

PROGRAM NAME: Isometric

**ORGANIZATION:** Isometric

ASSESSMENT TYPE: Non-CORSIA - Program Level Assessment

DATE OF SUBMISSION: 15 February 2024

**DOWNLOADED ON:** 29 February 2024

STATUS: IN REVIEW

#### **Background**

#### **Must Read**

Please acknowledge that you have reviewed the details provided in the "Background" section.

We have reviewed the Assessment Framework background materials.

Yes

#### **Methodologies for Exclusion**

Please list any methodologies (name and URL) that your programme would like to have excluded from Category-level assessment by the ICVCM team.

If none, please enter "None" or N/A.

None



#### A - Governance

#### 1.1 Effective Governance - CORSIA

CORSIA requirements related to governance framework:

1) Programme Senior Staff / Leadership (e.g., President / CEO, board members) \*List the names and titles of programme's senior staff and leadership, including board members.

**Board:** Eamon Jubbawy (CEO), Ryan Orbuch (Partner, Lowercarbon Capital), Khaled Helioui (Partner, Plural Platform), Clare Leckie (Secretariat)

**Leadership:** Eamon Jubbawy (CEO), Ola Sitarska (Head of Engineering), Ellie Romer-Lee (Head of People), Lukas May (Head of Expansion and Policy), Sophie Gill (Interim Head of Science)

#### https://isometric.com/company

Please note that towards the bottom of the <u>Company</u> page you can also manually access all public Isometric Policies referred to in many subsequent responses.

2) Provide an organizational chart that illustrates or otherwise describes the functional relationship a) among the individuals listed in 1; b) among those individuals and programme staff / employees; and c) the functions of each organizational unit and interlinkages with other units.

#### https://drive.google.com/file/d/1YJ1LD8JEScE7Whv4DOFIy3BtYbkFrd34/view

Isometric's organizational structure is set out in the publicly available Isometric <u>Appointments Policy</u>. It shows the makeup of the Board as well as the Leadership, and how these interact with individual Divisions as well as the independent Science Network.

The functions of each organizational unit are spelled out in more detail on our <u>Company page</u>, with separate tabs for each Division, as well as the Leadership and the Board.

#### 3) Provide a summary description of your programme (300 – 500

#### https://isometric.com

Isometric (Isometric HQ Limited) is a private limited company headquartered in the UK. The company, together with the <u>Science Network</u>, developed the <u>Isometric Standard</u> ("the Standard") and the underlying <u>methodologies</u> ("Protocols") that are governed by the Standard.

Our programme issues credits for long-duration carbon removal activities. Our core principles are transparency, scientific rigor, collaboration, and the elimination of conflicts-of-interest. Isometric credits represent scientifically rigorous confirmation that carbon removal has actually occurred. We only issue fully verified, *ex-post* delivered credits. Buyers can transparently view all the calculations and evidence that underpins each credit on the <u>Isometric Registry</u>. Isometric also hosts a publicly available <u>Science Platform</u> which allows Project Proponents to share and visualize their processes and data for feedback from the academic community.

The rules in the Isometric Standard underpin all Protocols that are certified by Isometric for use by Project Proponents. The Standard sets out the world's most stringent criteria for carbon removal activities, for example, only allowing for activities that can demonstrate 1,000 years or more of permanence.

A team of expert scientists within Isometric collaborate with Project Proponents to develop draft Protocols that meet the Standard's requirements. These drafts then undergo a formal review by the Science Network, an independent group of over 200 climate scientists. These scientists provide peer review style feedback, which is then incorporated as relevant into the final draft that is issued for a final public consultation. Only after reviewing those comments, and making further changes as relevant, can the Protocol be finalized and used for issuing credits against specific projects.



Isometric's fee structure is transparent, and designed to minimize conflicts of interest, with fees charged to buyers (instead of Project Proponents) and de-linked from the actual price of the carbon removal activity as well as the total number of credits issued. We believe this is essential to avoid a situation in which our programme is financially incentivized to provide more credits than can be justified by the data and the science.

### 4) Confirm that your programme publicly discloses who is responsible for the administration of the programme

#### https://isometric.com/company

As set out earlier, our governance, organizational structure, and the functions of different business units are set out on our Company page on the website as well as in the Isometric Appointments Policy.

#### 5) Confirm that your programme publicly discloses how decisions are made

#### https://drive.google.com/file/d/1YJ1LD8JEScE7Whv4D0FIy3BtYbkFrd34/view

Isometric has a publicly available <u>Appointments Policy</u>, which describes how appointments are made to Leadership, committees, and other groups (e.g. our Science Network).

Other key decisions are also publicly disclosed, notably:

- New staff hires and roles are updated on isometric.com/company.
- New credit issuances are live and publicly available on the <u>Isometric Registry</u>.
- New Protocols, or changes to existing Protocols, are put out for public consultation and available on the website.
- Any changes to the Isometric Standard go through a public consultation process available on the Isometric website.

### 6) Confirm that your programme can demonstrate that it has been continuously governed for at least the last two years

N/A

We confirm that Isometric has been continuously governed from its incorporation in January 2022 to the present day (over two years). A detailed <u>filing history</u> can be accessed on the UK Companies House website, including the Certificate of Incorporation and Articles of Association that were published on 5 January 2022.

### 7) Confirm that your programme can demonstrate that it has been continuously operational for at least the last two years

N/A

We confirm that Isometric has been continuously operational since January 2022 to the present (i.e. over two years). After completing the company incorporation, the main operational events during that time period have been as follows:

#### H1 2022:

- Company incorporated.
- Raised \$25m in seed funding from industry leading venture capital firms.
- Team growth to 8 members including Heads of People, Engineering and Science.
- Partnership talks conducted with major buyers, suppliers and non-profit institutions.



#### H2 2022:

- Hosted conference in San Francisco in November 2022 for 70 leading academics and policymakers in carbon removal, entitled: Workshop to Catalyze Collaborative and Cross-Pathway Measurement, Reporting, and Verification for Carbon Removal.
- Live product demo held at conference.
- Further team expansion to 16 staff by end of 2022.

#### H1 2023:

- Further expansion of science team to a total of 13 scientists: working on Protocols.
- Science Platform publicly launched, resulting in over 150 scientists joining the Science Network.

#### H2 2023:

- Conducted public consultations on 3 Protocols.
- Passed milestone of over 1,000 credits issued on the Isometric Registry.

#### Q1 2024:

- Confidential Information Submitted.
- 2 additional Protocols released for public consultation.

### 8) Confirm that your programme can demonstrate that it has a plan for the long-term administration of multi-decadal programme elements

#### https://science.isometric.com/standard

Beyond the crediting period, Project Proponents must commit to ongoing monitoring requirements, as set out in section <u>2.5.8.2 ("Monitoring")</u> of the Isometric Standard, that can extend into multi-decadal elements. Isometric plans to manage such elements through a combination of:

- Effective financial management and governance:
- The amount of funding raised for Isometric (\$25m) was designed to provide strong financial foundations ensuring long-term durability of the company and the ability to implement longterm (i.e. multi-decadal) plans.
- The revenue model is structured to cover Isometric's ongoing costs, ensuring a sustainable footing on which to continue operations in the long-term.
- Contractual commitments from Project Proponents that legally bind them (and successors) to compliance with any long-term (e.g. multi-decadal) elements in the relevant Protocol.

### 9) Confirm that your programme can demonstrate that it has a plan for possible responses to the dissolution of the programme in its current form

N/A

We have developed a Wind Down Policy setting out the plan for possible responses to the dissolution of the programme in its current form (uploaded directly as part of this application).

10) Confirm your programme has policies and robust procedures in place to 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



#### https://drive.google.com/file/d/1-crxTxayWXQeFrfosUVJmH Fz8nBeCaG/view

Isometric has a <u>Conflicts of Interest Policy</u> published on its website. This requires programme staff, Board members, and management from having financial, commercial or fiduciary conflicts of interest in the governance and provision of programme services. For example, if one of our in-house scientists has a family member at a Project Proponent with whom we work, then they will need to declare this and put in place a mitigation plan (e.g. that individual may not be permitted to be involved in the verification and crediting process in relation to the Project Proponent).

During the onboarding process and refreshed on an annual basis (or whenever a fresh conflict arises), a Conflict of Interest declaration must be completed by all staff, Board members, and contractors. For Data Protection purposes, the folder containing all completed declarations is considered sensitive as declarations contain personal and financial information so has not been shared here (in line with the data protection law principle of proportionality). However, specific examples of completed forms can be shared on request.

11) Confirm your programme has policies and robust procedures in place to ensure that, conflicts arising from programme staff, board members, and management having financial, commercial or fiduciary conflicts of interest, are appropriately declared, and addressed and isolated

#### https://drive.google.com/file/d/1-crxTxayWXQeFrfosUVJmH Fz8nBeCaG/view

Confirmed. Where a conflict is determined to exist, Isometric implements appropriate measures to resolve or mitigate that conflict. These measures may include recusal from relevant decision-making processes, disqualification from specific projects, or other actions as deemed necessary. Detailed measures for employees and relevant persons are outlined in the Isometric Conflicts of Interest Policy.

