which *are not* described in this form; as well as the specific methodologies, protocols, and/or framework(s) associated with these programme elements.

Emissions Unit Programme Registry Attestation

In **Appendix D** “*Emissions Unit Programme Registry Attestation (version 2, January 2022)*”, the programme should provide the information relating to programme registry functionality that is referred to in the attestation and its attachment. Both the programme representative of an emissions unit programme, and the administrator or authorized representative of the registry designated by the programme, should review and attest to the accuracy of this information and their acceptance of the terms, preferably at the time of application.

Treatment of EUC-relevant programme procedures at the methodology level

Programmes that identify with the following explanations are encouraged to summarize and provide evidence of both their overarching *programme-level* procedure(s) and *methodology-level* procedure(s) wherever relevant:

The CORSIA EUC and TAB assessments typically apply to *programme-level* procedures rather than to individual methodologies or projects. Most programmes' overarching guidance documents contain a mix of *general/guiding* requirements and *technical* ones. However, some programmes set out general requirements in overarching guidance documents, while reflecting key technical procedures in programme methodologies⁷. **Such methodologies may be relevant to TAB's assessment.** This could be the case where, e.g., the methodologies are developed directly by the programme (staff or contractors); the programme must refer to a methodology's requirements when describing its alignment with the EUC; the programme's general requirements alone are too high-level/non-specific for TAB to assess them as stand-alone procedures.

EXAMPLE: Programme A's project standard contains its *programme-level* general requirements. The standard requires all activities to pass a programme-approved additionality test. However, Programme A sets out a unique list of approved tests in each of its methodologies—rather than providing a single list or menu in its programme-level standard. These lists vary across different activity types or category(ies). Thus, TAB may ultimately need to assess Programme A's programme- *and* methodology-level requirements in order to confirm its use of the specific additionality tests called for under the *Must be Additional* criterion.

“Linked” certification schemes

This application form should be completed and submitted exclusively on behalf of the programme that is described in Part I of this form.

Some programmes may supplement their standards by collaborating with other schemes that certify, e.g., the social or ecological “co-benefits” of mitigation. The programme can reflect a linked scheme's procedures in responses to this form, where this is seen as enhancing—i.e. going “above and beyond”—the programme's own procedures. For example, the programme may describe how a linked scheme audits sustainable development outcomes; but is not expected to report the linked scheme's board members or staff persons.

Programmes should clearly identify any information provided in this form that pertains to a linked certification scheme and/or only applies when a linked certification scheme is used.

Disclosure of programme application forms and public comments

Applications, including information submitted in Appendices B, C, and D, as well as other information submitted by applicants will be publicly available on the ICAO CORSIA website, except for materials which the applicants designate as business confidential.

The public will be invited to submit comments on the information submitted, including regarding consistency with the EUC, through the ICAO CORSIA website, for consideration by the TAB in its assessment.

⁷ Note that any applicant may use different terminology. For example, a programme may refer to a “methodology” as a protocol or framework.

SECTION III: APPLICATION FORM

PART 1: General information

A. Programme Information

Programme name: [CarbonPath Marginal and Orphaned & Abandoned well abandonment](#)

Administering Organization⁸: [CarbonPath Inc.](#)

Official mailing address: [448 Harvard Street Houston, TX, USA, 77007](#)

Telephone #: [1-504-250-0942](#)

Official web address: [www.carbonpath.io](#)

B. Programme Administrator Information

Full name and title: [Samuel Arnold](#)

Employer / Company (*if not programme*): [CarbonPath](#)

E-mail address: sarnold@carbonpath.io

Telephone #: [1-504-250-0942](#)

C. Programme Representative Information (if different from Programme Administrator)

Full name and title: [Click or tap here to enter text.](#)

Employer / Company (*if not Programme*): [Click or tap here to enter text.](#)

E-mail address: [Click or tap here to enter text.](#)

Telephone #: [Click or tap here to enter text.](#)

D. Programme Senior Staff / Leadership (e.g., President / CEO, board members)

List the names and titles of programme's senior staff / leadership, including board members:

[Tyler Crabtree - CEO](#)

[Samuel Arnold - COO and CFO](#)

[Erik Baros - CTO](#)

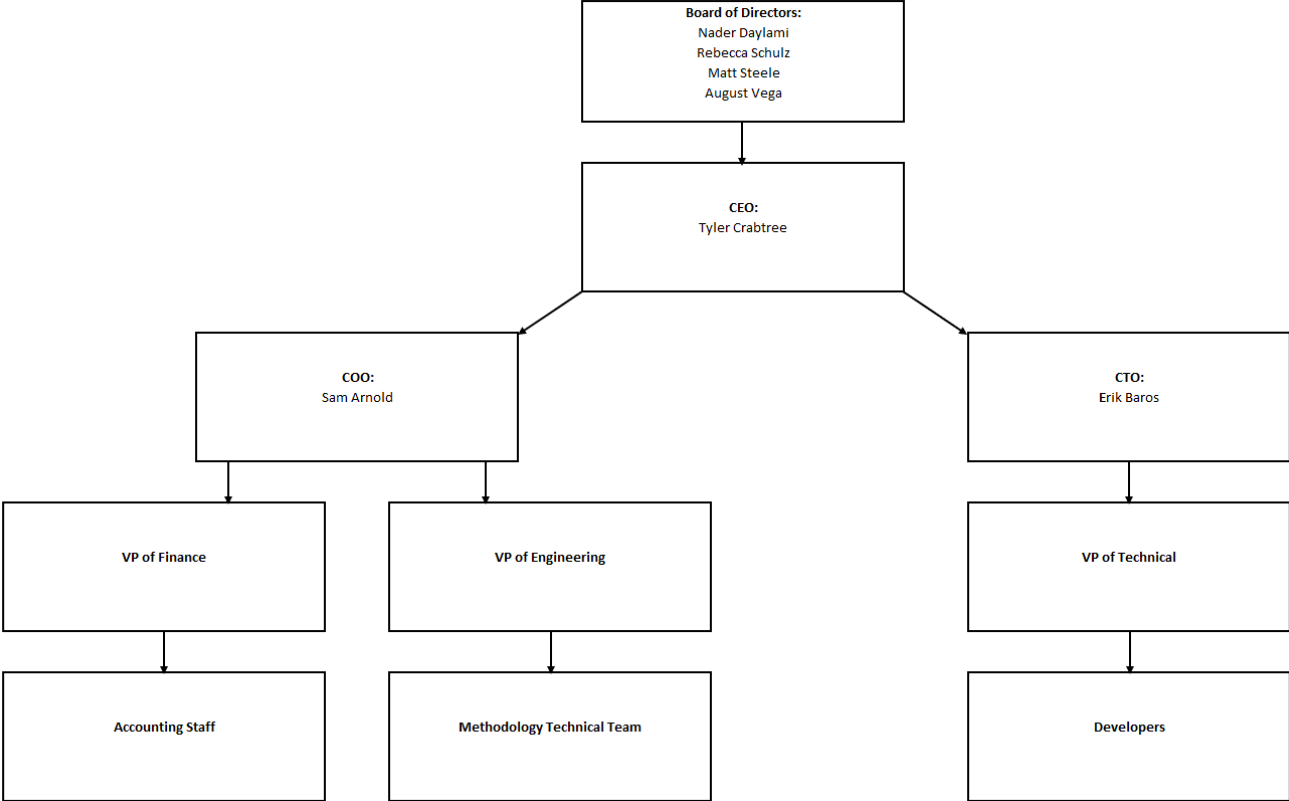
[Nader Daylami - Board of Directors](#)

[Rebecca Schulz – Board of Directors](#)

⁸ Name of the business, government agency, organization, or other entity that administers the Emissions Unit Programme, *if different from "Programme Name"*.

Matt Steele – Board of Directors
August Vega - Board of Directors

Provide an organization chart (in the space below or as an attachment) that illustrates, or otherwise describes, the functional relationship a) between the individuals listed in D; and b) between those individuals and programme staff / employees; and c) the functions of each organizational unit and interlinkages with other units.



PART 2: Programme summary

Provide a summary description of your programme

We are a registry that is focused on reducing emissions from industry. We are submitting two methodologies that reduce fugitive methane emissions from oil and gas wells. The first methodology generates credits for the voluntary offset market by plugging orphaned & abandoned wells in the United States. There are over two million orphaned & abandoned wells in the US alone, with the majority leaking methane directly to the atmosphere and the water table. According to the Environmental Defense Fund, fugitive methane emissions are responsible for 25% of greenhouse gas warming due to the extreme potency of methane relative to carbon dioxide early in the life of the element, and that 36% of these emissions emanate from the oil and gas sector. EDF also produced a paper that concludes that the majority of the methane emissions from the oil and gas sector originate from both marginal and orphaned & abandoned wells. [Facts about Methane | UNEP - UN Environment Programme](#)

Stopping methane emissions from both marginal and orphaned & abandoned wells can have a dramatic impact on the environment and help reduce GHG emissions significantly.

Orphaned & Abandoned wells are wells that have no solvent operator. This is typically the result of the producing operator filing for bankruptcy protection in the United States or dissolution as an entity with no responsible party available to fund the proper closure of the wells.

As a result, the main valves are shut off, but the wells can leak from holes in the production tubing, casing, or production equipment. There is often an undisturbed conduit between a reservoir of oil and gas thousands of feet below the surface and the water table and the atmosphere. These wells can take anywhere from \$20,000 to \$150,000 to plug and abandon according to US State and US Federal regulations. Therefore, the problem could cost between \$40 billion and \$300 billion to remediate. There is no responsible operator, and minimal US State and Federal Funding available to clean up the problem, and therefore the voluntary carbon market is needed.

For marginal wells, these are oil and gas wells that are operating, are generating free cash flow, but are at risk of becoming orphaned & abandoned. The credit finances the premature plugging of wells that would otherwise produce for decades longer and might fall into the hands of an operator that will become insolvent.

Our methodology provides a system for validating additionality and permanence, verifies that the project was completed according to US State or Federal regulations and that the emissions were reduced. The verifiers for our methodologies are the US State or Federal regulator who issues a permit certifying that the work was complete, a United States Security and Exchange Commission utilized 3rd party engineering reserves auditor, and an approved measurement company that measures pre and post plugging methane emissions. Because the plugging of a well is a discrete event, the ongoing review only includes monitoring to ensure that no new wells are drilled in that area. New wells require a permit, so we continually monitor to ensure that the reserves remaining in the ground are not accessed.

All of our digital monitoring, reporting and verification will be held on blockchain for any interested party to audit the results, providing the transparency we believe the market needs.

PART 3: Emissions Unit Programme Design Elements

Note—where “evidence” is requested throughout *Part 3* and *Part 4*, the programme is expected to provide web links to documentation and to identify the specific text, paragraph(s), or section(s) where TAB can find evidence of the programme procedure(s) in question. If that is not possible, then the programme may provide evidence of programme procedures directly in the text boxes provided (by copying/pasting the relevant provisions) and/or by attached supporting documentation, as recommended in “SECTION II: INSTRUCTIONS—**Form Completion: Supporting Evidence**”.

Note—“*Paragraph X.X*” in this form refers to corresponding paragraph(s) in Appendix A “Supplementary Information for Assessment of Emissions Unit Programmes”.

Note—Where the programme has any plans to revise the programme (e.g., its policies, procedures, measures, tracking systems, governance or legal arrangements), including to enhance consistency with a given criterion or guideline, provide the following information in response to any and all relevant form question(s):

- Proposed revision(s);
- Process and proposed timeline to develop and implement the proposed revision(s);
- Process and timeline for external communication and implementation of the revision(s).

Question 3.1. Clear methodologies and protocols, and their development process

Provide *evidence*⁹ that the programme’s qualification and quantification methodologies and protocols are *in place* and *available for use*, including where the programme’s existing methodologies and protocols are publicly disclosed: (*Paragraph 2.1*)

The methodologies are published on our website for project developers to utilize.

[CarbonPath Group Premature Oil Gas Well Abandonment Carbon Credit yZtE5l8.pdf](#) ([carbon-path-production.s3.amazonaws.com](#))

Summarize the programme’s process for developing further methodologies and protocols, including the timing and process for revision of existing methodologies: (*Paragraph 2.1*)

If a methodology is proposed, the methodology writer contacts CarbonPath through our website and if we believe that the process has merit after a review by our VP of Engineering and our COO, CEO and board, then we determine if we have the internal expertise to review and enhance the process to ensure it is actionable, additive, permanent, ascertain leakage, and can be adequately quantified. If we do then we will enhance the methodology and when ready, put it on our public website for open commentary. Once the public commentary period has ended, we compile, respond, and make any changes we deem necessary to the methodology. We publish the

⁹ For this and subsequent “evidence” requests, evidence should be provided in the text box (e.g., web links to documentation), and/or in attachments, as recommended in “SECTION II: INSTRUCTIONS—*Form Completion*”.

comments and our responses and any changes along with the current methodology for project developers to utilize. If we do not have the internal capabilities, we convene a meeting with senior management to hire outside resources that are experts in the space. If we hire, then we begin with the enhancement of the methodology and if we determine we cannot and should not hire the requisite resources, we will not pursue the methodology.

The website form submission tab is under methodologies, propose a methodology, and link on the links – this link starts the process of entering information regarding the new proposal - [Upload Methodology for Review \(typeform.com\)](#)

Provide *evidence of the public availability* of the programme’s process for developing further methodologies and protocols: (*Paragraph 2.1*)

Here is the link to upload a new methodology for consideration - [Upload Methodology for Review \(typeform.com\)](#)

Here is the process outlined for public review - [Methodology Info Guide \(notion.site\)](#) and there is a further document on this link entitled Process for evaluating new methodologies.docx

Question 3.2. Scope considerations

Summarize the level at which activities are allowed under the programme (e.g., project based, programme of activities, jurisdiction-scale): (*Paragraph 2.2*)

Our methodologies are focused on the Inland of the United States only and is not project based. Each well is considered a project as each well shut in contains an API number (American Petroleum Institute) record which is similar to a US Social Security Number, uniquely identifying that well and all of the public documentation that goes along with it. We geotag each carbon offset to a unique well and its API number. Each well permanently plugged and abandoned comes with a unique permit which contains the API number and the public record that it was determined by US State or US Federal regulators that the well was properly plugged according to applicable State or Federal standards. The boundary for a project is outlined for orphaned wells on page 10 under Boundary and for marginal wells on page 13 under 2.2.1C under Additionality Decision Tree.

Summarize the eligibility criteria for each type of offset activity (e.g., which sectors, project types, and geographic locations are covered): (*Paragraph 2.2*)

These projects are properly plugging oil and gas wells in the United States of America. As stated above, each offset is tagged to a specific well which contains calculations as to the amount of methane leaking, historical and forecasted production, audit of forecasted production by a third-party engineering firm, measurement to ensure that the plugging activities stopped all emissions, before and after pictures, and the US State or Federal permit approving and assuring that the work was properly completed. Each well must be considered a project and ran through our methodologies. The eligibility criteria are outlined for orphaned wells on page 8 under 4.2.1 Determine the qualifying status of an O&A wellbore and for marginal wells on 2.2.1C under Additionality Decision Tree.

Provide *evidence* of the Programme information defining a) level at which activities are allowed under the

Programme, and b) the eligibility criteria for each type of offset activity, including its availability to the public: (Paragraph 2.2)

Eligibility is defined in our methodologies which are listed for public view and were publicly available for comment prior to publication at [CarbonPath](#). For the marginal well methodology, it is contained under Section 2.2.1 and here is Figure 3 of the Methodology. The only test to whether an oil or gas well qualifies is if it is a Proved Developed Producing well per the United States Security and Exchange Commissions' guidelines.

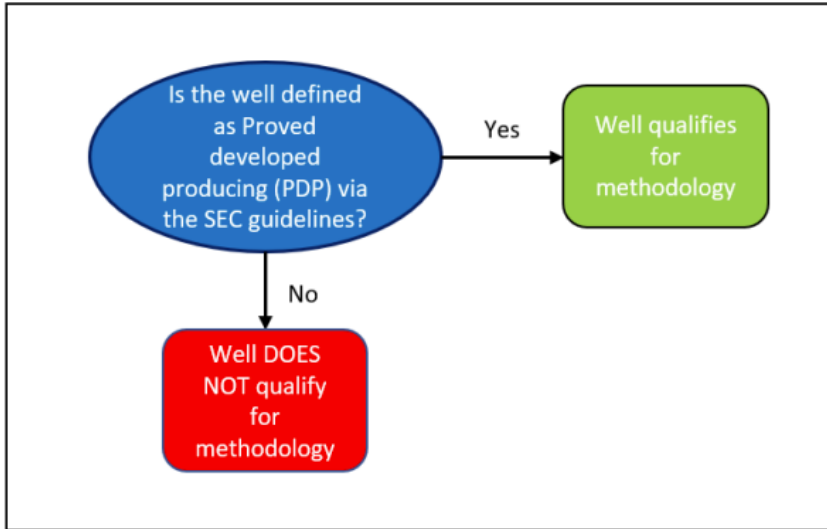


Figure 3: Additionality Decision Tree

For the Orphaned well methodology, the test is in the methodology under 4.2.1 , which is outlined below:

4.2.1 DETERMINE THE QUALIFYING STATUS OF AN O&A WELLBORE

Using the above definitions (section 3.2) within a wellbore database (section 3.3) a wellbore qualifies for this methodology if the following criteria are met.