12) Confirm your programme has policies and robust procedures in place to prevent the programme registry administrators from having financial, commercial or fiduciary conflicts of interest in the governance or provision of registry services

https://drive.google.com/file/d/1-crxTxayWXQeFrfosUVJmH Fz8nBeCaG/view

Confirmed. The mechanisms outlined in response to questions (10) and (11) are binding for all staff, including those administering the Isometric Registry.

13) Confirm your programme has policies and robust procedures in place to ensure that, where conflicts arising from programme registry administrators from having financial, commercial or fiduciary interests in the governance or provision of registry services arise, they are appropriately declared, and addressed and isolated

https://drive.google.com/file/d/1-crxTxayWXQeFrfosUVJmH Fz8nBeCaG/view

Confirmed. As set out above, a Conflict of Interest Declaration is mandatory for all staff, and where conflicts arise, the declaration needs to include the plan for isolating and addressing the conflict.

14) If the program is not directly and currently administered by a public agency, can the program demonstrate up-to-date professional liability insurance policy of at least USD\$5M?

#### 1.1 Effective Governance

In addition to CORSIA requirements related to governance framework, confirm that your organisation:

1) has a board comprised of independent board members who assume fiduciary responsibility for the organisation and operate according to robust bylaws.

https://drive.google.com/file/d/1YJ1LD8JEScE7Whv4D0FIy3BtYbkFrd34/view

The majority of Isometric's Board consists of non-executive Directors. The Board assumes fiduciary



responsibility for the organization and operates according to the robust bylaws as set out in the publicly available Articles of Association, and in compliance with UK company law and broader best practice. This includes the identification and resolution of any conflicts of interest, as set out in Isometric's Conflict of Interest Policy.

The Board also makes use of independent advisors, such as legal counsel and chartered accountants, to assist them in their decision-making.

An independent <u>Science Network</u>, with over 150 scientists, has been established to provide independent input and oversight of the methodologies ("Protocols") developed by Isometric. Further detail on this process is set out elsewhere in this application.

# 2) publishes an annual report that contains the organisation's revenues, expenses, and net assets over the past year and provides an overview of the organisation's mission, major programs and activities, and governance.

www.isometric.com/company

We will publish this year's full Annual Report in May (hosted at the URL provided), following the conclusion of our 2023-2024 financial year (the Report includes an overview of the mission, major programs and activities, and governance, as well as the financial accounts).

#### 3) Has processes in place to ensure corporate social and environmental responsibility.

https://drive.google.com/file/d/19f8jmXWTnTnmGUbkIZs-eErOQwdLq Qe/view

Isometric has an Environmental and Social Policy, published on its website.

#### 4) Has robust anti-money laundering processes in place.

#### https://drive.google.com/file/d/1YLopoLcxZojb1-6rO8d6bzLwW05cIkdX/view

Isometric has robust anti-money laundering processes in place. We have a publicly available KYC Policy, as well as an Anti-Bribery and Corruption Policy. Although Isometric is not formally in scope of the UK Money Laundering Regulations, Isometric has decided to draw from the principles set out in those Regulations and associated guidance (e.g. Joint Money Laundering Steering Group guidance). In summary, Buyers and Project Proponents seeking to use the Isometric Registry must first undergo a series of KYC checks and are then subject to ongoing monitoring to identify any suspicious activity.

#### 5) **follow practices consistent with robust anti-bribery and anti-corruption guidance and regulation.** <u>https://drive.google.com/file/d/1MhlsdYvaB1sGyqC0M29KQaRJrQcgcCgA/view</u>

Isometric has an Anti-Bribery and Corruption Policy that describes Isometric's controls for preventing bribery and corruption. The Policy follows best practice guidance and regulation, drawing in particular from the United Kingdom Bribery Act (UKBA) and the U.S. Foreign Corrupt Practices Act (FCPA). Examples of the practices followed include

- Prohibition of any improper payments, including bribes, kickbacks, excessive (beyond a defined threshold) gifts or entertainment, or any other payment made or offered to obtain an undue business advantage
- Any gifts made or received to be reported in the internal company gift log
- Any employee who has reason to believe that a violation of this Policy has occurred, or may occur, must promptly report this to their line manager (alternative escalation routes are also provided)



#### 1.2 Public Engagement, Consultation and Grievances - CORSIA

CORSIA requirements related to public engagement, consultation and grievances:

1) Confirm that your programme publicly discloses what information is captured and made available to different stakeholders.

#### https://science.isometric.com/standard

Yes, we disclose what information is captured and made available to different stakeholders.

- **Isometric Standard:** We conduct public consultations on material changes to the Isometric Standard. Any resulting final changes will be published in an updated version of the Standard alongside a clear explanation of the stakeholder input received, and how this informed the final changes that were made. This process is set out in section <a href="mailto:1.3">1.3</a> ("Versioning") of the Isometric Standard
- **Protocol:** As part of Protocol development, we seek scientific input on draft Protocols and subsections of Protocols ("Modules") from an independent Science Network of over 200 scientists. All material changes to Protocols and Modules are also published on Isometric's Science Platform for a 30-day public consultation. After a Protocol has undergone the full consultation process and is published, Isometric shares a consolidated document summarizing the feedback received. An example for this is the <u>Biomass Geological Storage Protocol</u>, for which a public consultation took place between 22 November and 22 December 2023, following which a <u>Public Consultation Summary</u> was published on the Science Platform (hint: you might need to select an older version, in this case v1.0.0, for the affiliated summary to appear). This process is set out in sections <u>2.1 ("Protocol Certification Process")</u> and <u>2.2 ("Consultation Requirements")</u> of the Isometric Standard.

### 2) Confirm that your programme publicly discloses its local stakeholder consultation requirements (if applicable)

#### https://science.isometric.com/standard

The Isometric Standard sets out our requirements for local stakeholder consultations in section 3.5 ("Stakeholder Input Process").

### 3) Confirm that your programme publicly discloses its public comments provisions and requirements, and how they are considered (if applicable).

#### https://science.isometric.com/standard

Public comments provisions are outlined under section 2.2 ("Consultation Requirements") of the Isometric Standard, as well as in section 3.5 ("Stakeholder Input Process") for project-level consultations. The comments received through these procedures are considered in the development of the Isometric Standard and underlying Protocols.

### 4) Confirm that your programme conducts public comment periods relating to methodologies, protocols, or frameworks under development

#### https://science.isometric.com/standard

As set out in section 2.2 ("Consultation Requirements") of the Isometric Standard, draft Protocols are put to the independent Science Network for review and comment, followed by a public comment period of at least 30 days. Following incorporation as appropriate of feedback from the public consultation, the completed Protocol will be published on the Isometric website. Results from the public consultation are summarized and also published.

### 5) Confirm that your programme conducts public comment periods relating to activities seeking registration or approval

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#### https://science.isometric.com/standard

We confirm that activities seeking registration or approval require public comment periods as per section 3.5 ("Stakeholder Input Process") of the Isometric Standard. This is to ensure that the interests of local stakeholders are incorporated into the design of any carbon removal activity. The consultation must be designed to be iterative, accessible, transparent, free from external manipulation, systematically documented, and contain a mechanism for grievances. The key elements of the process are:

- The Project Proponent must inform all relevant stakeholders about its proposed and current
- activities. There must be a first consultation meeting prior to project development, with stakeholder invitations to be issued with a minimum notice of 14 days before.
- Stakeholders and rights-holders should be invited to consultation meetings via methods including but not limited to the post, email, or notices in newspapers and public places.
- Consultation meetings should be scheduled to maximize attendance, taking note of cultural or religious holidays and heritage.
- The intention of each consultation meeting should be communicated to all stakeholders prior to the meeting.
- A summary of consultation meetings should be made available to all stakeholders no later than a month after the meeting.
- All stakeholder or Project Proponent conflicts-of-interests should be declared.
- A mechanism for stakeholders to voice and address grievances must be implemented and any grievances must be resolved or escalated no later than 60 days after receipt.
- All correspondence, meeting invitations, and meeting summaries must be saved and either published on the Project Proponent's website or made available upon reasonable request.

### 6) Confirm that your programme conducts public comment periods relating to operational activities (e.g., ongoing stakeholder feedback)

#### https://drive.google.com/file/d/110uorkLOxAGMsv\_gsjaL5Dyglt4ZY5t2/view

We confirm that we have provided for public comment in relation to operational activities. Comments related to operational activities of Isometric and requests for additional information can be submitted through contact details provided on our website. Our standard process is to respond to all requests within 3-5 working days. Additionally, Isometric has published a <u>Grievance Policy</u>, providing a process for the public to raise complaints in relation to our operational activities.

At the project level, section <u>3.5 ("Stakeholder Input Process")</u> of the Isometric Standard sets out rules for Project Proponents to ensure they also seek continuous feedback. This includes requirements for Project Proponents to conduct meetings and correspondence throughout the project's lifecycle. Project Proponents must also make their contact information publicly available to all stakeholders, and systematically document stakeholder interactions.

### 7) Confirm that your programme conducts public comment periods relating to additions or revisions to programme procedures or rulesets

#### https://science.isometric.com/standard

We confirm that public comment periods are required for additions or revisions to the Isometric Standard and any underlying Protocols. The procedures for this as relating to the Standard are set out in section 1.3 ("Versioning") of the Isometric Standard, and in section 2 ("Protocol Requirements") as it relates to the underlying Protocols.

8) Summarize the level at which activities are allowed under the programme (e.g., project based, programme of activities, jurisdiction-scale). Provide evidence of the programme information defining this and confirm it is made availability to the public.

https://science.isometric.com/standard



The Isometric Standard allows for project-based activities for highly durable forms of carbon removal. This covers pathways including Biomass Carbon Removal and Storage (BiCRS), Direct Air Capture (DAC) and Enhanced Weathering (EW). While the Isometric Standard is the overarching set of rules and principles surrounding the crediting of carbon removal activities, <a href="Protocols">Protocols</a> (also known as methodologies) are all composed of project-based requirements.

All Project Proponents must provide a Cradle-to-Grave GHG Assessment of all emissions associated with a project's removal process. The GHG Assessment must follow life cycle assessment guidelines set out by the relevant Protocol. Each Protocol has project-based standards outlining which system boundary and emission factors are acceptable and how they relate to the overall quantification of carbon credits. These include guidelines for conducting transport emission accounting, energy use accounting and embodied emission accounting, as well as specific Protocol requirements such as default emission factors. For example, when calculating embodied carbon emissions associated with a project, independently verified life cycle assessments or environmental product declarations can be used specific to the product or material.

The GHG emissions that result from the Project Proponents activities within the defined boundary combined with any leakages together encompass the entire impact of a project on GHG emissions. Isometric does not engage in jurisdiction-scale crediting.

The information defining these requirements is listed in the Isometric Standard, particularly in section 1 ("Introduction"), e.g. section 1.2 ("Scope").

9) Summarize the eligibility criteria for each type of offset activity (e.g., which sectors, project types, and geographic locations are covered). Provide evidence of the Programme information defining this and confirm its availability to the public.

Public comment engagement on eligibility criteria for types of offset activity approach URL:

#### https://science.isometric.com/standard

The Isometric Standard, which is publicly available, sets out the criteria for project eligibility. These projects must remove CO2 from the atmosphere and store it permanently (> 1,000 years). While all Standard requirements can be linked to eligibility, particular requirements are mentioned under section 3.3 ("Eligibility") of the Isometric Standard for clarification purposes. Isometric accepts projects from any geographical location where those Project Proponents are able to meet the requirements of the Standard and the relevant Protocol.

#### 1.2 Public Engagement, Consultation and Grievances

In addition to CORSIA requirements related to public engagement, consultation and grievances, confirm your organisation has processes for:

1) robust and transparent local and global stakeholder consultation processes, which provide for public comment and issue resolution.

#### https://science.isometric.com/protocols

Processes for local and global stakeholder consultations are set out in the <u>Isometric Standard</u>. All feedback is carefully considered and incorporated as appropriate. A summary of the feedback received, and any changes made as a result, is published on the Science Platform for each consultation. An overview of the status and summaries of consultations on the Isometric Standard and Protocols is provided in the header of each document on the <u>Isometric Science Platform</u> (hint: you might need to select an older version of a given document for the affiliated summary to appear).

The detailed requirements for consultations carried out at the "global" level are mainly set out by sections 1.3 ("Versoning") and 2.2 ("Consultation Requirements") of the Isometric Standard. Requirements for consultations conducted by Project Proponents are set out in section 3.5 ("Stakeholder Input Process") of the Isometric Standard. These require that stakeholder comments are transparently addressed by being considered, responded to, and made available to interested parties. In general, all stakeholders must be equitably represented, involved, and able to contribute freely. This includes and is not limited to Indigenous Peoples and Local Communities, stakeholders with land-tenure rights, local policymakers,



national government officials, and local NGOs.

Isometric has developed processes internally that ensure that our consultations offer a high degree of accessibility and transparency, through extensive user testing, and development of bespoke software that helps users engage with the content and provide their comments.

2) addressing grievances. The process shall be clear and transparent, ensure impartiality and where appropriate confidentiality, in the filing and resolution of grievances. Any applicable fees shall not impede legitimate access to the grievance process by civil society organisations or IPs & LCs.

#### https://drive.google.com/file/d/110uorkLOxAGMsv\_gsjaL5Dyglt4ZY5t2/view

At the project level, section <u>3.5</u> ("Stakeholder Input Process") of the Isometric Standard sets out the requirements for addressing grievances. Project Proponents must provide accessible contact information to all stakeholders, acknowledge grievances within 14 days after receipt, and resolve grievances no later than 60 days after receipt. The grievance mechanism requirements need to follow the principles of accessibility, transparency, and integrity.

At the programme level, Isometric has a publicly available <u>Grievance Policy</u> outlining rules and procedures for grievances relating to Isometric. The aim of this Policy is to provide a clear and transparent process for any stakeholder seeking to challenge Isometric's decision-making. In summary, the Policy sets out:

- Eligibility and scope of grievances
- How grievances will be assessed and impartiality ensured
- Procedures for escalation, including a route for appeal
- How decisions will be communicated (including provisions around confidentiality where appropriate) and expected timelines

#### 2.1 Effective Registries (Retirement and Addressing Erroneous Issuance) - CORSIA

CORSIA requirements related to carbon credits in your carbon-crediting program registry:

### 1) Confirm that your programme defines and ensures the underlying attributes of a unit https://registry.isometric.com/

All Credits on the Isometric Registry are issued with a permanent, unique serial number, with a full, public, immutable data provenance, as set out in section 5.1 ("Credit Attributes") of the Isometric Standard. This provenance is publicly visible on the Registry, allowing any credit user to trace the origin and history of the credit including information on its issuing date, issuing project, issuing Project Proponent, the specific removal for which the credit was issued, any previous transfers or transactions, retirement status, and retirement beneficiary. Information on the underlying removal activity that underpins any given credit is publicly available on the Isometric Science Platform, including a process overview, as well as the full life- cycle assessment calculation data. This ensures a completely transparent chain of custody from removal to credit issuance to credit retirement.

### 2) Confirm that your programme defines and ensures the underlying property aspects of a unit https://registry.isometric.com/

When credits are issued to the Project Proponent of a Validated and Verified carbon removal activity, a full history of ownership is tracked and displayed publicly on the Isometric Registry. The property aspects of the credit are set out in section 5.1 ("Credit Attributes") of the Isometric Standard and ensure that each credit on the Isometric Registry has a publicly available history of ownership, the date of first issuance, who it was first issued to, if and when it was retired, by whom, and where relevant, on behalf of whom. When the owner of a credit chooses to retire the credit, this results in issuance of a retirement certificate to said owner, according to sections 5.4 ("Retirement Rules") and 5.5 ("Retirement Certificates").



#### 3) Confirm that your programme utilises an electronic registry or registries

#### https://registry.isometric.com/

Isometric operates an electronic registry, which is a publicly accessible web application.

4) Confirm that your programme has procedures in place to ensure that the programme registry or registries have the capability to transparently identify emissions units that are deemed CCP-approved, in all account types

N/A

We confirm that we have included a tag in our system that enables credits to be classified as CCP-approved.

This tag will be toggled on only after Isometric is confirmed to be an approved program, and for a credit to receive this tag, it will need to fall within one of the approved Categories. We will add these categories as and when ICVCM publishes this information. Within our back-end system, we will map which projects fall within the Approved Categories, and can therefore receive the CCP-tag. This will then translate on the front- end to a CCP-label attached to the qualifying credits, visible on the Isometric Registry.

5) Confirm that your programme has procedures in place to ensure that the programme registry or registries identify, and facilitate tracking and transfer of, unit ownership/holding from issuance to cancellation/retirement

#### https://science.isometric.com/standard

As set out in response to questions 1 and 2, section <u>5 ("Crediting")</u> of the Isometric Standard sets out rules which ensure tracking of the full life-cycle of each credit on the Isometric Registry, including issuance, delivery, transfer, and retirement.

6) Confirm that your programme has procedures in place to ensure that the programme registry or registries identify unit status, including retirement / cancellation, and issuance status

#### https://science.isometric.com/standard

Section <u>5.1 ("Credit Attributes")</u> of the Isometric Standard confirms that every credit on the Isometric Registry must be accompanied by information on its unit status. This status is set to "issued" when a credit was first issued, and becomes "retired" upon retirement. The system we have built in the backend ensures this is tracked in real-time and reflected in the front-end on the <u>Isometric Registry</u>.

7) Confirm that your programme has procedures in place to ensure that the programme registry or registries assigns unique serial numbers to issued units

#### https://science.isometric.com/standard

Section 5.1 ("Credit Attributes") of the Isometric Standard confirms that each credit possesses a unique serial number, allowing for unique identification. As a default, the Isometric Registry always displays credits on the registry in "batches" (groups). For example: ISO-1-VAULT-USA-01P4-2023-1395450-1401153 represents the issuing of credit numbers 1395450 up to 1401153 issued from Vaulted Deep's Great Plains Project.

8) Confirm that your programme has procedures in place to ensure that the programme registry or registries 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

Identification of emission unit origin, vintage, and project registration date procedures URL:

https://science.isometric.com/standard



Confirmed. Section 5.1 ("Credit Attributes") of the Isometric Standard defines a set of metadata which must be associated with each unit on the Isometric Registry, and visible to users who want to click through to view it. This metadata includes the issuance date and therefore each unit's vintage. Each unit can be traced back to an individual removal and removal type, allowing for sectoral classification. Information on the underlying Project Proponent includes the country or countries in which carbon removal activities have taken place, as well as the project registration date.