- The wellbore is located within the United States.
- The wellbore is located onshore within the land boundaries of the wellbores reported state. Specifically excluded are wellbores located within the waters of the Gulf of Mexico and the Pacific Coast areas of California.
- The wellbore status within a database (section 3.3) is one of the following: abandoned, inactive, orphan, shut-in, TA, unknown OR no production has been reported to the regulatory entity for twelve (12) consecutive months.
- The operator of record is not solvent, i.e., the operator is not listed as an active oil and gas company within the reported state with the state regulatory entity OR no company level reporting has been filed with the state for 12 consecutive months.
- In the unique case of an unknown or undocumented wellbore, if the state recognizes the wellbore and the surface landowner agrees to the plan of plugging, the wellbore will qualify for this method.

Question 3.3. Offset credit issuance and retirement procedures

Are procedures in place defining how offset credits are... (<i>Paragraph 2.3</i>)	
a) issued?	<input checked="" type="checkbox"/> YES
b) retired / cancelled?	<input checked="" type="checkbox"/> YES
c) subject to discounting (<i>if any</i>)?	<input checked="" type="checkbox"/> YES

Are procedures in place defining... (<i>Paragraph 2.3</i>)	
d) the length of crediting period(s)?	<input checked="" type="checkbox"/> YES
e) whether crediting periods are renewable?	<input checked="" type="checkbox"/> YES

Provide evidence of the procedures referred to in a) through e) (if any, in the case of “c”), including their availability to the public:

These are defined in each of the methodologies. Where we differ from traditional nature-based solutions is that the event of plugging an oil or natural gas well is a discrete event. That plugging involves removing all of the production tubing, surface equipment, and filling the wellbore with cement so that there cannot be any future production out of the well. This is tested by verifiers going onsite to detect any leaks and is also done by the State or Federal regulatory body to ensure that the work was completed and done properly.

We only issue once all documentation has been provided by our third-party verifiers to ensure that the well was plugged and that the oil left in the ground is verified by a third-party reserve auditing engineering. We keep all documentation on blockchain to ensure that the credit is only issued once.

Once all documentation is in CarbonPath’s possession, we initiate the creation of the credits utilizing our smart contract through Fireblocks ([Fireblocks - #1 Institutional Digital Asset Custody, Settlement & Issuance](#)). This starts the initiation of delegation of authority which requires several members within management to verify the data on the block before creation of the credit.

Once the credit is issued, it lives on blockchain where the data surrounding the credit is kept on chain including all data one would need to replicate the calculations and verify that the work was completed. The credit is retired through a process called burning, where it is sent to a null wallet address and therefore can never be transferred out. The credit is retired but the record of its creation, trading history, and all pertinent documentation is always available for any interested party to review, providing the ultimate in transparency.

We have a discounting or a contingency plan in place in our methodologies in that we hold back a significant number of credits in an insurance pool called the buffer pool which is outlined in our marginal well methodology. If that pool is ever accessed, we mint those credits to offset and then retire immediately keeping the purchaser whole.

The length of the credit period is outlined in each of our methodologies – for marginal wells, it is the earlier of the well forecasted to reach one barrel of oil a day equivalent or ten years. There are roughly one third of the total wells operating in the United States that are at or below that one barrel of oil equivalent so we can reasonably

conclude that at that rate we are being conservative in our economic limit and the maximum is ten years. For orphaned & abandoned wells the crediting period is 25 years.

Because these are discrete events of plugging wells that will permanently impair access to that oil thousands of feet below the surface, the crediting period is a one-time event. This is outlined in each methodology.

The issuance of credits is outlined in the documentation [Methodology Info Guide \(notion.site\)](#) and specifically - [CarbonPath Blockchain Methodology.pdf \(notion.so\)](#). The length of the credit period for producing wells is outlined in section 2.2.9A, shown below:

2.2.9A DETERMINE THE CREDITING PERIOD

While qualifying wells will continue to produce for decades to come, it is difficult to assess the true productive life, and therefore crediting period, of a well given the dynamic nature of the external factors governing the life of a well such as commodity price, ownership, maintenance capital expenditure, etc. These external factors vary as a function of time and can be highly subjective. In addition, the carbon credit token incentive under this methodology must be cost competitive (see Figure 12 below) to other offerings in the voluntary carbon market to result in project well development. For these reasons, the crediting period shall be defined as the lesser of ten (10) years or the BTP (see section 2.2.2). Given the nature of the permanent P&A activity as a one-time event, tied to a single wellbore, the project developer shall have access to one (1) crediting period per project well per productive interval following the receipt of the required documentation from the procedures as outlined in this methodology. No subsequent crediting periods shall be granted once carbon credit tokens are issued against Baseline Hydrocarbon Reserves from a specific productive interval from an individual project well.

While the crediting period for orphaned wells is outlined in the Calculation Sections, of which there are two representing two potential measurement techniques, these are outlined in page 9 and page 12 of the methodology and are displayed here:

SOLUTION #1: CALCULATIONS

The technology to accurately measure methane emissions has existed for decades. The required identification, quantification, and reporting of emissions from industrial sites has been largely driven by state and federal governmental regulations. Third party data verifiers, monitoring solutions, and certification standards are also widely available and continue to grow with the increased scrutiny of greenhouse gas emissions, especially methane. This increased activity is helping to drive innovation and evolution of existing measurement technology and standardization.

A qualified rate measurement, verified, within a boundary in metric tons per year multiplied by 50 years is the avoided methane emission volume per wellbore that is properly decommissioned using this solution. Verification of the measurements is critical to the quality of this solution and is discussed below.

SOLUTION #2: CALCULATIONS

The United States Environmental Protection Agency (EPA) annually publishes the “EPA US Green House Gas Inventory” [1]. Contained in the “Energy” Chapter (Chapter 3 in the 2022 report) under the subchapter titled “Abandoned Oil and Gas Wells” (Chapter 3.8 in the 2022 report) the methodology, data, uncertainty, QA/QC, and planned improvements are presented. The EPA uses a Tier 2 method from IPCC 2019 to quantify emissions from abandoned oil and gas wells based on the number of plugged and unplugged abandoned wells in the U.S. and emission factors for plugged and unplugged abandoned wells in the US. The details of this approach and the data sources used are described in the memorandum Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2016: Abandoned Wells in Natural Gas and Petroleum Systems (2018 Abandoned Wells Memo) [5].

Key data reported in the “EPA US Green House Gas Inventory” within Sub-Chapter “Abandoned Oil and Gas Wells” are the total “unplugged abandoned oil wells”, total “unplugged abandoned gas wells”, “Methane (CH₄) from unplugged abandoned oil wells” and “Methane (CH₄) from unplugged abandoned gas wells”. The key variables are presented yearly in “Abandoned Oil Wells” Table 3-101 and “Abandoned Gas Wells” Table 3-102. Using the above key variables from the report, emission factors for each O&A wellbore can be calculated by dividing the methane (CH₄) volumes in each oil and gas table by the total number of O&A wells. This emission factor represents the average methane (CH₄) volume emitted by an oil or gas O&A wellbore per year. The weighted average of emission factors from oil and gas wells with the total number of unplugged abandoned oil and gas wellbores is 0.125 metric tons of CH₄/year for each O&A wellbore [Table 1].

Question 3.4 Identification and Tracking

Does the programme utilize an electronic registry or registries? (<i>Paragraph 2.4.2</i>)

<input checked="" type="checkbox"/> YES

Provide web link(s) to the programme registry(ies) and indicate whether the registry is administered by the

programme or outsourced to a third party (*Paragraph 2.4.2*):

Our registry is created on the Celo blockchain, an Ethereum Virtual Machine based system. The ledger of all credits originated, traded, held and retired is located on the validation computers located throughout the globe. This provides immutability as no transaction (retirement, trading) can happen without validation by the group, and therefore nothing can be traded or retired unless it is a legitimate transaction. If one server is eliminated from the system, there are many others that continue to hold the transactions and thus it is an immutable record and we believe superior to a traditional registry. Due to the speed of the Celo network, we can keep on chain or inside many computers a record of all data needed to audit the credit, and we provide a web-based portal to view this data. Anyone at any time to view any credit ever created or retired or in circulation.

This is direct on our app which utilizes Celo which can be seen here - [CarbonPath App](#)

By selecting a well closed on our map in the application, one can see the contract address specific for that well. Any credit issued on our platform represents a well, and that has an address, for example, <https://explorer.celo.org/mainnet/address/0x1F97C75201f2621f14d0c33Fb301747879177fB5>. One can utilize the Celo block explorer to determine the wallet address (account holder) of the credit and all of its trading history, which is an immutable record.

A more fulsome discussion as to how this works is contained in the following documents which are linked in our website:

[CarbonPath Architecture — CarbonPath documentation](#)

Does the programme have procedures in place to ensure that the programme registry or registries...:	
a) have the capability to transparently identify emissions units that are deemed ICAO-eligible, in all account types? (<i>Paragraph 2.4.3</i>)	<input checked="" type="checkbox"/> YES
b) identify, and facilitate tracking and transfer of, unit ownership/holding from issuance to cancellation/retirement? (<i>Paragraphs 2.4 (a) and (d) and 2.4.4</i>)	<input checked="" type="checkbox"/> YES
c) identify unit status, including retirement / cancellation, and issuance status? (<i>Paragraph 2.4.4</i>)	<input checked="" type="checkbox"/> YES
d) assign unique serial numbers to issued units? (<i>Paragraphs 2.4 (b) and 2.4.5</i>)	<input checked="" type="checkbox"/> YES
e) identify in serialization, or designate on a public platform, each unique unit's country and sector of origin, vintage, and original (and, if relevant, revised) project registration date? (<i>Paragraph 2.4.5</i>)	<input checked="" type="checkbox"/> YES
f) are secure (i.e. that robust security provisions are in place)? (<i>Paragraph 2.4 (c)</i>)	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the procedures referred to in a) through f), including the availability to the public of the procedures referred to in b), d), and f):

See the web application here which is the web2 based explorer that can search and find all of the blocks which are tokens that have been created ([CarbonPath App](#)). These tokens contain all of the information needed including the serial number of the well retired, the latitude and longitude of the well site, the US state, the others outlined below:

- Well American Petroleum Institute Number (API)
- Well Name
- Current Operator
- Primary Resource (Oil or Gas)
- Well Type (Vertical or Horizontal)
- Prior Well Status
- Field
- County
- State
- First Production Date
- Plugged and Abandoned Date
- Oil Sequestered
- Natural Gas Sequestered
- Advance EAVs
- Buffer Pool EAVs
- Methodology Version Utilized
- Township
- Range
- SHL Section
- SHL Latitude
- SHL Longitude
- Producing Formation
- Lease ID/Unit ID/ Production ID
- Measured Depth
- Total Vertical Depth
- 1st Perforation Depth
- Last Perforation Depth
- Advance PPV Length
- Advance PPV Height
- Advance PPV Width
- Buffer Pool PPV Length
- Buffer Pool PPV Height
- Buffer Pool PPV Width
- Mint Transaction Hash
- Contract Address
- Token ID
- IPFS Link (For documentation including the 3rd Party reserves report, the State Permit, the wellbore diagram, the chemical sampling for the well, production historical curve and the forecasted baseline production)

Because this data lives on an immutable blockchain, there is always a record of who owns the credit, a complete record of any trading activity, creation and retirement.

Each token has its own unique identifier and the pertinent information contained directly in the block as outlined above.

For ICAO standards, each well is plugged under our two methodologies and is therefore created by CarbonPath after it adheres to our methodology and all documentation has been provided.

This is the most secure method as blockchain technology ensures that consensus approves any change to the state of the block and one hacked computer cannot change that. Our system has been tested by Hacken, a third party security auditing firm ([Blockchain Security Auditor - Web3, DeFi, NFT | Hacken](#)). Our security audit is listed on our website under [CarbonPath SC Audit Report 16032023 \[SA-1027\] \(notion.so\)](#)

This is direct on our app which utilizes Celo which can be seen here - [CarbonPath App](#)
By selecting a well closed on our map in the application, one can see the contract address specific for that well. Any credit issued on our platform represents a well, and that has an address, for example, <https://explorer.celo.org/mainnet/address/0x1F97C75201f2621f14d0c33Fb301747879177fB5>. One can utilize the Celo block explorer to determine the wallet address (account holder) of the credit and all of its trading history, which is an immutable record.

A more fulsome discussion as to how this works is contained in the following documents which are linked in our website:

[CarbonPath Architecture — CarbonPath documentation](#)

List any/all international data exchange standards to which the programme’s registry(ies) conform: (*Paragraph 2.4 (f)*)

We are working with other blockchain voluntary credit creators to share information including Toucan, Flowcarbon and EcoRegistry.

Are policies and robust procedures in place to...	
a) prevent the programme registry administrators from having financial, commercial or fiduciary conflicts of interest in the governance or provision of registry services? (<i>Paragraph 2.4.6</i>)	<input checked="" type="checkbox"/> YES
b) ensure that, where such conflicts arise, they are appropriately declared, and addressed and isolated? (<i>Paragraph 2.4.6</i>)	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) and b):

The registry in itself is governed by the Celo Foundation and administered by all of the validators on the system. They are validating transactions for the entire ecosystem which includes these carbon offsets originated by CarbonPath and other general business transactions ([Homepage | Celo](#)). The Celo validators, like all blockchain validators, are compensated for validating transactions. The consensus mechanism ensures that if there is a nefarious actor who approves a non-valid transaction, that the funds utilized to stake or become a validator are at risk. Therefore, the system is highly robust and not subject to fraud. The highly publicized theft of crypto currencies comes from the poor control of the holder of their private key which is needed to initiate a transaction or those that gave custody to their assets on another custodian’s block, and the custodian transferred those co-mingled assets out).

The creators of the tokens under the smart contract can only done by CarbonPath and takes a multitude of senior management to originate a new token. See above where we have our delegation of authority to create new tokens once all of the checks have been concluded to ensure that all of the necessary documentation per the methodology is in hand and is correct.

All members of CarbonPath have seen and agreed to per the terms of their employment the Conflicts of Interest policy of CarbonPath which adheres to §144 of the Delaware General Corporation Law. A copy of this document is held with CarbonPath and has been circulated to all employees. It is not publicly disclosed but a copy can be given to the committee if needed.

Please see our Governing Procedures which are publicly available on our website - [Methodology Info Guide \(notion.site\)](#)

Are provisions in place...	
a) ensuring the screening of requests for registry accounts? (<i>Paragraph 2.4.7</i>)	<input checked="" type="checkbox"/> YES
b) restricting the programme registry (or registries) accounts to registered businesses and individuals? (<i>Paragraph 2.4.7</i>)	<input checked="" type="checkbox"/> YES
c) ensuring the periodic audit or evaluation of registry compliance with security provisions? (<i>Paragraph 2.4.8</i>)	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the registry security provisions referred to in a) through c):

The purchase of a token created from the completion of a project using one of our methodologies can be done by anyone who has a credit card or crypto wallet. In order to offramp and sell the credit for US Dollars, the exchanges require per US regulation a Know Your Customer and Anti Money Laundering check. We rely on that fact to comply with US regulations. We are not trading but an initial sales point and retirement point. If a buyer wants to immediately retire, they can do so anonymously.

Because you are on ramping to blockchain through creating a wallet and depositing funds, you connect a bank

account, purchase the currency of the blockchain, and utilize that to purchase the token. Blockchain creates an immutable record of all transactions so auditing ability is high.

This is not the typical web2 interface where one needs to be registered and verified through our site in order to ascertain suitability and prevent fraud. The utilization of the blockchain and the Celo ecosystem provides that clarity to the blockchain registry.

[Homepage | Celo](#)

We undertake an annual review of our security using Hacken as outlined above.