### 9) Confirm that your programme has procedures in place to ensure that the programme registry or registries are secure (i.e. that robust security provisions are in place)

N/A

We ensure data availability and integrity through multiple automated back-ups. Furthermore, we use a provider, Kandji, for mobile device management on computers used by staff to ensure that settings and security software are kept fully up to date. Isometric is also careful to manage the security of our software 'supply chain', through automatic vulnerability scanning and automatic recommended updates of open source software dependencies, ensuring any common vulnerabilities and exposures (CVEs) are rapidly identified, brought to the attention of the security team and resolved.

Security of credit management on the <u>Isometric Registry</u> is assured through individually identifiable user accounts, created and managed following industry standard best practices. User authentication occurs via Google Cloud Identity Platform. User accounts are authorized to operate under a single organization. Authentication is implemented through use of JSON Web Tokens (JWTs), which is an open standard (<a href="RFC 7519">RFC 7519</a>) that defines a compact and self-contained way for securely transmitting information between parties. All credit management activities are permission-checked using a centralized authorization framework and logged for audit purposes.

### 10) Confirm that your programme's registry(ies) conform to international data exchange standards N/A

We expose an HTTP GraphQL API for accessing registry data, which returns results in the JSON format. The format of the data is strictly controlled using a GraphQL schema, ensuring that all attributes are documented and can be easily parsed.

### 11) Confirm that your programme has provisions in place to ensure the screening of requests for registry accounts

#### https://drive.google.com/file/d/1YLopoLcxZojb1-6rO8d6bzLwW05cIkdX/view

Buyers and Project Proponents seeking to use the <u>Isometric Registry</u> must first undergo a series of standard KYC checks as defined in Isometric's <u>KYC Policy</u>, which is publicly available on its website. To summarize, the Policy requires the following measures to guard against the risk of money-laundering and the financing of terrorism:

- Collection of information on clients
- Isometric can thereby build an understanding of the legitimacy of Account Holder's businesses and monitor unusual or suspicious transaction activities
- If Account Holders are based in FATF high-risk jurisdictions, named on government sponsored watchlists or international sanctions lists, an Account cannot be opened
- KYC records are maintained for a minimum of five years
- Ongoing monitoring and intervention in the case of unusual or suspicious trading
- Interventions may include prohibition of trading with the counterparty or a site visit to the highrisk counterparty
- Role-specific training for Isometric employees
- Reporting of unusual or suspicious activities within Isometric
- Mitigations



- Asking for further information from clients to explain unusual activity
   Off-boarding clients who do not meet Isometric's risk appetite
- If necessary, filing of reports with relevant authorities

### 12) Confirm that your programme has provisions in place to restrict the programme registry (or registries) accounts to registered businesses and individuals

https://drive.google.com/file/d/1YLopoLcxZojb1-6rO8d6bzLwW05cIkdX/view

Accounts will only be issued to businesses who have passed our KYC procedures, as described in more detail in question 11. This is controlled through a log-in and user management system, whereby the "KYC verified" credential needs to be active on a user's account in order for them to log-in to view and use their account.

### 13) Confirm that your programme has provisions in place to ensure the periodic audit or evaluation of registry compliance with security provisions

N/A

Isometric has an annual security audit, resulting in Cyber Essentials certification. As part of this audit process we review and implement recommendations necessary to improve our security. For example, we have rigorous audit logging in place that provides an audit trail of all access that has taken place on data held by the company.

#### 2.1 Effective Registries (Retirement and Addressing Erroneous Issuance)

In addition to CORSIA requirements related to carbon credits in your carbon-crediting program registry, confirm that your organisation:

1) requires identification of the entity on whose behalf the carbon credit was retired

https://science.isometric.com/standard

This requirement is set out in section 5.4 ("Retirement Rules") of the Isometric Standard.

#### 2) requires the identification of the purpose of retirement

N/A

We have built a requirement into our Registry software that at the moment of retirement, a user of the Isometric Registry needs to specify the purpose of retirement. This can be selected from a drop-down menu with the following options, multiple of which can be selected:

- Meeting corporate climate targets
- Making a public environmental claim
- Government or regulatory requirement
- Other

# 3) has procedures to address erroneous issuance of carbon credits that identify remedial measures (e.g., cancellation, compensation through replacement) and the entities responsible for implementing these.

#### https://science.isometric.com/standard

We have a procedure in place where if an erroneous issuance had taken place then remedial measures will be implemented. As set out in section <u>5.1 ("Credit Attributes")</u> and section <u>5.6 ("Reversals and Buffer Pools")</u>, cancelation can take place in the case of an erroneous issuance.

The process operates as follows:



- 1. Erroneous issuance identified (either internally, or by an external party)
- Erroneous Issuance Incident created. This involves creation of a Slack channel featuring key
  personnel representing relevant teams: Commercial, Science, and Engineering, to ensure clear
  and effective communication is possible at pace.
- 3. The first step taken is for all extant credits to be frozen in the relevant account(s). This will generally be the account held by the supplier, since Isometric's standard process is to issue credits to the supplier once verified. However, it is theoretically possible that a Buyer's account may need to be frozen, if due to some error credits were issued directly to the Buyer, or if the Supplier had themselves erroneously assigned them to the Buyer and requested that we rectify the situation.
- 4. An investigation is carried out that will confirm the exact amount of credits issued in error. This will be validated internally as well as with relevant stakeholders (e.g. the recipient of erroneous credits). If there is a disagreement on the facts, the account will remain frozen while ongoing dialogue attempts to reach a clear agreement.
- 5. When the necessary rectification is agreed, Isometric will make the adjustments to the account holder's balance, in most cases by removing the erroneously issued credits.
- 6. If the error has been identified after credits have already been transferred or retired, then these credits will be cancelled. This will be displayed transparently on the registry, along with an explanatory note. Assuming the user, whose credits were cancelled, was not at fault, then compensatory credits will be issued from the same project to the equivalent amount, once these become available. The supplier is liable for providing these credits, given that the originally issued credits should not have been issued, so the supplier will not be at a net loss as a result. If no such credits are available, then Isometric will hold discussions with the affected user to agree what compensation would be deemed appropriate (whether in other available credits from another source, or financial compensation). Isometric would take the financial responsibility for making-good the enduser in an unexpected case such as this.

#### 3.1 Information - CORSIA

Please respond to each question below.

#### **CORSIA** requirements related to transparency:

1) Confirm that your programme has the procedures in place to ensure that the results of validation and verification are made publicly available

https://science.isometric.com/standard

Section <u>4.2 ("Validation and Verification Process")</u> of the Isometric Standard confirms that the results of each Validation and Verification process, including reports and opinions, are made publicly available alongside further project information. Examples are available on the <u>Isometric Registry</u>, where the relevant Project Documentation is published for each Project Proponent (including Validation and Verification Reports, Project Design Documents, and Validation and Verification Statements).

#### 3.1 Information

Please respond to each question below.

- a) In addition to CORSIA requirements, confirm that your organisation ensures that in relation to each mitigation activity that requests registration or that is registered, all relevant documentation relating to the mitigation activity is made publicly available (subject to confidentiality and proprietary, privacy and data protection restrictions) including:
- 1) all necessary information, such as spreadsheets used for calculations, to enable third parties to assess the social and environmental impacts of the mitigation activity and to replicate the GHG emission reduction or removal calculations (including baseline quantification), and assessment of additionality.

https://science.isometric.com/removal/rmv 1HJ7C37T21S0QYA1?tab=removal



A detailed breakdown of the removal calculations is available for all credits on the Isometric Registry. This includes information such as the calculation of emissions related to transport that need to be netted off the total carbon removal activity, and any supporting documentary evidence.

#### 2) a mitigation activity design document that includes:

- i. a non-technical summary.
- ii. detailed information on the mitigation activity, including its location and proponents.
- iii. a description of the technology or practices applied.
- iv. the environmental and social impacts.
- v. the methodology used.
- vi. information on how the methodology is and has been applied for the purpose of determining the baseline, demonstrating additionality and quantifying GHG emission reductions or removals.

#### https://registry.isometric.com/project/prj 1HHYZFVGW1S044ZY#credits

Section <u>3.2 ("Documentation")</u> of the Isometric Standard sets out the required content for any Project Design Document ("PDD"). This includes but is not limited to each of the requirements set out above. A PDD template was uploaded directly as part of this application.

#### 3) For Categories listed in 9.1 b) 1, information relating to the monitoring and

N/A

N/A

b) Confirm that your organisation shall ensure all relevant program documents are publicly available and has processes to ensure that where requests are made in relation to information that is missing from your website and/or registry, that information is provided (subject to confidentiality and proprietary, privacy and data protection restrictions) and made public alongside other relevant public information.

#### https://isometric.com

Requests for additional information can be submitted through the contact details available at the bottom of the Isometric website ("Get in touch"). Our standard process is to respond to all requests within 3 - 5 working days. Where such information is not subject to confidentiality or other restrictions, we will share this with the requester and for full transparency, publish this information separately on our website. Where the request will require a significant amount of work to prepare a response, we will inform the requester of an estimated timeline towards publication, and clarify whether there is a subset of the information that can be more readily prepared and still meet the requirements of the requester.

#### 4.1 Robust Independent Third-Party Validation and Verification - CORSIA

CORSIA requirements related to robust independent third-party validation and verification:

### 1) Confirm that your programme has standards, requirements, and procedures in place for the validation of activities

#### https://science.isometric.com/standard

We have standards, requirements, and procedures in place, as set out in the Isometric Standard. The procedure is as follows:

- Protocol development and certification: Isometric's in-house science team creates pathwayspecific Protocols. After a Protocol undergoes private and public consultation, a Project Proponent's carbon removal activities can be verified against that Protocol. This is explained in detail in section 2 ("Protocol Requirements") of the Isometric Standard.
- Preparation: Project Proponents must create a Project Design Document ("PDD"). Details of this



are set out in the documentation requirements in section 3.2 ("Documentation") of the Isometric Standard.

- Initial project validation: As outlined in section 4 ("Validation and Verification Requirements"), and particularly section 4.2 ("Validation and Verification Process") of the Isometric Standard, all Project Proponents must undergo initial project Validation, carried out by an independent third-party assessor ("VVB"), to assess conformity with the Isometric Standard and with the applied Protocol. The VVB uses the PDD and existing information gathered, as well as additional information which may be collected under an evidence gathering plan, in order to assess conformity. Upon completing this process, the VVB will submit a Validation Report and Validation Opinion to Isometric for final review.
- Initial project verification: Following project Validation, Project Proponents may submit claimed removals to Isometric, including associated removal calculations and monitoring data via the Science Platform. Isometric will appoint a VVB to conduct Verification, following the process described in section 4 ("Validation and Verification Requirements") of the Isometric Standard. Isometric appoints and pays the VVB, rather than the Project Proponent, to minimize the conflict of interest of a Project Proponent choosing its own auditor. The VVB must follow these requirements and the requirements of the selected Protocol, and will issue a Verification Report and Verification Opinion to Isometric for final review upon completion of the process. The first Verification for a project may take place at the same time as Project Validation, or subsequently. Verification may then take place at least annually, but generally more frequently, according to the requirements of the relevant Protocol. Once Isometric has accepted a Verification Report, the corresponding carbon removals will be deemed verified, and eligible for the issuance of credits.
- Unless otherwise specified in the relevant Protocol, a site visit is required for Validation and the first Verification of a project.

### 2) Confirm that your programme has standards, requirements, and procedures in place for the verification of emissions reductions

#### https://science.isometric.com/standard

This is not applicable because Isometric only credits carbon removals and not emissions reductions, as set out in section 1.2.4 ("Notable Exclusions") of the Isometric Standard.

### 3) Confirm that your programme has standards, requirements, and procedures in place for the accreditation of validators

#### https://science.isometric.com/standard

As per the <u>Isometric VVB Policy</u> and section <u>4 ("Validation and Verification Requirements")</u> of the Isometric Standard, VVBs conducting third-party services must be approved by Isometric. The minimum expectation for the accreditation and qualification of VVBs is set out in the Isometric Standard, relevant extract below:

- Accreditation from an International Accreditation Forum member against ISO 14065 or other relevant ISO standard, including, but not limited to ISO 14034, ISO 17020, ISO 17029; or
- Accreditation from a relevant governmental or intergovernmental regulatory body.

The accreditation must remain valid throughout the Validation and Verification process, as well as during the submission of the final audit report. Isometric will conduct regular checks on the status of accreditation of approved VVBs.

Before any VVB is approved by Isometric, they must submit a VVB application form (uploaded directly as part of this application), in which they must evidence their experience in greenhouse gas accounting and indicate their sectoral experience in a list based on IAF Mandatory Document 14. As part of the approval process, VVBs must also submit their certificate of accreditation.



### 4) Confirm that your programme has standards, requirements, and procedures in place for the accreditation of verifiers

#### https://science.isometric.com/standard

See response to question 3 above.

### 5) Confirm that your program has procedures in place to ensure that validation occurs prior to or in tandem with verification

#### https://science.isometric.com/standard

Section <u>4.2 ("Validation and Verification Process")</u> of the Isometric Standard specifies that Validation must occur either at the same time as the first Verification, or before the first Verification. Initial Validation, which always includes a site visit, therefore always occurs prior to or in tandem with the first Verification.

### 6) Confirm that your program has procedures in place to ensure that mitigation is measured and verified by an accredited and independent third-party verification entity

#### https://science.isometric.com/standard

As set out in section 4.1 ("Validation and Verification Body Qualification Requirements") of the Isometric Standard and in the <u>Isometric VVB Policy</u>, VVBs must be accredited by appropriate bodies. These Accreditation Bodies complete regular and thorough independent witness audits of VVBs. Isometric will always report material concerns on VVB performance to the relevant Accreditation Body responsible for the VVB.

As referenced in previous answers, only accredited VVBs are approved by Isometric to conduct Validation and Verification of carbon removal activities. Before onboarding VVBs, Isometric requires VVB to submit an application, which is assessed against the requirements in the <u>Isometric VVB Policy</u>. The form includes confirming competence of individual staff, sectoral expertise, and lack of conflicts of interest.

As per section 4.6 ("Validation and Verification Body Oversight") of the Isometric Standard as well as the Isometric VVB Policy, Isometric appoints and subsequently oversees VVB activity during the Validation and Verification process, and may suspend approval of a previously approved VVB. Oversight includes review of VVB documentation, including Verification and sampling plans, reports, opinions and conflict of interest disclosures, as well as review of Project Proponent documentation. Validation and Verification Reports receive a quality review by Isometric prior to the issuance of credits. If any shortcomings are identified, the auditor will need to address and clarify them before the report is accepted. Credits will only be issued once the report meets a satisfactory level of quality.

Isometric's procedure for Verification of carbon removal activities was set out in response to question 2, and further details can be found under section <u>4 ("Validation and Verification Requirements")</u> of the Isometric Standard.

### 7) Confirm that your programme has procedures in place to ensure that ex-post verification of mitigation is required in advance of issuance of emissions units

#### https://science.isometric.com/standard

Isometric only issues credits following ex-post Verification of mitigation. This is set out in <a href="section-4.2">section 4.2</a> ("Validation and Verification Process") of the Standard: "Isometric requires Verification of any Claimed Removal in order to Issue Credits" and only "once Isometric has accepted a Verification Report, the corresponding Removals will be deemed Verified, and eligible for issuance of Credits". Section <a href="5.1">5.1</a> ("Credit <a href="Attributes">Attributes</a>") of the Isometric Standard states clearly that "each Credit is Issued Ex-post against a net Verified Removal".

#### 8) Confirm that your programme has provisions in place to manage and/or prevent conflicts

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### of interest between accredited third-party(ies) performing the validation and/or verification procedures, and the programme and the activities it supports

#### https://science.isometric.com/standard

To prevent conflicts of interest between VVBs, Isometric, and Project Proponents, the Isometric Standard has specific requirements in section <u>4.4 ("Conflicts of Interest")</u>. Relevant extracts are listed below:

- Any organisation which has been involved in the development of a particular project may not act
  as a VVB for Validation and/or Verification purposes for that project. Any organisation which has
  been paid by a particular project to assist in developing any part of a Protocol for their process
  may not act as a VVB for Validation and/or Verification purposes for that project.
- To minimise the risk of conflicts of interest occurring between the Project Proponent and the VVB, Isometric will select and engage VVBs for project Validation and Verification, and VVBs must complete a conflict of interest disclosure.
- As outlined in response to Q4.2.5, the <u>Isometric VVB Policy</u> defines as a minimum requirement
  that an audit team shall at least include a team leader and a separate Validator or Verifier. To
  ensure the principle of dual control, Validation and Verification may not be conducted by a sole
  proprietor.
- Furthermore, according to section <u>4.5 ("Rotation of Validation and Verification Bodies")</u> of the Isometric Standard, VVBs must be rotated every five years.

The <u>Isometric VVB Policy</u> provides further granular requirements on the controls to ensure independence of the VVB:

- As part of the application form, VVBs need to complete, they must declare any conflicts of interest. This mechanism allows Isometric to identify any conflicts of interest, and mitigate them if possible, or select another VVB if not.
- Upon signature of the statement of work for an individual project, the VVB must confirm a declaration ensuring impartiality, quality, and the absence of any conflicts of interest. This
- includes confirmation: that the VVB has no financial interest in and no unmitigated conflict of interest with Isometric or the relevant project.
- that none of family members of involved auditors are dealing in, promoting, or otherwise have a fiduciary relationship with anyone promoting or dealing in the offset credits being evaluated.
- In cases where a conflict of interest was identified after signing of relevant contracts or the beginning of the audit, Isometric will take remedial action to mitigate the conflict of interest. This could include, for example, suspending the relevant experts from the audit process and seeking unconflicted replacement personnel from the VVB. If mitigation is not possible, Isometric reserves the right to suspend the VVB immediately and appoint a different VVB for the project.
- 9) Confirm that your programme has provisions in place 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

https://drive.google.com/file/d/1KOmLuhU6yzCYYtUWPyQCw4aByEEJ7Q1-/view

As set out in Section 6 of the VVB Policy, VVBs must provide a declaration that:

- the auditor has no financial interest in and no unmitigated conflict of interest with Isometric or the relevant project
- none of the family members of involved auditors must be dealing in, promoting, or otherwise have a fiduciary relationship with anyone promoting or dealing in the offset credits being evaluated



### 10) Confirm that your programme has provisions in place to address and isolate such conflicts, should they arise

#### https://drive.google.com/file/d/1KOmLuhU6yzCYYtUWPyQCw4aByEEJ7Q1-/view

As set out in the <u>Isometric VVB Policy</u>, where a conflict of interest has been identified, Isometric will determine the appropriate mitigation, and if mitigation is not possible Isometric may require specific individuals to be removed from the work program, or require a new VVB to be appointed.