[CarbonPath Blockchain Methodology.pdf \(notion.so\)](#)

Question 3.5 Legal nature and transfer of units

Does the programme define and ensure the following:	
a) the underlying attributes of a unit? (Paragraph 2.5)	<input checked="" type="checkbox"/> YES
b) the underlying property aspects of a unit? (Paragraph 2.5)	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the processes, policies, and/or procedures referred to in a) and b), including their availability to the public:

These are outlined in our methodologies ([CarbonPath](#)). The units of a credit are one tonne of CO2 and one tonne of CH4 (methane). These are calculated using the methodology which contains scientific methods to ascertain the amount of oil remaining in the ground using reservoir engineering principals, sampling of the oil and natural gas to understand the chemical composition of the fluid, and measurements of methane emitting from the well site. Therefore, one can reliably determine the amount of oil and natural gas that would have been produced and either burned or emitted to the atmosphere and chemically converted into a CO2 emission. The calculations are provided for marginal wells in 2.2.4 Determine The Hydrocarbon Reserves Composition and for orphaned wells under 4.2.3 and 4.2.4 and is a direct methane measurement.

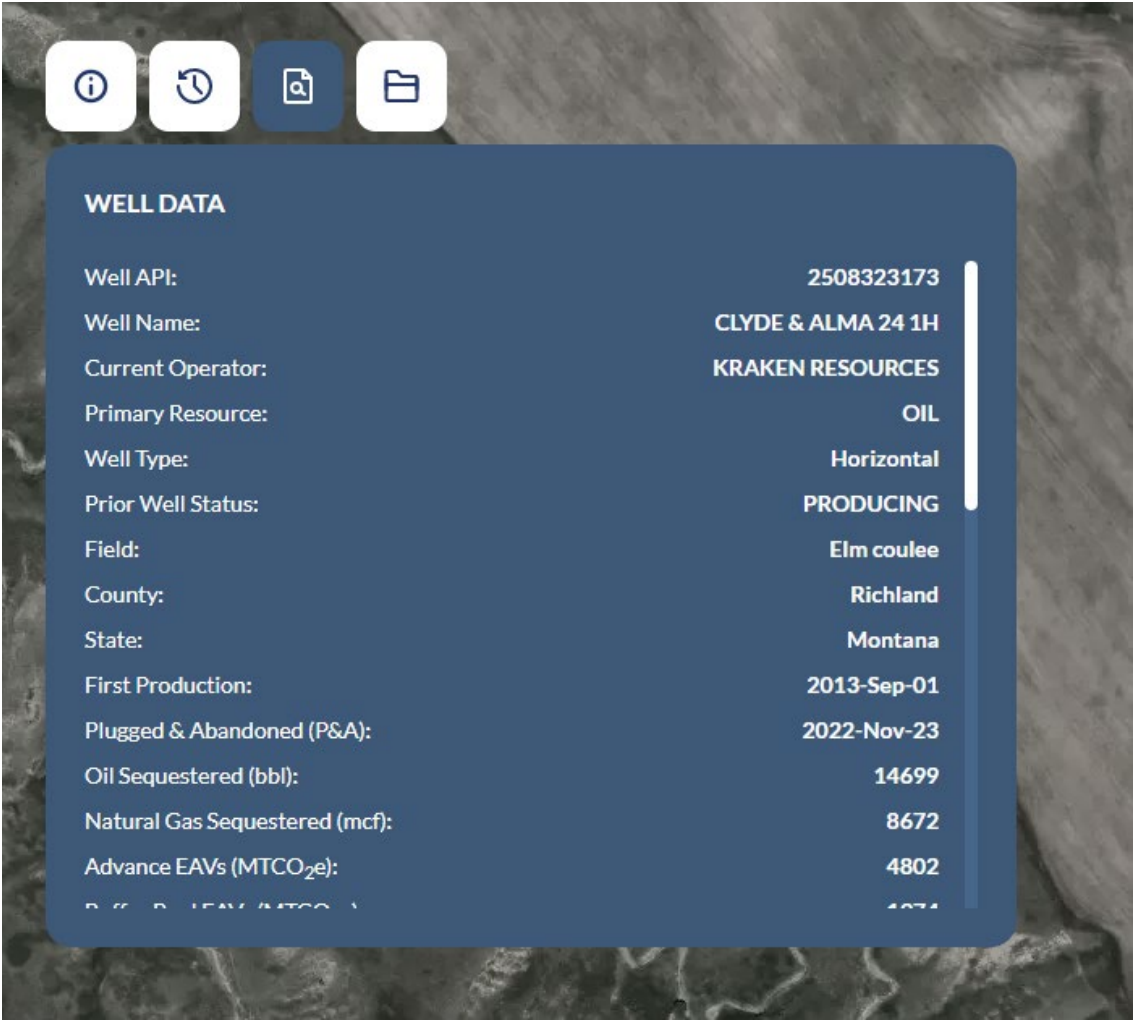
The underlying property aspects of a unit are held with the mineral owner, which is a very well-defined body of case law in the United States. Once a well has been permanently plugged, and the State of Federal government has issued a permit stating that the work is complete and to standards, then the rights to those minerals revert to the original owner. That owner is now free to contract with another operator to produce those reserves. However, because the well is a low producer or nonproductive, there is no plausible scenario where any new operator would commit capital to develop those reserves. For example, a well that is producing five barrels of oil a day might contain 10,000 barrels of Recoverable Reserves (SEC defined term which is audited and provided in our methodology). Those are barrels that would have eventually be produced through that well. Once it is plugged, it is not technically feasible to re-enter that well, and therefore a new well must be drilled to produce those reserves. The cost for a new well could be upwards of \$10 million and therefore an oil price significantly above \$1,000 a barrel would be needed to economically justify the cost. Because the well has been drained, the

pressure is low and the rate would not be higher than the previous well and couldn't be accessed by any nearby well because it would have already been account for in the audited reserves estimate.

The oil and natural gas in the reservoir were created millions of years ago and it has been in that pore space in the rock for that same amount of time, and therefore, without a well for it to travel to the surface, it will stay locked there for millions of years in the future, making it the most permanent credit available. The only way to unlock that molecule is to drill a new well, which is economically unfeasible under any potential scenario. However, we do account for this and create an insurance pool in case of any new well encroaching the drainage area of the original well plugged.

Under the CarbonPath app, link below, one can look at each project (oil well) and see under the 3rd tab, all of the information needed which is directly on chain, while the URL link in the smart contract links to other underlying documentation.

[CarbonPath App](#)



Question 3.6 Validation and verification procedures

Are standards, requirements, and procedures in place for... (<i>Paragraph 2.6</i>)	
a) the validation of activities?	<input checked="" type="checkbox"/> YES
b) the verification of emissions reductions?	<input checked="" type="checkbox"/> YES
c) the accreditation of validators?	<input checked="" type="checkbox"/> YES
d) the accreditation of verifiers?	<input checked="" type="checkbox"/> YES

Provide evidence of the standards, requirements, and procedures referred to in a) through d), including their availability to the public:

Validation is completed by CarbonPath and validation is outlined in each methodology. Verification is completed by third parties and consists of:

- 1) The United States of America State Oil and Gas regulatory body who issues permits to permanently plug oil and gas wells – thus verifying the work was complete
- 2) An independent 3rd party reserve engineering firm – approved list is attached below
- 3) An independent measurement company

CarbonPath validates the activities to ensure that it is additional and permanent. We ensure by running through the methodology that the plugging of the well does not represent a Business as Usual construct. For marginal wells, this is determined in 2.2.1 starting on page 10, while for orphaned wells it is located in 7.5 under Additional starting on page 19. This provides for the additionality test which is reviewed per well. The permanence of the well plugging is also reviewed by both CarbonPath and the third-party reserve auditors. The verification is done by several parties that are experts in their respective fields. The verification that the well was plugged according to the applicable standards is undertaken by the US State or US Federal government. The reserves left in the ground that would have been produced is verified by an independent third-party reserves auditor. These reserve auditors produce a report that is typically utilized for publicly traded companies on the US stock exchanges like the New York Stock Exchange or NASDAQ, and are scrutinized by the investment community and the Securities and Exchange Commission. The amount of methane leaking before and after is undertaken by third party verifiers that are approved by CarbonPath.

Our reputation and the public availability of every project well and all data will allow for external auditing by any party and therefore our self-accreditation of the validation is evident in that our business will be significantly harmed by any question of the validation of the activities.

The accreditation of the verifiers is completed annually and we review their processes including methods for collecting data, QA/QC or data and instruments. Our approved verifiers for methane capture are large, publicly traded companies that utilize proprietary methods for measurement and adhere to other standards including MiQ and Federal regulations. Our list of approved verifiers is located on our website here: [Methodology Info Guide \(notion.site\)](#) We do not accredit the US State or US Federal government in issuing a permit to permanently plug and abandon the well.

Question 3.7 Programme governance

Does the programme publicly disclose who is responsible for the administration of the programme? (<i>Paragraph 2.7</i>)	<input checked="" type="checkbox"/> YES
Does the programme publicly disclose how decisions are made? (<i>Paragraph 2.7</i>)	<input checked="" type="checkbox"/> YES

Provide evidence that this information is available to the public:

CarbonPath and its management is responsible for administration of the program, and CarbonPath is governed by its Board of Directors which is publicly disclosed on the website. If CarbonPath fails as an entity, the credits would no longer be created per our methodologies. The existing credits would still be able to be sold, traded, and retired. The credits live on the blockchain and therefore are an immutable record.

Yes, decisions that are made for additional methodologies is on our website, the work involved in the calculation of the credits are all attached to the credits on the blockchain and our website, and the review of the methodologies are all publicly available.

[Methodology Info Guide \(notion.site\)](#) – CarbonPath governing procedures

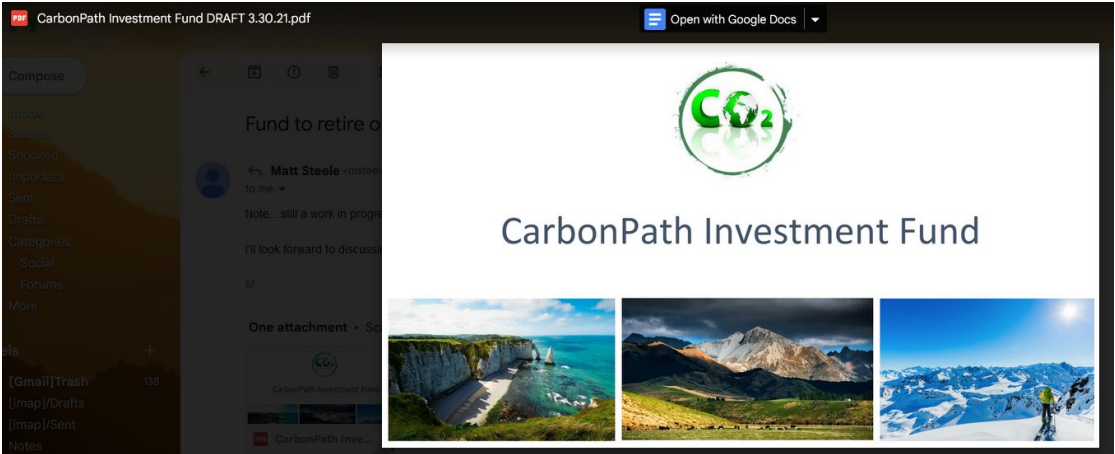
Can the programme demonstrate that it has... (<i>Paragraph 2.7.2</i>)	
a) been continuously governed for at least the last two years?	<input checked="" type="checkbox"/> YES
b) been continuously operational for at least the last two years?	<input checked="" type="checkbox"/> YES
c) a plan for the long-term administration of multi-decadal programme elements?	<input checked="" type="checkbox"/> YES
d) a plan for possible responses to the dissolution of the programme in its current form?	<input checked="" type="checkbox"/> YES

Provide evidence of the activities, policies, and procedures referred to in a) through d):

The company was founded in May 2020 and began with the development of the first methodology, including board oversight. The system we have designed and build purposely to be able to survive our entity’s existence and requires minimal follow up. Pre-credit issuance, the well plugging work is tested by the government and a third-party verifier to ensure that the wellbore has no more communication between the reservoir and the surface. Once that is verified, it is permanent. Therefore, the only follow up required post issuance is that no new well is drilled inside our polygon. On orphaned and abandoned wells, the reservoir is dead, meaning there is no way to extract hydrocarbons even with a new wellbore, so the likelihood of a new well is essentially zero and no follow up after post plugging measurement prior to credit issuance is required. For marginal wells, the reservoir is depleted, low pressure, and only marginal quantities available. Therefore, the probability of new operator leasing the land from the mineral owner and then making a decision to drill a new well anywhere near the polygon is essentially zero. However, we continue to monitor annually for permit activity around closed wells. If CarbonPath determines that the new permitted well will encroach upon the permanence polygon, we enact the insurance portion of the methodologies which releases and permanently retires the buffer pool credits. If CarbonPath as an

entity dissolves prior to encroachment, then the buffer pool will be transferred via blockchain to the new administrator.

For Governance for the last two years, we have an earlier presentation dated 03/31/2021 which shows the beginning of operations and governance occurred over two years ago. Governance for the blockchain has been in existence since Celo’s inception. As far as multi decadal program elements, we take it as fact that each credit is located on blockchain which is independent of CarbonPath and thus as long as the Ethereum Virtual Network continues, then the credit will continue to survive and once originated by CarbonPath, is independent of CarbonPath for survival. Thus, if CarbonPath ceases to exist or the crediting program stops and CarbonPath retires the methodology, those credits will continue to exist on an immutable record. Thus, utilizing blockchain technology solves the problems that this question is seeking to gain confidence in as a traditional registry with a numbering system and database of credits is highly dependent on decades of existence in order for those credits to continue to be monitored, retired, or sold.



Are policies and robust procedures in place to...	
a) prevent the programme staff, board members, and management from having financial, commercial or fiduciary conflicts of interest in the governance or provision of programme services? (Paragraph 2.7.3)	<input checked="" type="checkbox"/> YES
b) ensure that, where such conflicts arise, they are appropriately declared, and addressed and isolated? (Paragraph 2.7.3)	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) and b):
 The management who approves that the work has been completed and gives final approval on the issuance of credits has a strong financial incentive to preserve the value of the credit. Because all of our work, documentation and verification is publicly available for audit by any third party, we expose ourselves to the highest scrutiny. Therefore, if our credit is questioned, it impairs the value of the credit and our ability to conduct business,

providing entity risk.

Ownership of oil and gas wells is publicly available and therefore any conflicts are readily visible to any interested party. This public display of all documentation and data as well as the regulatory environment of the oil and gas industry makes it very difficult to have a conflict that would not be discoverable.

We do have a specific policy to address conflicts of interest which has been circulated to all employees, management and board and complies with Delaware law but believe that the public disclosure is the best way to eliminate conflicts. A copy of the policy can be found in our Governing Procedures here - [Methodology Info Guide \(notion.site\)](#)

If the programme is not directly and currently administered by a public agency, can the programme demonstrate up-to-date professional liability insurance policy of at least USD\$5M? (<i>Paragraph 2.7.4</i>)	<input checked="" type="checkbox"/> YES
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Provide evidence of such coverage:

Hartford Insurance, policy 21TE052259323 for \$5mm issued to CarbonPath, a copy of which can be provided upon request.

Question 3.8 Transparency and public participation provisions

Does the programme publicly disclose... (<i>Paragraph 2.8</i>)	
a) what information is captured and made available to different stakeholders?	<input checked="" type="checkbox"/> YES
b) its local stakeholder consultation requirements (if applicable)?	<input checked="" type="checkbox"/> YES
c) its public comments provisions and requirements, and how they are considered (if applicable)?	<input checked="" type="checkbox"/> YES

Provide evidence of the public availability of items a) through c):

Our system provides complete transparency to everyone by providing all information on a publicly accessible blockchain. The project developers must consult with all stakeholders including the surface landholder and come to an agreement as to the land restoration plan, the minerals owner for releasing the mineral rights and the public through the permit engagement. All of the information required per our methodologies are placed on the blockchain and are an immutable public record in which any interested stakeholder or any party can review and find all relevant documentation. Click on a well with the CarbonPath logo and one can find all of the data that is required to be posted for every project.