11) Confirm that your programme has procedures in place requiring that the renewal of any activity at the end of its crediting period includes a re-evaluation of its baselines, and procedures and assumptions for quantifying, monitoring, and verifying mitigation, including the baseline scenario

#### https://science.isometric.com/standard

Section 3.4 ("Project Crediting") of the Isometric Standard specifies that the renewal of any activity at the end of its crediting period requires a full re-evaluation of the project, included in an updated PDD, which would require a re-evaluation of its baselines. According to section 2.5.2 ("Baselines") of the Isometric Standard, all Project Proponents must review baselines whenever a crediting period extension is sought and must undergo another project Validation. Sections 2.5.2 ("Baselines"), 2.5.5 ("Default Emission Factors, Proxies and Models"), and 2.5.7 ("Uncertainty in Removals") of the Isometric Standard set out the requirement to employ a conservative approach in quantifying baselines within each Protocol. This includes a requirement that the uncertainty assessment should be revisited as part of every Verification, with updates incorporated as appropriate. Two examples of when baselines would be revaluated on an even more frequent basis than the renewal of the crediting period:

- For biomass carbon removal and sequestration projects, Project Proponents must provide
  evidence on the specific feedstock they are using and these could potentially lead to different
  baselines based on the feedstock and market characteristics. So the baseline is updated for each
  new type of feedstock used.
- Enhanced weathering Project Proponents are required to use a control plot which has similar characteristics to the land on which the projects will spread mineral feedstocks. Data from these control plots would be used to compare project drawdowns and so act as a continuously updated dynamic baseline.
- 12) Confirm that your programme has procedures in place requiring that 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. \*If yes, provide evidence, including identifying the allowable number of years between verification events.

#### https://science.isometric.com/standard

As set out in section 4.2 ("Validation and Verification Process"), carbon removals will be verified annually, unless specified otherwise by the requirements of the relevant Protocol, or at the Project Proponent's request. If the Project Proponent requests Verification outside of the standard cycle, as set out in the Isometric Standard, the procedures that would apply to such a Verification are the same as when the Verification takes place on the standard cycle. So, for example, if insufficient data was available at the time of Verification (because not enough time had elapsed), this would mean no credits could be issued and Verification would resume on the standard time-frame.

13) Carbon credits that are issued ex-ante are not CCP eligible. If your organisation supports both ex-ante and ex-post issuance, confirm it has procedures in place to transparently identify units that are issued ex- post and are thus eligible under the ICVCM.

#### https://science.isometric.com/standard

Isometric does not issue credits ex-ante. Credits are exclusively issued ex-post, for carbon removals which have been independently verified against a Protocol. This is detailed in section  $\underline{5.1}$  ("Credit Attributes") of the Isometric Standard.



#### 4.1 Robust Independent Third-Party Validation and Verification

In addition to CORSIA requirements, in relation to validation of mitigation activities and verification of GHG emission reductions and removals, confirm your organisation:

1) requires VVBs to be accredited by a recognised international accreditation standard (e.g., according to the current edition of ISO 14065 and ISO 14066, or per rules relating to the UNFCCC Kyoto Protocol Clean Development Mechanism or Paris Agreement Article 6, paragraph 4 Supervisory Body).

#### https://science.isometric.com/standard

All VVBs conducting third-party services must be approved by Isometric, for which they must demonstrate appropriate accreditation. The minimum expectation for the accreditation and qualification of VVBs is set out in section 4.1 ("Validation and Verification Body Qualification Requirements") of the Isometric Standard and chapter 2 of the Isometric VVB Policy. Accreditation is required from:

- an International Accreditation Forum (IAF) member against ISO 14065 or other relevant ISO standard; including but not limited to ISO 14034, ISO 17020, ISO 17029; or
- a relevant governmental or intergovernmental regulatory body.

The accreditation must remain valid throughout the Validation and Verification process, as well as during the submission of the final audit report. Isometric will conduct regular checks on the status of accreditation of approved VVBs.

2) has a process for managing VVB performance, including systematic review of validation and verification activities, reports and remedial measures to address performance issues including measures to ensure that poor VVB performance is reported to the relevant accreditation body, and provisions to suspend or revoke the participation of a VVB in the program.

#### https://science.isometric.com/standard

See also the response to 4.1 (a) 10. Isometric oversees VVB performance on an ongoing process during the Validation and Verification processes, and may suspend approval of a previously approved VVB due to performance issues. Oversight tools include review of documentation, verification and sampling plans, reports, opinions and conflict of interest disclosures, as well as review of Project Proponent documentation. Isometric will report significant and/or repeated VVB performance concerns to the relevant accreditation body. This is set out in section 4.6 ("Validation and Verification Body Oversight") of the Isometric Standard as well as the <u>Isometric VVB Policy</u>.

#### **B – Emissions Impact**

#### 5.1 Methodology Approval Process - CORSIA

CORSIA requirements related to Clear Methodologies and Protocols and their Development Process:

1) Confirm that your programme has qualification, quantification methodologies, and protocols in place, available for use, and are publicly disclosed.

#### https://science.isometric.com/protocols

We confirm that our detailed Protocols, which are publicly disclosed and available for use, cover both qualification and quantification requirements, in extensive detail and with a high degree of scientific rigor.

We have published, including a formal public consultation, the following Protocols:

- Biomass Geological Storage
- Bio-oil Geological Storage
- Direct Air Capture
- Enhanced Weathering in Agriculture

We have issued a private consultation for a Protocol related to Ocean Alkalinity Enhancement, following



which it is expected to enter public consultation in March 2024.

### 2) Summarize the programme's process for developing further methodologies and protocols, including the timing and process for revision of existing methodologies.

#### https://science.isometric.com/standard

In summary, Protocols are initially developed by Isometric's team of experienced scientists, drawing on expertise from academia as well as industry participants. When an initial draft is ready, the Protocol is formally reviewed by members of Isometric's <u>Science Network</u>, following which it undergoes a public consultation. The same process is in place for any material changes to existing Protocols, which are reviewed at least every 2 years. The process is set out in section <u>2 ("Protocol Requirements"</u>) of the Isometric Standard.

A more detailed step-by-step explanation of the process is set out below:

#### 1. Protocol Development

- 2. A prioritization decision is made internally to draft a Protocol to cover a certain carbon removal pathway.
- In developing the Protocol, Isometric uses a modular approach. This means where relevant, Isometric will re- use existing Modules we have already developed. For example, as alluded to above, Isometric developed two Protocols to cover two distinct methods of biomass carbon removal and storage (BiCRS) one creating and storing bio-oil, and the other storing biomass. Although the feedstocks are different, there is sufficient overlap in other aspects of the process that they share specific Modules for example embodied emissions accounting, transportation emissions, and energy use accounting. This ensures a consistent standard of verification across different carbon removal activities.
- 4. Protocol development is led by members of the Isometric Science Team with relevant expertise in the carbon removal pathway. Where required, Isometric will also engage consultants to provide specific expertise to certain elements of a Protocol.

#### 1. Protocol Certification

- 2. When a first draft of the Protocol is ready, it will be sent to the Science Network for peer review and feedback. This will generally involve 5-10 sector experts reviewing the Protocol for up to 10 hours each and providing comments and feedback. The Science Network consists of over 200 scientific experts in carbon removal across a range of disciplines.
- 3. These comments are then incorporated into a final draft Protocol, which is then put forward for public consultation. This is published on the website and Isometric also conducts marketing activities (e.g. posting through social media channels) to ensure visibility and encourage comment and input. Protocols are open for public comment for a minimum of 30 days as per section <a href="2.2">2.2</a> ("Consultation Requirements") of the Isometric Standard.
- 4. After this period is completed, and all material comments have been addressed, the Protocol is certified, and uploaded onto the Isometric Science Platform as a certified Protocol that can be used for the purposes of issuing credits on the Registry. A summary of feedback received and the changes made as a result is also published for transparency purposes.

If there are any material modifications proposed for a Protocol, these alterations must undergo the complete Protocol certification process (including consultation) as outlined in above. As per section <u>2.4</u> ("Updates to Protocols") of the Isometric Standard, each Protocol is reviewed at the soonest of:

- after 2 years have passed since the original certification;
- whenever the number of credits issued under a Protocol passes the following milestones: 100,000 credits issued; 500,000 credits issued; 1,000,000 credits issued; 5,000,000 credits issued;
- If recommended by Isometric's in-house scientific experts, or the Science Network, due to any material changes in scientific research, technology, or regulatory frameworks.

In addition to this, each individual Module, of which all Protocols are composed, is reviewed at least



annually. Furthermore, any material changes in the science or regulatory framework relevant to a given Protocol will trigger an ad hoc review within at most 6 months of such a change having been identified.

3) Provide evidence of the public availability of the programme's process for developing further methodologies and protocols.