- A) For evidence as to what information regarding the credit is disclosed, it is listed in the app here - [CarbonPath App](#)
- B) Local stakeholder requirements are outlined in the methodologies specifically but the main consultation is with the landowner of the well as this is required by law in order to gain a permit to abandon an oil and gas well – the link to the methodologies is here - [CarbonPath](#)

- C) Public commentary periods are only for the methodologies and not for discrete projects – the public comments on the methodologies are listed here under Methodologies and then Public Commentary Periods - [CarbonPath](#)

Does the programme conduct public comment periods relating to... (<i>Paragraph 2.8</i>)	
a) methodologies, protocols, or frameworks under development?	<input checked="" type="checkbox"/> YES
b) activities seeking registration or approval?	<input type="checkbox"/> YES
c) operational activities (e.g., ongoing stakeholder feedback)	<input checked="" type="checkbox"/> YES
d) additions or revisions to programme procedures or rulesets?	<input type="checkbox"/> YES

Summarize and provide evidence of any programme procedures referred to in a) through d):

We conduct public commentary periods for all new methodologies. In addition, this is open access to anyone to submit comments or proposals at any time and is not a curated participant list. We have website submission form where anyone can send us feedback on anything we have on the website, including our policies and procedures.

- a) We hold public comment periods for each methodology, which are posted here - [CarbonPath](#)
- b) We do not hold public comment periods for activities seeking registration
- c) We have a website submission form which is here - www.carbonpath.io under Contact Us
- d) We do not hold public comment periods for revisions to program procedures of rulesets but do post them when updated

We do not have any public comment period for specific projects, or methodologies we are considering but do not have something ready for public comment period.

Question 3.9 Safeguards system

Are safeguards in place to address... (<i>Paragraph 2.9</i>)	
a) environmental risks?	<input checked="" type="checkbox"/> YES
b) social risks?	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the safeguards referred to in a) and b), including their availability to the public: Our methodologies are materially improving the lives of those around them and adhere to several of the UN Sustainability goals, including improving the water and air.

The plugging and abandonment work necessary for our methodologies requires a US State or US Federal permit. By adhering to US State and US Federal regulations for the work, environmental risks are considered and sufficiently addressed in the work as there are robust work requirements and procedures to provide a safe operating environment and minimize risks to the environment. This work is monitored and inspected by US State

and Federal regulators providing another check on the project developer to ensure that proper techniques and equipment is utilized.

We incorporate these risks into our methodologies and links to our methodologies is here - [CarbonPath](#). For the orphaned wells, the permit requirement is outlined on Figure 2 on page 11 and for marginal wells on 2.2.6 on page 34.

Question 3.10 Sustainable development criteria

Does the programme use sustainable development criteria? (<i>Paragraph 2.10</i>)	<input checked="" type="checkbox"/> YES
Does the programme have provisions for monitoring, reporting and verification in accordance with these criteria? (<i>Paragraph 2.10</i>)	<input type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to above:
 Every project utilizing our two methodologies have sustainable development criteria. Each project is unique yet similar in that they are permanently eliminating access between the water table and atmosphere a hydrocarbon reservoir. This cleans up the air, the water, and restores the land from industrial to more sustainable purposes. The elimination of truck traffic to check on the wells daily, the large truck traffic utilized to haul produced water away from the wellsite, the compressor and pump noise pollution and air emissions, and potential to leak benzene, hydrogen sulfide, and normally occurring radioactive material are all eliminated. We do not measure for each of these projects as these are additional benefits that meet the sustainability goals of the UN, but they are present in each project that is completed. Because they are not individually measured, there is no monitoring or reporting.

These sustainable development criteria are imbedded in the methodologies here - [CarbonPath](#)

Question 3.11 Avoidance of double counting, issuance and claiming

Does the programme use sustainable development criteria? (<i>Paragraph 2.10</i>)	<input checked="" type="checkbox"/> YES
Does the Programme provide information on how it addresses double counting, issuance and claiming in the context of evolving national and international regimes for carbon markets and emissions trading? (<i>Paragraph 2.11</i>)	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the information referred to above, including its availability to the public:
 As stated above, the methodologies use sustainable development criteria but the characteristics are similar for all projects, so they are not measured or reported on a per project basis.

All projects utilizing our methodologies are intended for the United States and the United States of America does not have a law to enforce the climate pledges of the current administration, but an executive branch commitment

that does not establish any trading scheme, monitoring, or reporting. The only reporting requirement is voluntary by public company if they choose to have an emissions reduction target.

Credits issued under our methodologies and registry are placed on a public, global blockchain that can be accessed by anyone in the world at any time. By assigning each credit to a particular well with a US issued serial number (called an API number, or American Petroleum Institute), we can ensure that only one credit is issued for each tonne of CO2 or CH4 reduced per our methodologies. Each tonne can only be created once, traded unlimited times, and once retired, the record remains but it is permanently eliminated from being traded or retired again. Blockchain provides the greatest assurances against the risk of double counting, claiming or issuance as it can only be in one address at a time and that is tagged to a particular project with all pertinent data. If it was attempted to be reported in several nations’ regimes, it would be apparent that the unique credit identifier could be searched and determined that it is being utilized for more than one trading scheme.

PART 4: Carbon Offset Credit Integrity Assessment Criteria

Note—where “evidence” is requested throughout *Part 3* and *Part 4*, the Programme should provide web links to documentation. If that is not possible, then the programme may provide evidence of programme procedures directly in the text boxes provided (by copying/pasting the relevant provisions) and/or by attached supporting documentation, as recommended in “SECTION II: INSTRUCTIONS—*Form Completion*”.

Note—“*Paragraph X.X*” in this form refers to corresponding paragraph(s) in Appendix A “Supplementary Information for Assessment of Emissions Unit Programmes”.

Note—Where the programme has any plans to revise the programme (e.g., its policies, procedures, measures, tracking systems, governance or legal arrangements), including to enhance consistency with a given criterion or guideline, provide the following information in response to any and all relevant form question(s):

- Proposed revision(s);
- Process and proposed timeline to develop and implement the proposed revision(s);
- Process and timeline for external communication and implementation of the revision(s).

Question 4.1 Are additional

Do the Programme’s carbon offsets... (<i>Paragraph 3.1</i>)	
a) represent greenhouse gas emissions reductions or carbon sequestration or removals that exceed any greenhouse gas reduction or removals required by law, regulation, or legally binding mandate?	<input checked="" type="checkbox"/> YES
b) exceed any greenhouse gas reductions or removals that would otherwise occur in a conservative, business-as-usual scenario?	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) and b), including their availability

to the public:

Please see our methodologies. For orphaned & abandoned wells in the United States, there is no responsible party for the proper plugging of the well. Therefore, the business as usual case is apparent that nothing will be done to shut down the well without the credit. The Biden administration in the United States allocated \$5B to states to help them clean up their orphaned wells, but at a price tag of US\$40 to US\$300B to remediate, this only scratches the surface of the problem. If there is additional money allocated, or the state has plans utilizing outside funding to plug, the additionality test fails and credits are not issued. For the Orphaned Well methodology, this is located on page 19.

For marginal wells, the methodology targets producing wells with a production rate between 15 barrels of oil equivalent per day down to one barrel of oil equivalent per day. At these rates, the wells generate positive cash flow and therefore business as usual is the continual operation. Given that these are free cash flow positive wells, there is no regulatory requirement to plug the well and therefore the credit is additional. Please see page 14 which has the Additionality Decision Tree.

Environmental Defense Fund has written extensively on this topic, one of which is included here as evidence that shows marginal wells as a major source of methane emissions globally. The wells owned by solvent operators are at risk of being sold to less capable operators and may become orphaned and abandoned, but will produce for decades longer if the credit is not provided.

[MarginalWellFactsheet2021_0.pdf \(edf.org\)](#)

The impetus for allocating funds to orphaned and abandoned wells is outlined in the paper listed below:

[Green Stimulus for Oil and Gas Workers: Considering a Major Federal Effort to Plug Orphaned and Abandoned Wells - Center on Global Energy Policy at Columbia University | SIPA](#)

Is additionality and baseline-setting... (<i>Paragraph 3.1</i>)	
a) assessed by an accredited and independent third-party verification entity?	<input checked="" type="checkbox"/> YES
b) reviewed by the programme?	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) and b), including their availability to the public:

The baseline is the production that would have occurred if not for the prematurely shutting down of an oil and gas well. Fortunately, there is a significant body of public work and study regarding how a petroleum well will perform over time, governed by reservoir engineering, which is a course of study at major universities throughout the United States and the world.

The baseline production is forecasted by the project developer. CarbonPath checks this against standard statistical analysis packages such as ComboCurve ([Home - ComboCurve](#)). We assess if the historical production which is publicly available matches with the future forecast before allowing the project developer to proceed with the

plugging work. An independent, third-party reserves engineering audit firm then checks the work of the project developer. The third-party reserves engineers on our approved list all work with publicly traded companies in the United States and audit the reserves of oil and gas companies for public disclosure through the United States Security and Exchange Commission.

For orphaned & abandoned wells, the crediting is defined by the methane that is currently leaking out of the wells and the continual leakage is the baseline and business as usual. This is measured and reported by an independent third-party measurement company that has expertise in the field.

Verification is required for several activities and is discussed under many headings in the two methodologies.

The list of CarbonPath approved 3rd party verifiers is located here - [Methodology Info Guide \(notion.site\)](#)

Identify one or more of the methods below that the programme has procedures in place to ensure, and to support activities to analyze and demonstrate, that credited mitigation is additional; which can be applied at the project-and/or programme-level: (*Paragraphs 3.1, and 3.1.2 - 3.1.3*)

- Barrier analysis
- Common practice / market penetration analysis
- Investment, cost, or other financial analysis
- Performance standards / benchmarks
- Legal or regulatory additionality analysis (as defined in *Paragraph 3.1*)

Summarize and provide evidence of the policies and procedures referred to in the above list, including describing any/all additionality analyses and test types that are utilized under the programme:

For Orphaned & abandoned wells, we use common practice and some basic financial analysis. Over two million out of a total well count of three million in the United States are orphaned & abandoned, so this is evidence that abandonment without any remediation is the common practice in the United States. Bonding requirements for oil and gas producers have been very relaxed since the start of the industry in 1859, and therefore once an operator declares bankruptcy or dissolves the entity, there is no responsible party. A rule change that would require adequate bonding or sinking fund would only solve new wells drilled, and thus the existing three million wells (2 million current orphaned and 1 million producing at risk wells) would still require this crediting to fund. Plugging a well is very expensive, being anywhere from \$20,000 to \$150,000, and therefore is a difficult decision economically for anyone to come in and plug an orphaned well for which they have no responsibility.

For marginally producing wells, we rely on the economics of the activity to guide additionality. This methodology incentivizes solvent, producing operators to give up the future cash flows that a well would produce and accelerate the plugging expense to today in exchange for a carbon offset. The positive money forward economics we check at the outset of a project and believe it is in any operator's best interest to defer a large plugging expense as long as there is any positive cash flow from operating the well.

For orphaned and abandoned wells, please see page 14 which has the Additionality Decision Tree. For the Orphaned Well methodology, this is located on page 19.

See the methodologies for additionality tests. [CarbonPath](#)

If the Programme provides for the use of method(s) not listed above, describe the alternative procedures and how they ensure that activities are additional: (*Paragraph 3.1*)

Not applicable.

If the programme designates certain activities as automatically additional (e.g., through a “positive list” of eligible project types), does the programme provide clear evidence on how the activity was determined to be additional? (<i>Paragraph 3.1</i>)	<input checked="" type="checkbox"/> YES
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Summarize and provide evidence of the policies and procedures for determining the automatic additionality of activities, including a) the criteria used to determine additionality and b) their availability to the public:

Yes, the orphaned and abandoned well methodology utilizes a body of academic research to determine that orphaned and abandoned wells will not be shut down if there is not a governmental body actively working on plugging those wells. There is no solvent operator, and therefore no responsible party. The wells can cost anywhere from \$20,000 to \$150,000 to properly plug per US State and Federal regulations so it is assumed that, given the large amount of orphaned & abandoned wells in existence in the United States and the limited resources allocated to solve the problem relative to extreme amount of dollars it would take to remediate, that the plugging of an orphaned & abandoned well is additional. We do review for additionality to ensure that the specific project undertaken is not funded by outside sources such as governmental clean up funds or a charitable organization.

The impetus for allocating funds to orphaned and abandoned wells is outlined in the paper listed below which discusses why this is additional – there is no responsible operator to fund the plugging work:

[Green Stimulus for Oil and Gas Workers: Considering a Major Federal Effort to Plug Orphaned and Abandoned Wells - Center on Global Energy Policy at Columbia University | SIPA](#)

Explain how the procedures described under Question 4.1 provide a reasonable assurance that the mitigation would not have occurred in the absence of the offset programme: (*Paragraph 3.1*)

For marginal wells, we use not only evidence of 750,000 wells operating in the US as low producers but economics to show that these wells continue to generate positive cash flow, and even if the well were to lose a small amount of money annually, it would be in the best interests of the operator to continue to produce and defer the large one-time plugging expense. Out of one million producing wells in the United States, there are 750,000 wells producing under 15 barrels of oil equivalent per day and 300,000 wells of those 750,000 that are producing at or below one barrel of oil equivalent per day. Therefore, it is business as usual to defer plugging work for as long as

feasible and our methodology checks to ensure that the well is not at that point where it would be in the best interests of the operator to plug.

For orphaned & abandoned wells, we, as part of our test for additionality, check to ensure that the well is not being funded by US Federal or US State dollars or under any other program that is financed by outside capital that would undertake the plugging without the credit. See the paper outlined in the question above.

[CarbonPath](#)

Question 4.2 Are based on a realistic and credible baseline

Are procedures in place to... (<i>Paragraph 3.2</i>)	
a) issue emissions units against realistic, defensible, and conservative baseline estimations of emissions?	<input checked="" type="checkbox"/> YES
b) publicly disclose baselines and underlying assumptions?	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) and b), including how “*conservativeness*” of baselines and underlying assumptions is defined and ensured:

For marginal wells, there is a large, 100-year history of predicting the future production from a well which is rooted in fluid mechanics, geoscience, and wrapped in a field of study called reservoir engineering, of which major universities throughout the United States provide formal education in this discipline and have for decades. The baseline for a marginal well is the production that would have occurred if not for the premature plugging of that well. This utilizes reservoir engineering principles which provide an accurate, predictable answer. This is further checked by CarbonPath utilizing third-party proprietary machine learning tools (Such as ComboCurve reference in an earlier answer) to see if the project developer’s production profile matches production history using this field of reservoir engineering. A further check is employed as part of our DMRV by a third-party reservoir engineering firm that has been vetted by CarbonPath and all of which work with publicly traded companies to audit and submit an audit letter to the SEC attesting to the reserves owned by an entire public company, of which their market capitalization is based and the subject of significant scrutiny. The production history, the predicted production, the calculations, and the third-party engineering report are all attached to the carbon offset and are available for anyone to see. Therefore, any interested party can re-create our carbon credits using the methodology.

For orphaned & abandoned wells, the crediting originates from the methane that is leaking from the wells - there is a conduit that is unmonitored between the reservoir thousands of feet below the earth’s surface and the water table and surface. Some wells leak significant amounts and others leak marginal amounts, but combined, there are several million that are responsible for millions of tonnes of methane directly emitting into the atmosphere. Under our methodology, we use third parties verified by CarbonPath that the project developer must utilize in order to establish a baseline of methane emission. The verifiers all utilize proprietary models that ascertain a flow rate based upon several inputs including wind speed and direction, humidity, temperature, but all work with

the RMI developed MiQ standard. There are US Federal requirements that are proposed, but not signed into law, which our verifiers all comply with and will be held to that standard upon legal adoption by the United States.

- A) This is discussed for orphaned wells on Solution #1 Calculations on page 9 and Solution #2 Calculations on page 12. For marginal wells, the baseline calculations are summaries on page 27 under section 2.2.5.
- B) This dataset is placed on blockchain and presented by a third party reserves engineer and can be seen for a particular well under our application. [CarbonPath App](#)

Are procedures in place to ensure that <i>methods of developing baselines</i> , including modelling, benchmarking or the use of historical data, use assumptions, methodologies, and values do not over-estimate mitigation from an activity? (<i>Paragraph 3.2.2</i>)	<input checked="" type="checkbox"/> YES
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Summarize and provide evidence of the policies and procedures referred to above:

Yes, we utilize a third-party statistical analysis package to ascertain if the baseline production is within generally accepted reservoir engineering parameters. There is also a third-party reserves auditor that checks the work of the project developer. These are outlined in our methodologies. For marginal wells, on page 47 in the Appendix lists that the third party reserves engineer is required, along with measurement companies for section 2.2.5B. For orphaned wells, starting on page 26 Appendix B.