#### **Development of methodologies and protocols process URL:**

#### https://science.isometric.com/standard

The process set out above for Protocol development is publicly available in the Isometric Standard, particularly in sections <u>2 ("Protocol Requirements"</u>), <u>2.1 ("Protocol Certification Process"</u>), and <u>2.4 ("Updates to Protocols"</u>).

- 4) Confirm that procedures are in place to ensure that emissions units are based on accurate measurements and valid quantification methods/protocols.
- 5) Confirm that procedures are in place to ensure that monitoring, measuring, and reporting of both activities and the resulting mitigation is conducted at specified intervals throughout the duration of the crediting period.

#### 5.1 Methodology Approval Process

In addition to CORSIA requirements related to Clear Methodologies and Protocols and their Development Process:

a) Please confirm that your organisation has a process for developing and adopting updates to existing quantification methodologies.

#### https://science.isometric.com/standard

Isometric <u>Protocols</u>, including the quantification methods they contain, are reviewed in full at least every two years. The individual <u>Modules</u> that collectively comprise a Protocol, some of which are shared across several Protocols, are reviewed at least annually. Reviews will also take place within those time frames on an ad hoc basis should any relevant developments take place in scientific research, technology, or regulatory frameworks.

If any of these reviews lead to material changes to a Protocol, the revised Protocol will need to go through the full certification process including public consultation, as set out in section <a href="2">2 ("Protocol Requirements">2 ("Protocol Requirements")</a> of the Isometric Standard.

### b) Confirm your organisation's approved methodologies or general carbon-crediting program provisions address the following essential components:

1) applicability or eligibility criteria. 2) determination of the accounting boundary. 3) determination of additionality (to the extent this is not covered in other general carbon crediting program provisions). 4) establishing the baseline scenario. 5) quantification of GHG emission reductions or removals. 6) monitoring practices.

#### https://science.isometric.com/standard

These components are requisite parts of any Protocol, as set out in the Isometric Standard, and in particular section <u>2.5 ("Protocol Contents")</u> of the Isometric Standard. Each of the "approved methodologies" (Protocols) then specifies these components in detail in relation to the relevant pathway.

Specific references are set out below for ease:

- i. applicability or eligibility criteria: See sections <u>1.2.3 ("Greenhouse Gas (GHG) Eligibility")</u> and <u>1.2.4 ("Notable Exclusions")</u> of the Isometric Standard.
- ii. determination of the accounting boundary: See section <u>2.5.1 ("Boundaries")</u> of the Isometric Standard.



- iii. determination of additionality (to the extent this is not covered in other general carbon crediting program provisions): See section 2.5.3 ("Additionality") of the Isometric Standard.
- iv. establishing the baseline scenario: See sections <u>2.5.2 ("Baselines")</u>, <u>2.5.3 ("Additionality")</u>, and <u>2.5.5 ("Default Emission Factors, Proxies and Models"</u>) of the Isometric Standard.
- v. quantification of GHG emission reductions or removals: Overarching guidance is provided in the Isometric Standard in sections 1.1.2 ("Principles"), 2.5.2 ("Baselines"), 2.5.4 ("Leakage"), 2.5.5 ("Default Emission Factors, Proxies and Models"), 2.5.7 ("Uncertainty in Removals"), 2.5.8 ("Durability and Monitoring") and 2.5.10 ("GHG Assessment Policies"). This is then further specified within each Protocol, tailored to the relevant carbon removal pathway to which the Protocol applies.
- vi. monitoring practices: See section 2.5.8 ("Durability and Monitoring") of the Isometric Standard.

# c) Confirm that your organisation requires that, prior to approval, new methodologies and major revisions of existing methodologies undergo review by a group of independent experts and a public stakeholder consultation.

#### https://science.isometric.com/standard

Independent review and a public consultation are required ahead of approval of any new Protocol, or material changes to an existing Protocol. This is outlined in section 2 ("Protocol Requirements") of the Isometric Standard and in answers to questions in 5.1 a).

Specifically, all new Protocols, and major revisions of existing Protocols must:

- Undergo review by a group of independent experts the <u>Science Network</u>. This group is asked to provide comments and feedback. Isometric also, where relevant, engages sector-specific expert consultants to give input to specific elements of a Protocol.
- Following the expert review, the Protocol is further adapted as relevant, and then a public stakeholder consultation is carried out before the Protocol can be finally approved for crediting.

# d) Confirm that your organisation has procedures to review, suspend and/or withdraw the use of methodologies where the carbon-crediting program has determined, based on evidence, that GHG emission reductions or removals are being overestimated or that additionality might not be ensured.

#### https://science.isometric.com/standard

In addition to the regular reviews described in previous answers, staff are encouraged to raise any concerns about overcrediting, and where such concerns are identified this can trigger an ad hoc Protocol review process. Where such a review concludes there are major issues, including the possibility of removals being overestimated and/or additionality not being ensured, such changes can trigger an immediate suspension of the relevant Protocol. As set out in section 2.5 ("Updates to Protocols") of the Isometric Standard, Isometric reserves the right to suspend a Protocol pending further investigation of the issues. Following the review, the Protocol could be withdrawn entirely. Alternatively, substantive improvements may be proposed to the Protocol, and consulted on in the usual manner, following which credit issuance could resume. In these circumstances Project Proponents would be required to follow the new Protocol even if they had previously been Validated to credit against a previous version of the Protocol.

#### 5.2 Requirements for Quantifying GHG Emission Reductions or Removals - CORSIA

Please respond to each question below.

1) Confirm that procedures are in place to issue carbon credits against realistic, defensible, and conservative baseline estimations of emissions.

#### https://registry.isometric.com/standard#baselines

Section 2.5.2 of the Isometric Standard states that all Projects must be assessed against a Baseline

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scenario of their activities not having taken place, and that Baselines must be based on conservative assumptions. The Isometric Standard follows the principle of choosing conservative parameter values wherever uncertainty exists in order to ensure the number of credits issued is realistic, defensible, and conservative. As set out in section 2.5.5 ("Default Emission Factors, Proxies and Models") of the Isometric Standard, in creating baseline estimations of emissions, Protocols must apply conservative uncertainty factors and make conservative assumptions. Further information can be found under sections 2.5.6 ("Common Calculation Factors"), and 2.5.7 ("Uncertainty in Removals") of the Isometric Standard.

Project counterfactuals and baselines must be assessed for every Removal. Projects can only be credited for removals above and beyond what was likely to have occurred in the baseline scenario, and are not credited for emissions reductions or avoidance. Specific baseline requirements for different carbon removal pathways are specified in the relevant Isometric Protocols (available publicly here: <a href="https://registry.isometric.com/protocols">https://registry.isometric.com/protocols</a>)

#### 2) Confirm that procedures are in place to publicly disclose baselines and underlying assumptions.

#### https://registry.isometric.com/protocol/biomass-geological-storage#baseline

Baselines and their underlying assumptions are publicly available in each Isometric Protocol (all of which are available <a href="here">here</a>. The URL shared above links to the Baseline section of Isometric's Biomass Geological Storage Protocol as an example. This section sets out the assumed counterfactual, and points to a detailed explanation of how baselines are assessed for projects in this pathway (in this case, in Isometric's Biomass Feedstock Accounting module). Similar sections can be found in other Isometric Protocols. Baselines and underlying assumptions for every Project are disclosed publicly on the Isometric website, in the PDD, as well as in the underlying Calculation Data associated with all credits issued on the Isometric Registry.

# 3) Confirm that procedures are in place to ensure that methods of developing baselines, including modelling, benchmarking or the use of historical data, use assumptions, methodologies, and values do not over-estimate mitigation from an activity.

#### https://registry.isometric.com/standard#baselines

As set out in section 2.5.5 ("Default Emission Factors, Proxies and Models") of the Isometric Standard, proxies and models are only permitted in specific circumstances - direct measurements will always be preferred. Where such models are used in developing baselines, as set out in section 2.5.2 ("Baselines"), baselines must be calculated using conservative assumptions as outlined in relevant Protocols.

When used, models and proxy measurements must apply conservative uncertainty factors and make conservative assumptions. Further requirements and guidance for the use of default emission factors, standards, proxies and models in Protocols are outlined in sections 2.5.5.1 ("Default Emission Factors"),

2.5.5.2 ("Proxies"), 2.5.5.3 ("Models"), and 2.5.6 ("Common Calculation Factors").

Isometric requires the following methods for incorporating uncertainty into development of baselines and other calculations required for calculating total net carbon removal:

- Conservative estimate of input parameters (as per section 2.5.7.2 of the Isometric Standard): This approach is most suitable for Projects where it is difficult to obtain detailed information on input parameter distributions. Where it is appropriate to assume a uniform distribution, then the value used in the removal calculation should be either ≤16th or ≥84th percentile, depending on which one yields a more conservative estimate of removal.
- $\bullet$  Variance propagation (as per section 2.5.7.3 of the Isometric Standard): This approach is most suitable when parameters follow normal distributions and errors are linear and independent. The variance must be defined for all input parameters. Variance propagation should be conducted following uncertainty propagation rules, where the outcome is the variance in removal. Isometric recommends that the conservative removal estimate be at least 1 standard deviation (square-root of the variance) below the mean, equivalent to  $\leq 16$ th percentile.