Are procedures in place for activities to respond, as appropriate, to changing baseline conditions that were not expected at the time of registration? (<i>Paragraph 3.2.3</i>)	<input checked="" type="checkbox"/> YES
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Summarize and provide evidence of the policies and procedures referred to above:

Yes, we are highly confident in the baseline from an existing well that we can predict with accuracy and precision the production that would have emitted from the marginally producing well but rely on economics to ensure that those reserves are never accessed in the future. If there is any attempt to access those reserves inside our polygon, then there will be a triggering event.

The Oil and Gas industry is a fully regulated industry at the state and federal levels. An Oil and Gas operator cannot propose to drill, drill, produce hydrocarbons, workover, or plug a well without approval from the appropriate regulatory authority. Proposed projects, execution of those projects, and the results are public information that is published in and on the regulatory agencies databases and websites.

CarbonPath has partnered with a global leader in energy data, Enverus. Enverus is a world class technology provider, with real-time access to analytics, insights, and benchmarking, and the only energy-dedicated SaaS platform. Enverus continually reads, scours, and cleans data from all state and federal oil and gas databases, then makes this data commercially available. Enverus is the energy data supplier for many governmental agencies including the EPA.

The CarbonPath permanence polygon is a critical portion of the measurement, reporting, and verification (MRV) within the method and adds to the quality of the CarbonPath credits. The permanence polygon is a calculated volume that represents the carbon-dioxide (CO2) that is permanently left in the ground

by the action of plugging an oil or gas well. This polygon at the correct geological depth is monitored using our industrial data partner Enverus. The polygon and its latitude and longitude coordinates represent a search area for an Enverus powered algorithm to search all state and federal databases for any Oil and Gas activity. The polygons are also manually checked for any new activity once a quarter.

If a permit for new oil and gas activity is posted within the permanence polygon, the Enverus algorithm will generate a notice that is posted and sent to CarbonPath via email.

There is a scenario, however unlikely, that will trigger a notice but create a false positive via a new proposed surface drilling permit located within the permanence polygon but for a different geological depth. In this case a new well is proposed to be drilled within the existing permanence polygon, but targeting hydrocarbons not covered by the method or credits generated by the methodology. This unique case will be investigated by CarbonPath and if determined to be a new permit, but for a different geological target, the new information will be added to the ledger of the original well that was plugged via the method. The relevant data and a summary of the results will be attached to ensure transparency and auditability even for wells not affecting the original or insurance credits.

During the generation of credits via the methodology a calculation is run for the express creation of “Insurance credits”, this is covered in Section 2.2.9C Calculating Buffer Pool Emission Prevention Volumes (EPVs) and shown below in Figure 11.

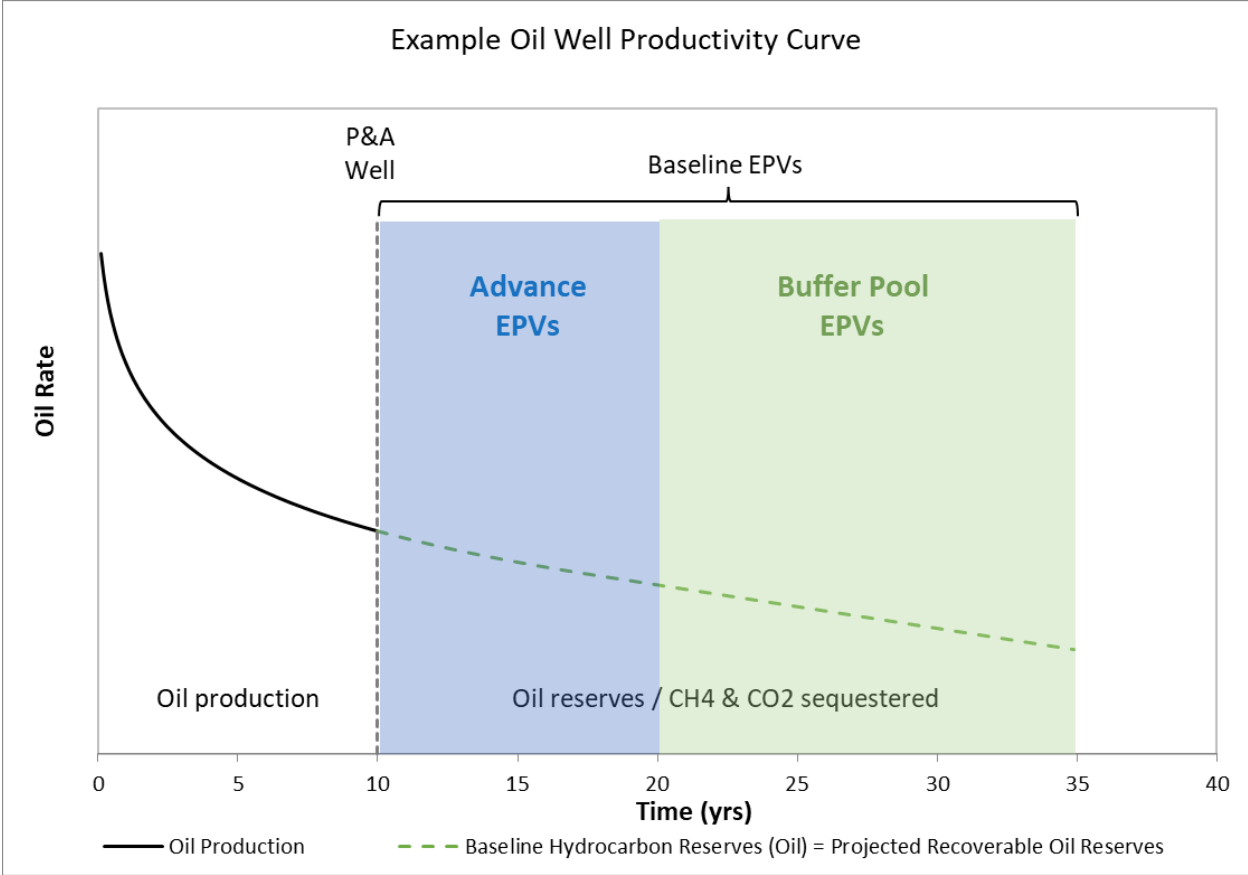


Figure 11: Graphical Representation of Baseline EPVs Components - Advance EPVs & Buffer Pool EPVs

Buffer Pool emissions (or insurance credits) are created from each well that generates credits via the methodology. The dashed green line in the graph above is supplied directly from the third-party reserves auditor and represents the future volume of hydrocarbons that would be produced in a business-as-usual case. The green shaded area under the dashed line are the buffer pool emissions that represent the volume of hydrocarbon reserves calculated and, via the method, converted into carbon credits for 15 years after the primary or advanced credits (first 10 years after plugging). This 15-year timeline can be cut short if the rate of oil and gas production falls below 1 barrel of oil equivalent per day (boe/d). The 1 boe/d cutoff represents the floor production rate at which the well still producing should be plugged.

The buffer pool credits are “released” once a permit for oil and gas activity reported within the permanence polygon targeting the reserves and credits generated from plugging the original well is acted upon. This action will be followed by a regulatory notice of a completion report, detailing the exact depth and location of a new well and the attempt and/or reporting of hydrocarbon production. This is an important step as the permitting of a well can include a range of depths as it relates to its geologic target. Once a well is drilled and the well is flowing hydrocarbons the exact depth is required to be reported to the regulatory body. Both the permit and new well activity (completion report) will be posted to the original methodology well.

Once an incursion on the permanence polygon is confirmed with the above steps, a “release” of buffer pool (insurance) credits is initiated. There are four categories of existing credits from the original well that need to be canceled and replaced due to the incursion.

This is outlined in the methodology for marginal wells on page 44 and in our [Methodology Info Guide \(notion.site\)](#).

Question 4.3 Are quantified, monitored, reported, and verified

Are procedures in place to ensure that...	
a) emissions units are based on accurate measurements and valid quantification methods/protocols? (<i>Paragraph 3.3</i>)	<input checked="" type="checkbox"/> YES
b) validation occurs prior to or in tandem with verification? (<i>Paragraph 3.3.2</i>)	<input checked="" type="checkbox"/> YES
c) the results of validation and verification are made publicly available? (<i>Paragraph 3.3.2</i>)	<input checked="" type="checkbox"/> YES
d) monitoring, measuring, and reporting of both activities and the resulting mitigation is conducted at <i>specified intervals</i> throughout the duration of the crediting period? (<i>Paragraph 3.3</i>)	<input checked="" type="checkbox"/> YES
e) mitigation is measured and verified by an accredited and independent third-party verification entity? (<i>Paragraph 3.3</i>)	<input checked="" type="checkbox"/> YES
f) <i>ex-post</i> verification of mitigation is required in advance of issuance of emissions units? (<i>Paragraph 3.3</i>)	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) through f):

- a) The measurement of the reserves remaining in the ground for the marginal well methodology is based upon reservoir engineering and decline curve analysis, which is a well-established discipline as outlined above. This is highly accurate, precise, and replicable. It is also check both by machine learning algorithms as independent third-party reservoir engineering firms working with the US Securities and Exchange Commission. For orphaned wells, the quantification of methane emitting from the wellbore is based upon measurements taken by independent third-party measurement companies vetted and approved by CarbonPath, all of which adhere to the MiQ standards developed in conjunction with RMI. Please see each methodology - [CarbonPath](#)
- b) Validation is the first test for each methodology before verification. This work is done by CarbonPath as we have the expertise to ascertain additionality and permanence. Validation consists of determining additionality, which is a test imbedded in each methodology, determine permanence which we view as self evident given the work. - [CarbonPath](#)
- c) All work is placed on blockchain for anyone to validate and verify so there does not need to be any trust in CarbonPath as any interest party can replicate our work to their satisfaction. [CarbonPath Architecture — CarbonPath documentation](#)
- d) The crediting period is a onetime discrete event which is the right approach to well plugging. Once a well is plugged to US State or US Federal regulations, it is permanently dismantled and a new well would need to be drilled and a permit would need to be issued, allowing us to issue the credits in a onetime event. The methodologies hold back a buffer pool for marginal wells if those reserves are ever accessed in the future. We work with a third-party data company to continually monitor for any new activity in those areas and have a process for releasing and retiring those insurance tonnes. This is outlined in the methodology for marginal wells on page 44 and in our [Methodology Info Guide \(notion.site\)](#).
- e) Yes, the third-party that continuously monitors for any new well activity in our areas is Enverus ([Enverus | Creating the future of energy together.](#))
- f) Yes, all verification must be submitted for inclusion on the blockchain for the credit prior to issuing that credit as part of the methodologies. [CarbonPath Architecture — CarbonPath documentation](#)

Are provisions in place... (Paragraph 3.3.3)	
a) to manage and/or prevent conflicts of interest between accredited third-party(ies) performing the validation and/or verification procedures, and the programme and the activities it supports?	<input checked="" type="checkbox"/> YES
b) requiring accredited third-party(ies) to disclose whether they or any of their family members are dealing in, promoting, or otherwise have a fiduciary relationship with anyone promoting or dealing in, the offset credits being evaluated?	<input checked="" type="checkbox"/> YES
c) to address and isolate such conflicts, should they arise?	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) through c):
 There are three independent verifiers utilized by our methodologies:

- 1) Third Party reserve engineers. All of our verified independent third-party reserve engineers that are approved by CarbonPath have conflicts of interests policies and procedures. These companies work with the US Securities and Exchange Commission to audit publicly traded oil and gas companies and are exposure to the highest scrutiny as their assessments are utilized to issue billions of US dollars in debt and equity value to hundreds of banks, private equity and equity investors. This verification is a small part of their overall business and their reputation is of the utmost importance to their business model and therefore we have high confidence in their model. However, we do require that they attest to a conflicts of interest disclosure for each project and if there is disclosure of a conflict, this conflict will be reviewed and resolved by the Board of Directors and Senior Management of CarbonPath.
- 2) US State or US Federal agencies. The most important verifier in our methodologies is the verifier that the well has been plugged per the applicable standards. This role is filled by the US Federal government or the US State where the well is located. These governmental agencies issue the permit that certifies that the well was plugged to their standards. Any conflict of interest that would be exposed would be a crime and face significant levels of implications that we as a registry and carbon offset provider would not be able to replicate. Therefore, we rely on those assurances and do not have a process in place with those entities as this would require adoption of new laws.
- 3) The methane measurement. All of our methane measurement third-party verifiers are certified by MiQ and have practices and controls in place. We do require that they attest to a conflicts of interest disclosure for each project and if there is disclosure of a conflict, this conflict will be reviewed and resolved by the Board of Directors and Senior Management of CarbonPath.

Are procedures in place requiring that... (<i>Paragraph 3.3.4</i>)	
a) the renewal of any activity at the end of its crediting period includes a reevaluation of its baselines, and procedures and assumptions for quantifying, monitoring, and verifying mitigation, including the baseline scenario?	<input type="checkbox"/> YES
b) the same procedures apply to activities that wish to undergo verification but have not done so within the programme’s allowable number of years between verification events?	<input type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) and b), including identifying the allowable number of years between verification events:

This is not applicable for the marginal well or orphaned & abandoned well methodology as there is only one discrete crediting period as the plugging of a well is a onetime event. We believe that this is a unique attribute of our credits and is valuable as it reduces the ongoing DMRV requirements and provides limited opportunity for reversal compared to alternative types of credits.

Are procedures in place to transparently identify units that are issued <i>ex ante</i> and thus ineligible for use in the CORSIA? (<i>Paragraph 3.3.5</i>)	<input checked="" type="checkbox"/> YES
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Provide evidence of the policies and procedures referred to above:

Yes. Per our methodology and controls, credits can only be issued one time immediately following the submission

of all verification documents, the last of which being the US State or US Federal permit. Wells that we permitted for closure prior to the start of our methodology are ineligible. The permit has a time stamp on when it was issued and when work was completed, and therefore we can ascertain if the work was done prior to engagement with CarbonPath to determine additionality and permanence.

[CarbonPath Blockchain Methodology.pdf \(notion.so\)](#) slide 7

Question 4.4 Have a clear and transparent chain of custody

SECTION III, Part 3.4—*Identification and tracking* includes questions related to this criterion. No additional information is requested here.

Question 4.5 Represent permanent emissions reductions

List all emissions sectors (if possible, activity types) supported by the Programme that present a potential risk of reversal of emissions reductions, avoidance, or carbon sequestration:

The plugging of an oil or gas well is a discrete, permanent event. The molecules that would have been transported through the wellbore to the surface and either emitted or combusted are the carbon molecules that are credited under our methodology. Those molecules have no mechanism to transport to the surface after plugging is completed. Because we calculate the drainage area to create a permanence polygon, no existing well will provide this transportation mechanism and this is verified by a third-party reserves engineer. Therefore, that molecule will remain in the reservoir where it has been for millions of years unless a new conduit (a new well) is created. Economically, it is unfeasible. Technically, we can and do continuously monitor to ensure no new well will be drilled that could provide a conduit for the molecule to come to the surface. This is the most permanent solution in the market as our timeline is millions of years not decades.

What is the minimum scale of reversal for which the Programme provisions or measures require a response? (Quantify if possible)

Any piercing of the permanence polygon would trigger a review, a calculation of the amount of the credited reserves accessed, and a release of the buffer pool credits to account for this access of the reserves. CarbonPath, by having geologists and engineers on staff, are capable of making this determination and documenting the event through blockchain.

For sectors/activity types identified in the first question in this section, are procedures and measures in place to require and support these activities to...	
a) undertake a risk assessment that accounts for, <i>inter alia</i> , any potential causes, relative scale, and relative likelihood of reversals? (<i>Paragraph 3.5.2</i>)	<input checked="" type="checkbox"/> YES
b) monitor identified risks of reversals? (<i>Paragraph 3.5.3</i>)	<input checked="" type="checkbox"/> YES
c) mitigate identified risks of reversals? (<i>Paragraph 3.5.3</i>)	<input checked="" type="checkbox"/> YES
d) ensure full compensation for material reversals of mitigation issued as emissions units and used toward offsetting obligations under the CORSIA? (<i>Paragraph 3.5.4</i>)	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) through d):

The plugging of an oil or gas well is a discrete, permanent event. The molecules that would have been transported through the wellbore to the surface and either emitted or combusted are the carbon molecules that are credited under our methodology. Those molecules have no mechanism to transport to the surface after plugging is completed. Because we calculate the drainage area to create a permanence polygon, no existing well will provide this transportation mechanism. Therefore, that molecule will remain in the reservoir where it has been for millions of years unless a new conduit (a new well) is created. Economically, it is unfeasible. Technically, we can and do continuously monitor to ensure no new well will be drilled that could provide a conduit for the molecule to come to the surface. This is the only potential for reversals is a new well to access so this differs from traditional nature based solutions. We have a defined procedure outlined in each of the methodologies and further published on our website that outlines the release of the insurance credits.

For the marginal wells, section 2.2.13 discusses ongoing monitoring(a and b) which involves a potential piercing of the permanence polygon while section 2.2.13B discusses the mitigation efforts if such an event occurs (c and d).

Are provisions in place that... (<i>Paragraph 3.5.5</i>)	
a) confer liability on the activity proponent to monitor, mitigate, and respond to reversals in a manner mandated in the programme procedures?	<input type="checkbox"/> YES
b) require activity proponents, upon being made aware of a material reversal event, to notify the programme within a specified number of days?	<input type="checkbox"/> YES
c) confer responsibility to the programme to, upon such notification, ensure and confirm that such reversals are fully compensated in a manner mandated in the programme procedures?	<input type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) through c), including indicating the *number of days within which activity proponents must notify the programme of a material reversal event*:

As the validator CarbonPath takes on the responsibility to monitor the permanence polygon (drainage area of the wellbore plugged) continuously and automatically. CarbonPath is alerted automatically via email that there is permit activity in or around our permanence polygon utilizing the Enverus platform. As the owner of all of the project’s buffer pool credits (insurance credits) we then investigate, make a determination and then release the appropriate amount of the buffer pool credits and retire them to offset any encroachment. However, this is a highly unlikely event as the marginal or orphaned well is pressure depleted and would therefore have a low or no production rate and would not justify drilling the new well at a cost of \$4-10 million. For marginal wells, section 2.2.13 discusses ongoing monitoring which involves a potential piercing of the permanence polygon while section 2.2.13B discusses the mitigation efforts if such an event occurs.

Does the programme have the capability to ensure that any emissions units which compensate for the material reversal of mitigation issued as emissions units and used toward offsetting obligations under the CORSIA are fully eligible for use under the CORSIA? (<i>Paragraph</i>	<input checked="" type="checkbox"/> YES
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3.5.6)	
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Summarize and provide evidence of the policies and procedures referred to above:

Yes, these credits are issued per the same methodology as the CORSIA credits and are held in the CarbonPath buffer pool account and only released when required by the methodology. For the marginal wells, section 2.2.13 discusses ongoing monitoring which involves a potential piercing of the permanence polygon while section 2.2.13B discusses the mitigation efforts if such an event occurs.

Would the programme be willing and able, upon request, to demonstrate that its permanence provisions can fully compensate for the reversal of mitigation issued as emissions units and used under the CORSIA? (Paragraph 3.5.7)	<input checked="" type="checkbox"/> YES
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For the marginal wells, section 2.2.13 discusses ongoing monitoring(a and b) which involves a potential piercing of the permanence polygon while section 2.2.13B discusses the mitigation efforts if such an event occurs.

Question 4.6 Assess and mitigate against potential increase in emissions elsewhere

List all emissions sectors (if possible, activity types) supported by the programme that present a potential risk of material emissions leakage:

We define leakage as the net impact on the global petroleum system, making it a much more robust leakage determination than other methodologies. If we were to assume that the area of the system for leakage was the reservoir where the well was plugged, or if it was the basin where the well was located, we believe it would effectively be zero leakage. This is verified by third-party reservoir engineering firms with reports that are attached to our credit and permanently available on the public blockchain for any interested party to view. In our methodology, our leakage is 40%, meaning that for marginal wells, if 1,000 barrels of oil was permanently shut down per our marginal well methodology, then 400 barrels of oil per day would be produced somewhere else in the world. We utilize studies the State of California utilized to ascertain the net impact of a potential policy of shutting down all oil in the state.

From the methodology:

2.2.8 LEAKAGE FACTOR The leakage factor (LF), as it relates to this methodology, is the disposition factor for another entity to replace some or all of the hydrocarbon production being permanently sequestered and thus the emissions prevention impact for each project well. The leakage factor in this methodology accounts for the possibility that permanently shutting down an oil and/or natural gas well pursuant to this methodology may cause an increase in the supply of oil and/or natural gas elsewhere in the world and takes a conservative approach to accounting for it. The leakage factor will adjust the amount of carbon credit tokens to be issued against each project well and will be periodically evaluated and updated based on advancements in academic research and literature. After a review of the academic literature, one study contemplated the direct impact of this methodology and the corresponding leakage rate, “Would constraining US fossil fuel production affect global CO2 emissions? A case study of US leasing policy” by Peter Erickson & Michael Lazarus of the Stockholm Environment Institute¹⁵. Erickson and Lazarus estimate the decrease in global crude oil consumption per barrel of U.S. crude

oil production avoided in 2030 under a scenario where there is a moratorium on new oil and coal leases on U.S. Federal Lands, which was proposed by the Obama administration. To estimate Page | 36 the global oil consumption reduction, the authors proposed to quantify the reduction in consumption based upon the global supply and demand elasticities of oil. In modeling the oil market, the oil supply elasticity is governed by the oil price with a reference case of \$110/bbl in 2030 per the current U.S. Energy Information Administration report at the time of the study. The study analyzed oil supply elasticities at three different future oil price cases using a forward-looking oil project supply curve from research firm Rystad Energy. (see Figure 10). The study contemplated which projects were profitable at each of the price cases to inform the oil supply elasticity at each price case. The authors concluded the oil supply elasticity lowers as the price of oil increases because there is less incentive for oil producers to drill new projects and increase supply at higher oil prices given that most new projects were already economic at lower prices. They derived three oil supply elasticities based upon the three price cases. For the reference price case, the authors propose the oil supply elasticity to be 0.13. The recent capital discipline shown by the oil industry along with the lack of capital available to the industry further demonstrates this lower supply elasticity. According to the 2021 EIA Global Outlook, “The United States is expected to see only modest growth through the next six years. Although costs of production in the shale patch have fallen, the availability of cheap capital is not as plentiful as it was in the boom years. The industry is consolidating and is taking a more conservative approach to investment than was the case when smaller independent companies were the dominant players. They are also becoming wary of Environmental, Social and Governance (ESG) criteria and the potential for increased regulations under the new Biden administration.” 17 Figure 10: Oil Supply Curve from Rystad Energy & Rhodium Group (source: Bordoff & Houser 2015)16 Page | 37 To further the study and determine the reduction in global oil consumption, the authors performed a literature review to inform the oil demand elasticity. Upon their review, Erickson and Lazarus concluded that the long-run global oil demand elasticity of -0.20 derived by JD Hamilton in 2009 was most representative and within the range of -0.072 to -0.30 proposed by a more recent review by Bordoff and Houser in 2015. Given the global public policy support for renewable alternatives to fossil fuels as well as the significant rise in global consumer demand for fossil fuel alternative products like electric vehicles, the demand elasticity used by the authors would appear to be conservative in nature to current market conditions. The authors concluded the study by quantifying the decrease in global oil consumption under the three price cases using the formula shown in Equation 28a. Change in Oil Consumption = $\frac{\text{ElasticityDemand}}{\text{ElasticitySupply} - \text{ElasticityDemand}}$ (Equation 28a) Using the oil supply elasticity of 0.13 for the reference price case and the oil demand elasticity of -0.20, the authors calculated the reduction in oil consumption to be 0.606 bbls per bbl of avoided oil production. Therefore, the leakage can be defined as the shortfall in achieving a one (1) barrel reduction in consumption for one (1) barrel of production avoided, or $1 - \text{Change in Oil Consumption}$. Thus, this methodology shall define the leakage factor (LF) to be (rounded up to a whole number): Leakage Factor (LF) = $1 - \text{Change in Oil Consumption} = 1 - 0.606 = 0.394$ or 40% (Equation 28b) The same authors analyzed various other research studies by numerous authors that attempt to quantify the same or similar effects. The leakage factor for this methodology falls in the middle of the range of outcomes proposed by each of these studies providing confidence in utilizing this study in determining the leakage factor.

For orphaned & abandoned wells, there is zero leakage because there are no other new wells abandoned as a result of this activity.

Are measures in place to assess and mitigate incidences of material leakage of emissions that may result from the implementation of an offset project or programme? (<i>Paragraph 3.6</i>)	<input checked="" type="checkbox"/> YES
--	---

Summarize and provide evidence of the policies and procedures referred to above:

The global oil and gas market is very large, complex, and therefore we must rely on peer reviewed academic studies to determine the impacts on shutting down marginal oil wells. If every well in the US eligible under our methodology were plugged, it would represent less than 0.5% of total world production and we believe would be immaterial even under a perfect scenario, but under any realistic scenario would represent much less than 0.5% and therefore would have no measurable impact. CarbonPath continues to assess academic literature and it is outlined in our methodology that any change in the body of academic research that changes the estimated leakage will be taken into account. See the answer to the question above for marginal oil wells.

Are provisions in place requiring activities that pose a risk of leakage when implemented at the project level to be implemented at a national level, or on an interim basis on a subnational level, in order to mitigate the risk of leakage? (<i>Paragraph 3.6.2</i>)	<input type="checkbox"/> YES
---	------------------------------

Summarize and provide evidence of the policies and procedures referred to above:

The risk of leakage is global in nature and unmeasurable and therefore this is not applicable to our methodology.

Are procedures in place requiring and supporting activities to monitor identified leakage? (<i>Paragraph 3.6.3</i>)	<input checked="" type="checkbox"/> YES
---	---

Summarize and provide evidence of the policies and procedures referred to above:

There is no way to monitor leakage on a global scale, which estimates the amount of new production that would be brought online as a result of the reduction in well output from our methodology, but we do monitor for encroachment within our particular drainage area to access those reserves. See the application and a sample well where the permanence polygon is mapped in yellow and coordinates are located on the blockchain for the specific well. Any potential piercing of the drainage area is triggered an automatic alert to CarbonPath and investigated per our methodologies in section 2.2.13B.

Are procedures in place requiring activities to deduct from their accounting emissions from any identified leakage that reduces the mitigation benefits of the activities? (<i>Paragraph 3.6.4</i>)	<input checked="" type="checkbox"/> YES
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Summarize and provide evidence of the policies and procedures referred to above:

Yes, our methodology for marginal wells accounts for and subtracts 40% of the calculated value to account for leakage on a global system scale. This is done before minting the credits and is embedded in our methodology.

Question 4.7 Are only counted once towards a mitigation obligation

Does the Programme have measures in place for the following...	
a) to ensure the transparent transfer of units between registries; and that only one unit is issued for one tonne of mitigation (<i>Paragraphs 3.7.1 and 3.7.5</i>)	<input checked="" type="checkbox"/> YES
b) to ensure that one unit is issued or transferred to, or owned or cancelled by, only one entity at any given time? (<i>Paragraphs 3.7.2 and 3.7.6</i>)	<input checked="" type="checkbox"/> YES
c) to discourage and prohibit the double-selling of units, which occurs when one or more entities sell the same unit more than once? (<i>Paragraph 3.7.7</i>)	<input checked="" type="checkbox"/> YES
d) to require and demonstrate that host countries of emissions reduction activities agree to account for any offset units issued as a result of those activities such that double claiming does not occur between the airline and the host country of the emissions reduction activity? (<i>Paragraph 3.7.3</i>)	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) through d):

As all of our wells under the methodology are in the United States, which does not have a country target and accounting system, there will not be double counting between an airline and the United States. With respect to a) through c), by placing all of our credits issued on blockchain, we ensure that credits can only be issued once, can only be held in one account at one time, and can only be retired once. This record is immutable and must be voted on by all validators and therefore is virtually impossible to nefariously alter. There is not a policy to point to but it is self evident and the design of a blockchain system.

Does the Programme have procedures in place for the following: (<i>Paragraph 3.7.8</i>)	
a) to obtain, or require activity proponents to obtain and provide to the programme, written attestation from the host country's national focal point or focal point's designee?	<input checked="" type="checkbox"/> YES
b) for the attestation(s) to specify, and describe any steps taken, to prevent mitigation associated with units used by operators under CORSIA from also being claimed toward a host country's national mitigation target(s) / pledge(s)?	<input checked="" type="checkbox"/> YES
c) for Host country attestations to be obtained and made publicly available prior to the use of units from the host country in the CORSIA?	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) through c):

Under our methodologies the host country is the United States of America which does not have any of the national mitigation targets and therefore double counting cannot occur. However, in our methodologies we require the project developer to obtain these assurances if necessary due to change in US law, US State jurisdiction, or activities conducted outside of the United States of America.

Does the Programme have procedures in place requiring... (<i>Paragraph 3.7.9</i>)	
a) that activities take approach(es) described in (any or all of) these sub-paragraphs to prevent double-claiming?	<input checked="" type="checkbox"/> YES
<input checked="" type="checkbox"/> Emissions units are created where mitigation is not also counted toward national target(s) / pledge(s) / mitigation contributions / mitigation commitments. (<i>Paragraph 3.7.9.1</i>)	
<input checked="" type="checkbox"/> Mitigation from emissions units used by operators under the CORSIA is appropriately accounted for by the host country when claiming achievement of its target(s) / pledges(s) / mitigation contributions / mitigation commitments, in line with the relevant and applicable international provisions. (<i>Paragraph 3.7.9.2</i>)	
<input checked="" type="checkbox"/> Programme procedures provide for the use of method(s) to avoid double-claiming which are not listed above (<i>Paragraph 3.7.9.3</i>)	
b) that Host Country attestations confirm the use of approach(es) referred to in the list above?	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) and b):

See the previous answer. The United States of America has no mitigation targets enshrined in law and does not actively measure mitigation efforts and therefore credits issued from wells in the United States will not be double counted. However, in our methodologies we require the project developer to obtain these assurances if necessary due to change in US law, US State jurisdiction, or activities conducted outside of the United States of America. Due to the utilization of blockchain technology, the credits can only be held by one entity at one time and is immutable, and therefore if any host country is claiming those credits it would be in error as they would not have a receipt of ownership.

Does the Programme... (<i>Paragraph 3.7.10</i>)	
a) make publicly available any national government decisions related to accounting for units used in ICAO, including the contents of host country attestations described in paragraph 3.7.8?	<input checked="" type="checkbox"/> YES
b) update information pertaining to host country attestation as often as necessary to avoid double-claiming?	<input checked="" type="checkbox"/> YES

Summarize and provide evidence of the policies and procedures referred to in a) and b):

Project developers are responsible for reporting to the appropriate organizations and CarbonPath is responsible for monitoring any change in law and following host country attestations. Any changes in accounting origination from a host country that impacts the credits and potential double counting will activate the insurance pool and credits will be released to account for that potential. CarbonPath utilizes a third-party policy consultant to monitor changes in laws in host countries where CarbonPath does business.

Does the Programme have procedures in place to compare countries' accounting for emissions units in national emissions reports against the volumes of eligible units issued by the programme and used under the CORSIA which the host country's national reporting focal point or designee otherwise attested to its intention to not double claim? (<i>Paragraph 3.7.11</i>)	<input checked="" type="checkbox"/> YES
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Summarize and provide evidence of the policies and procedures referred to above:

The program provides for a public ledger of credits issued, each with a unique identifier and a blockchain registry that prevents them from being on two balance sheets at once. The project developer is required to report to the appropriate host country representative. CarbonPath has a policy to review annually any host country's accounting for emissions to ensure CarbonPath credits are not utilized in that host country's accounting. If they are, determine remediation actions including the potential to release insurance pool credits.

Does the Programme have procedures in place for the programme, or proponents of the activities it supports, to compensate for, replace, or otherwise reconcile double claimed mitigation associated with units used under the CORSIA which the host country's national accounting focal point or designee otherwise attested to its intention to not double claim? (<i>Paragraph 3.7.13</i>)	<input checked="" type="checkbox"/> YES
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Summarize and provide evidence of the policies and procedures referred to above:
 The insurance pool concept is imbedded in our methodologies and CarbonPath has a policy in place to monitor potential events that would require a release of insurance pool credits (called buffer pool credits) if warranted.

Would the Programme be willing and able, upon request, to report to ICAO's relevant bodies, as requested, performance information related to, <i>inter alia</i> , any material instances of and programme responses to country-level double claiming; the nature of, and any changes to, the the number, scale, and/or scope of host country attestations; any relevant changes to related programme measures? (<i>Paragraph 3.7.12</i>)	<input checked="" type="checkbox"/> YES
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Question 4.8 Do no net harm

Are procedures in place to ensure that offset projects do not violate local, state/provincial, national or international regulations or obligations? (<i>Paragraph 3.8</i>)	<input checked="" type="checkbox"/> YES
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Summarize and provide evidence of the policies and procedures referred to above:

Yes, the methodologies require a US State or US Federal permit which requires that they adhere to all governmental regulations prior to issuance of that permit by the regulatory authority. This permit is required prior to issuance of the credit and specific parts of the methodologies requiring permits is discussed in previous questions.

Describe, and provide evidence that demonstrates, how the programme complies with social and environmental safeguards: (*Paragraph 3.8*)

We take it as a given that removing these harmful wells that have the potential to pollute the groundwater and the air is a social good and any well plugged has a positive impact on the community. The environmental safeguards for the plugging of an oil and gas well is governed by and enforced by state and local regulations and therefore if a permit is issued the work was inspected by the appropriate regulator to ensure it was done safely and according to environmental regulations.

Describe, and provide evidence of the programme’s public disclosure of, the institutions, processes, and procedures that are used to implement, monitor, and enforce safeguards to identify, assess and manage environmental and social risks: (*Paragraph 3.8*)

The social impacts are publicly disclosed in our methodologies which are posted on our website at www.carbonpath.io. The applicable US State or Federal regulations are posted on the appropriate governmental agency’s website. For example, in the US State of Montana, the regulations for oil and gas wells including the plugging and abandonment are publicly available in the Montana code of regulations - MCA 82-10-401, ARM 36.22.1302). Well plugging and reclamation are mandated under ARM 36.22.502, 36.22.1303, and 36.22.1307. Every state has its own regulations which must be followed in order to obtain a permit.

PART 5: Programme comments

Are there any additional comments the programme wishes to make to support the information provided in this form? Our methodologies target methane reduction and help clean up the petroleum industry, which lowers the overall emissions intensity from producing oil and gas. Oil is the primary source of all airlines’ emissions and therefore the airline industry should take a keen interest in helping to lower the carbon intensity of their main fuel. Shutting down marginal wells will help transition the industry away from traditional fossil fuels into renewable aviation fuels that will take time to develop but hold great promise.

Given that the industry is highly regulated, we can provide certainty the work of plugging a well was completed as evidenced by a US State or US Federal permit, which we believe is a unique attribute of our methodologies. The century of work surrounding the petroleum industry and the study of the quantities of reserves, the volumes of knowledge in ascertaining future production from oil wells and the large amount of capital contributed and put at risk in this effort allows for high confidence in our baseline estimates. Third parties that work with the US SEC

provide further assurances that these calculations are correct.

By placing every document on a permanent blockchain, we are allowing everyone to audit the credit and this provides assurances that there is minimal probability of fraud. The proof of stake which underpins blockchain technology provides a security that cannot be replicated by utilizing a company specific database, and minimizes the potential for any double counting. The immutable record ensures that a credit is generated once for a specific well, can be traded but only held in one account, and when retired is permanent with a permanent record showing all of its history.

Once a well is plugged, it does not have the ability to access the oil and gas that is trapped miles beneath the earth's surface. Accessing those particular reserves is economically extremely unlikely and can be continuously monitored. If any encroachment is discovered, there is a robust process to release insurance credits to keep buyers whole.

Therefore, we believe that we have the highest quality credit on the market. It is additional, permanent, verifiable, and auditable and thus changing the way that credits are traditionally developed.

We view the outline of questioning involving credit quality is based upon the traditional registry system. This system has shown over time great flaws in crediting despite the volumes of paperwork dedicated to the contrary. We developed an improved system which does not conform to the traditional registry system yet vastly improves upon the work previously done and the assurances your organization seeks to verify.

Our system has been publicly reviewed, peer reviewed and user tested. It can be audited by anyone with knowledge of petroleum engineering, a widely studied science which allows for continuous auditing and scrutiny that will ensure that credits are only issued when real. The nature of oil and gas operations provides for a discrete event of credit generation which is unique, verifiable, and criminal if not completed to state regulations safeguarding the local communities and stakeholders.

SECTION IV: SIGNATURE

I certify that I am the administrator or authorized representative (“Programme Representative”) of the emissions unit programme (“Programme”) represented in a) this form, b) evidence accompanying this form, and c) any subsequent oral and/or written correspondence (a-c: “Programme Submission”) between the Programme and ICAO; and that I am duly authorized to represent the Programme in all matters related to ICAO’s analysis of this application form; and that ICAO will be promptly informed of any changes to the contact person(s) or contact information listed in this form.

As the Programme Representative, I certify that all information in this form is true, accurate, and complete to the best of my knowledge.

As the Programme Representative, I acknowledge that:

the Programme’s participation in the assessment does not guarantee, equate to, or prejudice future decisions by Council regarding CORSIA-eligible emissions units; and

the ICAO is not responsible for and shall not be liable for any losses, damages, liabilities, or expenses that the Programme may incur arising from or associated with its voluntary participation in the assessment; and

as a condition of participating in the assessment, the Programme will not at any point publicly disseminate, communicate, or otherwise disclose the nature, content, or status of communications between the Programme and ICAO, and of the assessment process generally, unless the Programme has received prior notice from the ICAO Secretariat that such information has been and/or can be publicly disclosed.

Signed:

Samuel Arnold
Full name of Programme Representative (*Print*)

3/20/2023
Date signed (*Print*)

Programme Representative (*Signature*)

(This signature page may be printed, signed, scanned and submitted as a separate file attachment)



| ICAO

Programme Application Form, Appendix B

Programme Assessment Scope

CONTENTS: With this document, programmes may define which of their activities they are submitting for assessment by the TAB. The two sheets are described below:

- Sheet A) Activities the programme describes in this form, which will be assessed by ICAO's TAB
- Sheet B) List of all methodologies / protocols that support activities described under Sheet A



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Programme Application Form, Appendix C

Programme Exclusions Scope

CONTENTS: With this document, programmes may define which of their activities they are **excluding** from TAB's assessment. The two sheets are described below:

- Sheet A) Activities the programme describes in this form will be **excluded** from assessment by ICAO's TAB
- Sheet B) List of all methodologies / protocols that support activities described under Sheet A

Emissions Unit Programme Registry Attestation

(Version 3, January 2023)

PART A. Applicability and Instructions

1. Relevance and definitions:

1.1. These terms are relevant to emissions unit programmes and their designated registries:

1.1.1. **CORSIA Eligible Emissions Unit Programme:** emissions unit programme approved by the ICAO Council as eligible to supply emissions units under the CORSIA.

1.1.2. **CORSIA Eligible Emissions Unit Programme-designated registry:** registry designated by a CORSIA Eligible Emissions Unit Programme to provide its registry services and approved by the ICAO Council as reflected in the programme's listing contained in the ICAO Document titled "*CORSIA Eligible Emissions Units*".

1.1.3. **Material change:** any update to the procedures of an emissions unit programme or its designated registry that would alter the functions that are addressed in the Emissions Unit Criteria (EUC), related guidelines, or the contents of this attestation. This includes changes that would alter responses to questions in the application form that the programme has submitted to the ICAO Secretariat or contradict the confirmation of the registry's adherence to the requirements contained in this attestation.

1.1.4. **Cancel:** the permanent removal and single use of a CORSIA Eligible Emissions Unit within a CORSIA Eligible Emissions Unit Programme designated registry such that the same emissions unit may not be used more than once. This is sometimes also referred to as "retirement", "cancelled", "cancelling" or "cancellation".

1.1.5. **Business day:** defined by the CORSIA Eligible Emissions Unit Programme registry when responding to formal instruction from a duly authorized representative of the owner of an account capable of holding and cancelling CORSIA Eligible Emission Units.

1.2. References to "Annex 16, Volume IV" throughout this document refer to Annex 16 to the Convention on International Civil Aviation — *Environmental Protection*, Volume IV — *Carbon Offsetting and reduction Scheme for International Aviation (CORSIA)*, containing the Standards and Recommended Practices (SARPs) for CORSIA implementation. Reference to "ETM, Volume IV" throughout this document refer to Environmental Technical Manual (Doc 9501), Volume IV — *Procedures for demonstrating compliance with the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)*, containing the guidance on the process to implement CORSIA SARPs.

2. Programme - registry relationship:

2.1. The ICAO Council's Technical Advisory Body (TAB) conducts its assessment of emissions unit programme eligibility including an assessment of the programme's provisions and procedures governing the programme registry, as represented by the programme. The ICAO Council determines CORSIA eligible emissions units upon recommendations by TAB and

consistent with the EUC. The programme registry is not separately or independently considered throughout this process. The TAB may periodically review and report to the ICAO Council regarding the continued consistency of programme's registry and its administration with terms contained in this document's Part B.

- 2.2.** The provision of registry services under the CORSIA by a CORSIA Eligible Emissions Unit Programme registry is fully subject to the terms, conditions and limitations to the programme's scope of eligibility. Such terms include, *inter alia*, the programme's commitment to administer any and all provisions and procedures governing the programme registry in the manner represented by the programme in the application form and additional information provided to TAB during the assessment process.
 - 2.3.** A CORSIA Eligible Emissions Unit Programme registry can provide registry services to aeroplane operators prior to the programme's and programme registry's demonstration of the registry's consistency with the registry requirements contained in this attestation. However, the programme registry can only claim to support and can only provide for aeroplane operators to fulfill the provisions in Annex 16, Volume IV and ETM, Volume IV involving emissions unit cancellation-, reporting-, and verification-related actions after its consistency with the registry requirements contained in this attestation is demonstrated by the programme in accordance with Part A, Paragraph 3 of this document, and the signed attestation is published on the CORSIA website in addition to the ICAO document "*CORSIA Eligible Emissions Units*".
- 3.** Submitting an "*Emissions Unit Programme Registry Attestation*":
- 3.1.** Both the administrator or authorized representative ("Programme Representative") of an emissions unit programme ("Programme"), and the administrator or authorized representative ("Registry Representative") of the registry designated by the Programme ("Programme Registry") will review and attest to their acceptance (as signed in Section 8 of this attestation) of all terms contained herein.
 - 3.2.** The Programme will electronically submit to the ICAO Secretariat a unique, dual-signed attestation for each and every Programme Registry that will provide its registry services to the Programme under the CORSIA:

 - 3.2.1.** If the Programme is determined to be eligible by a decision of the ICAO Council taken in 2020, the Programme will submit the signed attestation(s) to the ICAO Secretariat no later than one year after the Programme is determined to be eligible by the ICAO Council.
 - 3.2.2.** From 2021, the Programme should submit the signed attestation(s) to the ICAO Secretariat at the time of applying for assessment by the TAB. If the Programme is determined to be eligible by a decision of the ICAO Council after 31 December 2020, the Programme will submit the signed attestation(s) to the ICAO Secretariat no later than 180 days after the Programme is determined to be eligible by the ICAO Council.
 - 3.3.** As soon as possible upon receiving a signed attestation from the Programme, the ICAO Secretariat will:

3.3.1. Forward the signed attestation to the TAB; and

3.3.2. If the Programme is determined to be eligible by a decision of the ICAO Council, publicly post the signed attestation on the CORSIA website in addition to the ICAO document "*CORSIA Eligible Emissions Units*".

PART B: Emissions Unit Programme Registry Attestation

4. **Programme application materials.** As the Registry Representative, I certify items 4.1 to 4.4:

4.1. I have read and fully comprehend the following information:

4.1.1. The instructions and terms of this attestation;

4.1.2. The contents of the ICAO document “*CORSIA Emissions Unit Eligibility Criteria*”;

4.1.3. The contents of the most recent version of the application form that the Programme has provided to the ICAO Secretariat; and

4.1.4. The terms, conditions and limitations to the Programme’s scope of eligibility and further action(s) requested to the Programme by the ICAO Council, as presented to the Programme upon relevant decision of the ICAO Council on the Programme’s eligibility¹ for the 2024-2026 compliance period (First Phase).

4.2. The Programme’s representation of its provisions and procedures governing the Programme Registry, and of Programme Registry functionality, as contained in the most recent version of the application form that the Programme has provided to the ICAO Secretariat, is true, accurate, and complete, to the best of my knowledge;

4.3. The Programme Registry will notify the Programme of any material changes to the Programme Registry, to enable the Programme to maintain consistency with relevant criteria and guidelines throughout its assessment by TAB and up to an eligibility decision by the ICAO Council; and, if applicable, continuing on from the effective date of an affirmative eligibility decision by the ICAO Council, the Programme Registry will notify the Programme of any material changes to the Programme Registry, such that the Programme can maintain consistency with relevant criteria and guidelines;

4.4. The Programme Registry and Registry Representative will not publicly disseminate, communicate, or otherwise disclose the nature, content, or status of communications between the Programme, the Programme Registry, and/or the ICAO Secretariat, related to the status of the Programme’s provision of programme and registry services under the CORSIA, unless the Programme has received prior notice from the ICAO Secretariat that such information has been and/or can be publicly disclosed.

5. **Scope of Programme responsibilities under the CORSIA.** As the Registry Representative, I acknowledge items 5.1 to 5.2:

5.1. The scope of the Programme assessment by the TAB, through which the TAB will develop recommendations on the list of eligible emissions unit programmes (and potentially project types) for use under the CORSIA, which will then be considered by the ICAO Council for an eligibility decision, including the Programme’s responsibilities throughout this process; and

¹ Only applicable when the Programme submits the signed “*Emissions Unit Programme Registry Attestation*” to the ICAO Secretariat after the Programme is determined to be eligible by a decision of the ICAO Council.

- 5.2. The scope and limitations of the ICAO Secretariat's responsibilities related to the assessment process.
6. **Programme - Registry relationship.** As the Registry Representative, I understand and accept items 6.1 to 6.2:
- 6.1. The Programme Registry's provision of registry services under the CORSIA is subject to the terms, conditions and limitations to the Programme's scope of eligibility, as presented to the Programme upon relevant decision of the ICAO Council on the Programme's eligibility; and
- 6.2. Only after the Programme and the ICAO Secretariat have completed all steps in Part A, Section 3 of this attestation, can the Programme Registry facilitate and identify emissions unit cancellations specifically for CORSIA use, and support any related reporting and verification activities. The Programme Registry will not promote itself as being capable of providing registry services for the described purpose until such time.
7. **Scope of Programme Registry responsibilities under the CORSIA.** As the Registry Representative, I certify items 7.1 to 7.12:
- 7.1. The Programme Registry is capable of fully meeting the objectives of any and all Programme provisions and procedures related to the Programme Registry that the Programme is required to have in place:
- 7.1.1. In the manner represented by the Programme in the application form that the Programme has provided to the ICAO Secretariat; and
- 7.1.2. As acknowledged by the Programme in the signed "Programme acceptance to terms of eligibility for inclusion in the ICAO document "*CORSIA Eligible Emissions Units*"².
- 7.2. The Programme Registry will not deny a CORSIA participant's request for a registry account solely on the basis of the country in which the requestor is headquartered or based;
- 7.3. The Programme Registry will identify (in the case of applicants to be assessed to determine their eligibility) / identifies (when the Programme is determined to be eligible by a decision of the ICAO Council) CORSIA Eligible Emissions Units as defined in the ICAO document "*CORSIA Eligible Emissions Units*"³. This will be/is done consistent with the capabilities described by the Programme in its communications with ICAO, and any further requirements decided by the ICAO Council for CORSIA Eligible Emissions Unit Programme-designated Registry.
- 7.4. The Programme Registry will, upon request of the CORSIA participant account holder or participant's designee, designate the participant's cancellation of emissions units for the purpose of reconciling offsetting requirements under the CORSIA, including by compliance cycle;

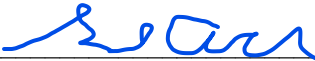
² Only applicable when the Programme submits the signed "*Emissions Unit Programme Registry Attestation*" to the ICAO Secretariat after the Programme is determined to be eligible by a decision of the ICAO Council.

³ As prescribed in the ICAO Document "*CORSIA Eligible Emissions Units*", the programme must provide for and implement its registry system to identify its CORSIA eligible emissions units as defined in the document.

- 7.5. The Programme Registry will, within 1 – 3 business days of receipt of formal instruction from a duly authorized representative of the owner of an account capable of holding and cancelling CORSIA Eligible Emission Units within the registry, and barring system downtime that is scheduled in advance or beyond the control of the registry administrator, make visible on the Programme Registry’s public website the account owners cancellations of CORSIA Eligible Emission Units as instructed. Such cancellation information will include all fields that are specified for this purpose in Annex 16, Volume IV, and ETM, Volume IV;
- 7.6. The Programme Registry will, upon request of the CORSIA participant account holder or participant’s designee, generate report(s) containing the information specified for this purpose in Annex 16, Volume IV, and ETM, Volume IV;
- 7.7. The Programme Registry will maintain robust security practices that ensure the integrity of, and authenticated and secure access to, the registry data of CORSIA participant account holders or participants’ designees, and transaction events carried out by a user; and disclose documentation of such practices upon request. The Programme Registry will utilize appropriate method(s) to authenticate the identity of each user accessing an account; grant each user access only to the information and functions that a user is entitled to; and utilize appropriate method(s) to ensure that each event initiated by a user (i.e. transfer of units between accounts; cancellation/retirement of a unit, update of data, etc.) is an intentional transaction event confirmed by the user. Such security features will meet and be periodically updated in accordance with industry best practice;
- 7.8. The Programme Registry will, upon identifying any breach of Programme Registry data security or integrity that affects a CORSIA participant account holder or participant’s designee, notify the CORSIA participant account holder or their designee, and notify the Programme, which will inform and engage with the ICAO Secretariat on the matter in the same manner as required for material deviations from the Programme’s application form;
- 7.9. The Programme Registry will ensure the irreversibility of emissions unit cancellations and the designation of the purpose of emissions units cancellations, as per the requirements contained in Annex 16, Volume IV, and ETM, Volume IV. Without prejudice to the aforementioned, such requirement would not prevent a Programme Registry from utilizing secure, time-bound and auditable methods for correcting unintentional user-entry errors;
- 7.10. The Programme Registry will ensure that all cancellation information on its website is presented in a user-friendly format; is available at no cost and with no credentials required; is capable of being searched based on data fields; and can be downloaded in a machine-readable format, e.g., .xlsx;
- 7.11. The Programme Registry will retain documents and data relevant to CORSIA Eligible Emissions Units and cancellations on an ongoing basis and for at least three years beyond the end date of the latest compliance period in which the emissions unit programme is determined to be eligible; and consistent with the Programme’s long-term planning, including plans for possible dissolution;
- 7.12. The Programme Registry will append a document to the end of the signed attestation describing how it will ensure its ability to implement the requirements of this document. This will include references to existing registry functionalities that already meet the

requirements of this document and/or description of business practices and procedures that ensure the Programme Registry's ability to implement the requirements in this document prior to identifying any emissions unit cancellations specifically for CORSIA use and supporting any related reporting and verification activities.

8. Accuracy and completeness of information. The signatures below certify that the information provided is true and correct in all material respects on the date as of which such information is dated or certified and does not omit any material fact necessary in order to make such information not misleading. Representatives are duly authorized for official correspondence on behalf of their organization.



Programme Representative Signature

Samuel Arnold _____
Programme Representative Name



Registry Representative Signature

Samuel Arnold _____
Registry Representative Name

CarbonPath, Inc. _____
Programme Name

CarbonPath, Inc. _____
Registry Name

3/23/23 _____
Date

3/23/23 _____
Date

Instructions for Registry Representative: Please append a document on the next page of this attestation describing your Registry's ability to implement the requirements of this document, including references to existing registry functionalities that meet the requirements of this document and/or description of business practices and procedures that ensure the Programme Registry's ability to implement the requirements of this document prior to identifying any emissions unit cancellations specifically for CORSIA use and supporting any related reporting and verification activities.

ATTACHMENT A: PROGRAMME REGISTRY ATTESTATION DISCLOSURE FORM

PART 1: INSTRUCTIONS FOR REGISTRY REPRESENTATIVE

The following information request corresponds to the registry representative's certification of its adherence to items 7.1 to 7.11 of the *Emissions Unit Programme Registry Attestation* "Scope of Programme Registry responsibilities under the CORSIA".

In accordance with item 7.12 of the *Emissions Unit Programme Registry Attestation*, registry administrators are to complete and append this form to the signed *Attestation* describing how the Registry will ensure its ability to implement the requirements of the *Attestation*. This includes references to existing registry functionalities that already meet the requirements of the *Attestation* and/or descriptions of business practices and procedures that ensure the Programme Registry's ability to implement the requirements in the *Attestation*.

For further guidance regarding the format and approaches for providing summary information and evidence of system functionalities and/or procedures in this form, refer to instructions for "**Form Completion**" in the *Application Form for Emissions Unit Programmes*⁴.

PART 2: PROGRAMME AND REGISTRY REPRESENTATIVE INFORMATION

1. Programme Representative Information

A. Programme Information

Programme name: [CarbonPath](#)

Administering Organization⁵: [CarbonPath](#)

Official mailing address: [448 Harvard Street Houston, TX, USA 77007](#)

Telephone #: [1-504-250-0942](#)

Official web address: www.carbonpath.io

B. Programme Administrator Information (i.e., individual contact person)

Full name and title: [Samuel Arnold, COO](#)

Employer / Company (if not programme): [CarbonPath](#)

E-mail address: sarnold@carbonpath.io

Telephone #: [1-504-250-0942](#)

C. Programme Representative Information (if different from Programme Administrator)

⁴ <https://www.icao.int/environmental-protection/CORSIA/Pages/TAB.aspx>

⁵ **Please complete**, even if the name of the business, government agency, organization, or other entity that administers the Emissions Unit Programme is the same as "*Programme Name*".

Full name and title: [Click or tap here to enter text.](#)

Employer / Company (*if not Programme*): [Click or tap here to enter text.](#)

E-mail address: [Click or tap here to enter text.](#)

Telephone #: [Click or tap here to enter text.](#)

2. Registry Representative Information⁶

A. Registry Information

Registry / system name: [CarbonPath](#)

Administering Organization: [Celo](#)

Official mailing address: [448 Harvard Street Houston, TX, USA, 77007](#)

Telephone #: [1-504-250-0942](#)

Official web address: www.carbonpath.io

B. Registry Administrator Information (i.e., individual contact person)

Full name and title: [Samuel Arnold](#)

Employer / Company (*if not Registry Administering Organization*): [CarbonPath](#)

E-mail address: sarnold@carbonpath.io

Telephone #: [1-504-250-0942](#)

C. Programme Representative Information (if different from Registry Administrator)

Full name and title: [Click or tap here to enter text.](#)

Employer / Company (*if not Registry Administering Organization*): [Click or tap here to enter text.](#)

E-mail address: [Click or tap here to enter text.](#)

Telephone #: [Click or tap here to enter text.](#)

⁶ **Please complete this section**, even if the business, government agency, organization, or other entity that administers the Emissions Unit Programme Registry is the same as the organization described in **Part 2. “1. Programme Representative Information”**.

PART 3: EVIDENCE OF ADHERENCE TO SCOPE OF REGISTRY RESPONSIBILITIES

	Does the Programme Registry fully meet the objectives of any and all Programme provisions and procedures related to the Programme Registry that the Programme is required to have in place in the manner represented by the Programme in the application form that the Programme has provided to the ICAO Secretariat and, if applicable ⁷ , as acknowledged by the Programme in the signed “Programme acceptance to terms of eligibility for inclusion in the ICAO document “ <i>CORSIA Eligible Emissions Units</i> ”?”	<input checked="" type="checkbox"/> YES
7.1	Describe how the Registry ensures its ability to implement these provisions:	
	CarbonPath reviews the appropriate documentation annually to ensure that the company is complying with and has the ability to implement all procedures.	
	In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry’s implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i> .	
	app.carbonpath.io – application is the registry	

	Will the Programme Registry ensure that a CORSIA participant’s request for a registry account will not be denied solely on the basis of the country in which the requestor is headquartered or based?	<input checked="" type="checkbox"/> YES
7.2	Describe how the Registry does or will implement this provision:	
	Utilizing blockchain we create a specific wallet for each entity irrespective of domicile. There will be AML and KYC checks prior to creating the wallet and it is the option of the CORSIA participant to have CarbonPath manage the wallet or the company directly manage the wallet.	
	In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry’s implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i> .	
	app.carbonpath.io – please review the application	

7.3	Will the Programme Registry (in the case of applicants to be assessed to determine their eligibility)/Does the Programme Registry (when the Programme is determined to be eligible by a decision of the ICAO Council) identify / label its CORSIA eligible emissions units as defined in the ICAO Document “ <i>CORSIA Eligible Emissions Units</i> ”?	<input checked="" type="checkbox"/> YES
	Describe how the Registry does or will implements this provision:	

⁷ Only applicable when the Programme submits the signed “*Emissions Unit Programme Registry Attestation*” to the ICAO Secretariat after the Programme is determined to be eligible by a decision of the ICAO Council.

	Every credit issued under the two methodologies will be tagged as CORSIA eligible and if purchased placed in an immutable account and record of the purchaser and can only be retired by that entity.
	In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry's implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i> .
	CarbonPath App

	Will the Programme Registry, upon request of the CORSIA participant account holder or participant's designee, designate the participant's cancellation of emissions units for the purpose of reconciling offsetting requirements under the CORSIA, including by compliance cycle?	<input checked="" type="checkbox"/> YES
7.4	Describe how the Registry does or will implement these provisions:	
	CarbonPath App – this can be done by the CORSIA participant directly utilizing the application with a permanent record, receipt given and inability to recreate that credit and sell or retire again.	
	In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry's implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i> .	
	CarbonPath	

	a. Will the Programme Registry, within 1 – 3 business days of receipt of formal instruction from a duly authorized representative of the owner of an account capable of holding and cancelling CORSIA Eligible Emission Units within the registry, and barring system downtime that is scheduled in advance or beyond the control of the registry administrator, make visible on the Programme Registry's public website the account owner's cancellations of CORSIA Eligible Emission Units as instructed.	<input checked="" type="checkbox"/> YES
	b. Will such cancellation information (row a) include all fields that are specified for this purpose in Annex 16, Volume IV, and ETM, Volume IV?	<input checked="" type="checkbox"/> YES
7.5	Describe how the Registry does or will implement these provisions:	
	This can be done by the CORSIA registrant or CarbonPath can do this with the appropriate written communication. This act can be completed in a few minutes.	
	In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry's implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i> .	
	CarbonPath App	

7.6	Will the Programme Registry, upon request of the CORSIA participant account holder or participant’s designee, generate report(s) containing the information specified for this purpose in Annex 16, Volume IV, and ETM, Volume IV?	<input checked="" type="checkbox"/> YES
	Describe how the Registry does or will implement this provision:	
	A receipt with all data is always available and immutable. A receipt with that information will be generated upon retirement.	
	In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry’s implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i> .	
	CarbonPath App	

7.7	a. Does the Programme Registry maintain robust security practices that ensure the integrity of, and authenticated and secure access to, the registry data of CORSIA participant account holders or participants’ designees, and transaction events carried out by a user?	<input checked="" type="checkbox"/> YES
	b. Does the Programme Registry disclose documentation of such practices (row a) upon request?	<input checked="" type="checkbox"/> YES
	c. Does the Programme Registry utilize appropriate method(s) to authenticate the identity of each user accessing an account?	<input checked="" type="checkbox"/> YES
	d. Does the Programme Registry grant each user access only to the information and functions that a user is entitled to?	<input checked="" type="checkbox"/> YES
	e. Does the Programme Registry utilize appropriate method(s) to ensure that each event initiated by a user (i.e. transfer of units between accounts; cancellation/retirement of a unit, update of data, etc.) is an intentional transaction event confirmed by the user?	<input checked="" type="checkbox"/> YES
	f. Do such security features (rows a – e) meet and undergo periodic updates in accordance with industry best practice?	<input checked="" type="checkbox"/> YES
	Describe how the Registry implements each provision in rows a – f:	
<ul style="list-style-type: none"> a) The CarbonPath registry system and blockchain has been extensively tested by Hacken, a security audit firm and received high marks which can be shared, while the fact that the records are held on blockchain means that it is a distributed ledger and highly impervious to unauthorized transactions. b) Yes, this is on the Celo website and we have all documentation on our security audits. c) The authentication depends upon the method chosen – either CarbonPath maintained or the CORSIA entity maintained, which would be at the option of the CORSIA entity. The account holder (entity) will have access to the company’s specific wallet. Having that access only allows that entity to facilitate trading or retirement. If that wallet is managed by CarbonPath, then that request come from a valid, authorized representative of the company. d) Yes, one would only have access to their wallet but the record for all credits is publicly maintained. 		

	<p>e) Yes, for CarbonPath controlled wallets. CarbonPath confirms with the entity prior to the retirement or trading of credits.</p> <p>f) Yes, CarbonPath conducts annual security audits</p>
	<p>In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry's implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i>.</p>
	<p>CarbonPath App</p>

	<p>a. Will the Programme Registry, upon identifying any breach of Programme Registry data security or integrity that affects a CORSIA participant account holder or participant's designee, notify the CORSIA participant account holder or their designee?</p>	<p><input checked="" type="checkbox"/> YES</p>
	<p>b. Will the Programme Registry, upon identifying any breach of Programme Registry data security or integrity that affects a CORSIA participant account holder or participant's designee, notify the Programme, which will inform and engage with the ICAO Secretariat on the matter in the same manner as required for material deviations from the Programme's application form?</p>	<p><input checked="" type="checkbox"/> YES</p>
7.8	<p>Describe how the Registry does or will implement each provision in rows a and b:</p>	
	<p>Yes, we have a security policy that requires us to notify all participants of a potential or actual breach.</p>	
	<p>In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry's implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i>.</p>	
	<p>CarbonPath</p>	

	<p>Does the Programme Registry ensure the irreversibility of emissions unit cancellations and the designation of the purpose of emissions units cancellations, as per the requirements contained in Annex 16, Volume IV, and ETM, Volume IV⁸?</p>	<p><input checked="" type="checkbox"/> YES</p>
	<p>Describe how the Registry implements these provisions:</p>	
7.9	<p>Yes, utilizing blockchain involves "burning" the tokens as part of the retirement process. This ensures that it is impossible to reverse once retired, and only one credit can be originated, traded and retired at one account at a time as the unique credit can only be held in one wallet at any time.</p>	
	<p>In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry's implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i>.</p>	
	<p>CarbonPath App</p>	

⁸ Without prejudice to the aforementioned, such requirement would not prevent a Programme Registry from utilizing secure, time-bound and auditable methods for correcting unintentional user-entry errors.

	a. Does the Programme Registry ensure that all cancellation information on its website is presented in a user-friendly format?	<input checked="" type="checkbox"/> YES
	b. Does the Programme Registry ensure that all cancellation information on its website is available at no cost and with no credentials required?	<input checked="" type="checkbox"/> YES
	c. Does the Programme Registry ensure that all cancellation information on its website is capable of being searched based on data fields?	<input checked="" type="checkbox"/> YES
	d. Does the Programme Registry ensure that all cancellation information on its website can be downloaded in a machine-readable format, e.g., .xlsx?	<input checked="" type="checkbox"/> YES
	Describe how the Registry implements each provision in rows a – d:	
7.10	<ul style="list-style-type: none"> a) There is an immutable record of creation, any trading, and retirement which is only possible utilizing blockchain technology. The retirement comes with and is always available a receipt with all pertinent information. b) The retirement is public record and always available on the block explorer for anyone to see that immutable record. c) Yes this is all on the website and the Celo block explorer. d) The receipt is downloadable as a PDF and there are ample programs publicly available to translate PDF data into excel or other formats for consumption. 	
	In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry’s implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i> .	
	CarbonPath App	

	a. Will the Programme Registry retain documents and data relevant to CORSIA Eligible Emissions Units and cancellations on an ongoing basis and for at least three years beyond the end date of the latest compliance period in which the emissions unit programme is determined to be eligible?	<input checked="" type="checkbox"/> YES
	b. Will the Programme Registry retain documents and data relevant to CORSIA Eligible Emissions Units and cancellations consistent with the Programme’s long-term planning, including plans for possible dissolution?	<input checked="" type="checkbox"/> YES
	Describe how the Registry does or will implement each provision in rows a and b:	
7.11	<ul style="list-style-type: none"> a) Utilizing blockchain provides an immutable record that will never be erased so long as the Celo protocol is available, and if this comes into question CarbonPath will migrate to a new registry and keep those records on the new chain. b) Yes, those records will be kept on blockchain and will always be available for inspection. 	
	In the field below, provide link(s) to any web-based evidence of existing registry functionalities and/or of documents demonstrating business practices and procedures for the Programme Registry’s implementation of these provisions. Alternatively, or in addition, confirm that such evidence is included as an attachment to this <i>Emissions Unit Programme Registry Attestation</i> .	
	CarbonPath App	