• Monte Carlo Simulations (as per section 2.5.7.4 of the Isometric Standard): This approach provides a more comprehensive representation of uncertainties and may result in more credits issued. This approach is suitable for Projects where sufficient information is available for all input variables so that Monte Carlo Simulations can be conducted. The final distribution for the removal is determined by randomly sampling from input distributions many times (e.g., n = 1,000). The conservative estimate of removal will be  $\leq 16$ th percentile for consistency between variance propagation and this approach in the case of normal distributions.

### 4) Confirm that procedures are in place for activities to respond, as appropriate, to changing baseline conditions that were not expected at the time of registration.

#### https://registry.isometric.com/standard#baselines

As per section 2.5.2 ("Baselines") of the Isometric Standard, Projects must reassess baselines at a minimum whenever a crediting period needs to be renewed (the maximum crediting period is 5 years). The re- assessment may take place more frequently than this depending on the potential for changing baseline conditions specific to the Project. Two examples where baselines will be re-evaluated on a more frequent basis than the standard crediting renewal period, as defined in the relevant Protocols:

- For biomass carbon removal and sequestration Projects, Project Proponents must provide evidence on the specific feedstock they are using. These could potentially lead to different baselines based on the feedstock and market characteristics. Therefore the baseline is updated for each new type of feedstock used.
- Enhanced weathering Project Proponents are required to use a control plot that has similar characteristics to the land on which the Projects will spread mineral feedstocks. Data collected on an ongoing basis from these control plots will be used to calculate the level of carbon removal. Therefore the data collected act as a type of continuously updated dynamic baseline.

### 5) List all emissions sectors (if possible, activity types) supported by your program that present a potential risk of material emissions leakage:

#### https://registry.isometric.com/protocols

Isometric does not support activity types that are generally considered to present a risk of material emissions leakage. Isometric has taken precautions in how we deal with certain types of emission generating activities, such as energy use, to directly account for potential leakages. For example, in relation to energy usage, Project Proponents are (above a de minimis) required to calculate short run marginal emissions from the energy usage if they utilize grid based energy. These emissions are then netted off against the total carbon removal calculation. This approach is specifically designed to account for leakage arising from potential additional power generation being brought online in response to the mitigation activities.

Isometric currently has protocols for the following activities:

- Biomass Carbon Removal and Storage (covering both biomass and bio-oil geological storage)
- Direct Air Capture
- Enhanced Weathering
- Ocean Alkalinity Enhancement

Each Protocol contains detailed rules requiring the robust quantification of potential leakage related to a particular Project.

### 6) Confirm that measures are in place to assess incidences of material leakage of emissions that may result from the implementation of a mitigation activity.

https://registry.isometric.com/standard#leakage



As per section 2.5.4 ("Leakage") of the Isometric Standard, Project Proponents must provide a robust assessment of potential increases in greenhouse gasses outside the Project boundary that occur due to the respective Project's carbon removal activities. This must consider upstream considerations as laid out in the relevant Protocol, and downstream storage considerations beyond a Project's direct activities. If potential for such leakage was identified, it must be quantified and deducted from the amount of carbon removals.

As an example, carbon removal Project Proponents utilizing biomass need to submit information on the feedstocks they are using. This includes criteria such as source, price paid, quantity purchased, type of feedstock, or past uses (if any). In this case, market leakage presents a risk in two ways:

- Project Proponents pay feedstock suppliers enough money that it might lead to the intensification/extensification of growing/harvesting/treatment practices leading to higher emissions.
- Project Proponents remove feedstock from a prior use that now requires some amount of emissions to create a replacement product.

To mitigate the risk of these types of leakage, the Biomass Feedstock Accounting Module embedded in section 7.2.1 ("Biomass Feedstock Accounting") of Isometric's Bio-oil Geological Storage Protocol requires Project Proponents to demonstrate, based on the price they paid for their feedstock, that there is minimal chance of upstream market mediated leakage:

- One way this can be achieved by Project Proponents is to demonstrate that they acquired their feedstocks for \$0 or a negative price.
- To mitigate against replacement emissions, Project Proponents can demonstrate that the source of their feedstock came from an unused waste pile.
- 7) Confirm that provisions are in place to mitigate the risk of material leakage from activities that pose a risk of leakage when implemented at the project, national, or on an interim basis on a subnational level.

N/A

This is not applicable to the activity types covered by Isometric.

8) Confirm that procedures are in place requiring activities to monitor identified material leakage. https://science.isometric.com/module/energy-use-accounting-v-1-1#short-run-marginal-emission-rates---ef

 $\underline{\text{https://science.isometric.com/module/energy-use-accounting-v-1-1} \# short-run-marginal-emission-rates-}$ 

<u>--ef</u>

Isometric Protocols set out the specific types of leakage relevant to the activity type that Project Proponents should be monitoring. The Protocols further specify how Project Proponents should determine and evidence whether or not their activities present a risk of leakage. An example of this can be found in the Energy Accounting Module section 3.2.5.2 ("Short-run Marginal Emission Rates"), which sets out in detail how Projects should determine reasonable providers of short-run marginal emissions rates and provides fallback options in cases of lower data availability. Projects are then provided with the specific calculation, in section

3.2.3.2 ("Other facilities"), that they must complete as part of determining the total net carbon removal.

### 9) Confirm that procedures are in place requiring activities to deduct emissions from any identified material leakage that reduces mitigation benefits.

https://science.isometric.com/standard#leakage

As per section 2.5.4 ("Leakage") of the Isometric Standard, Project Proponents must quantify and deduct



the amount of leakage identified from the net carbon removal calculation and thus commensurately reduce the total number of carbon removal credits issued. As per section 2.5.1 ("Boundaries") of the Isometric Standard, all Project Proponents must provide a cradle-to-grave GHG Assessment of all emissions associated with a Project's removal process. The GHG emissions that result from the Project's activities within the defined boundary combined with any leakages together form the overall impact of an activity on GHG emissions and therefore the total number of credits that can be issued.

#### 5.2 Requirements for Quantifying GHG Emission Reductions or Removals

- a) In addition to CORSIA requirements\*, confirm that your organisation does:
- \*CORSIA "Eligibility Criterion", "Carbon offset credits must be based on a realistic and credible baseline" and "Carbon offset credits must be quantified, monitored, reported and verified"
- 1) clearly define a carbon credit as one metric tonne of CO2 equivalent of GHG emission reductions or removals.

#### https://science.isometric.com/standard

As defined under section <u>6.0 ("Definitions and Acronyms")</u> of the Isometric Standard, a carbon credit issued on the Isometric Registry represents one metric tonne of verified carbon removed from the atmosphere.

#### 2) disclose the global warming potential (GWP) values used to calculate the CO2 equivalence.

https://science.isometric.com/standard

As defined in section <u>2.5.6 ("Common Calculation Factors")</u> of the Isometric Standard, all calculations converting CO2 to an equivalent must use the respective 100-year GWP, based on the Sixth IPCC Assessment Report. The values for the three major types of greenhouse gases are:

- CO2 = 1
- CH4 = 27.9
- N2O = 273

#### 3) define the length of crediting periods, including the total length of combined crediting periods.

#### https://science.isometric.com/standard

Isometric defines the crediting period as the time over which a PDD is deemed valid and during which removals may be verified, as per section <u>6.0 ("Definitions and Acronyms")</u> of the Isometric Standard. As defined under section <u>3.4 ("Project Crediting")</u> of the Isometric Standard, the default maximum crediting period for any project is 5 years. If a Project Proponent wishes to renew their crediting period, an updated PDD must be provided and the project must be Re-validated (including a site visit).

Isometric does not have a fixed requirement for a maximum total length of combined crediting periods for a given project, in particular as Isometric only credits removals, and not reductions. When a Project Proponent applies to renew their crediting period, an assessment will be made of the continued additionality, permanence and net negativity of the project intervention as part of the Re-validation of the project — with the extension of the crediting period being consequently granted or denied on the merits of the specific project, on a case-by-case basis.

4) provide guidance on steps and requirements for renewal of the crediting periods. Any renewal of the crediting period shall include a reassessment of the baseline scenario, including whether the conditions and barriers at the start of the mitigation activity still prevail, and an update of relevant parameters used to calculate emissions reductions and removals.

#### https://science.isometric.com/standard

All Project Proponents must reassess the baseline scenario whenever the crediting period is extended,



as set out in section <u>2.5.2 ("Baselines")</u> of the Isometric Standard. This includes an update of relevant parameters to calculate carbon removals, and a review of whether the conditions and barriers at the start of the project still prevail. A conservative approach in quantifying baselines must be employed, as set out in sections <u>2.5.2 ("Baselines")</u>, <u>2.5.5 ("Default Emission Factors, Proxies and Models"</u>), and <u>2.5.7 ("Uncertainty in Removals"</u>) of the Isometric Standard. Uncertainty assessment should initially be revisited as part of every Verification, with updates incorporated as appropriate. Two examples where baselines would be re- evaluated on a more frequent basis than the standard crediting renewal period, as defined in the relevant Protocols:

- For biomass carbon removal and sequestration projects, Project Proponents must provide
  evidence on the specific feedstock they are using and these could potentially lead to different
  baselines based on the feedstock and market characteristics. In this sense the baseline is
  updated for each new type of feedstock used.
- Enhanced weathering Project Proponents are required to use a control plot which has similar
  characteristics to the land on which the projects will spread mineral feedstocks. Data from these
  control plots will be used to compare project drawdowns and so act as a type of continuous
  dynamic baseline.

5) assess the overall uncertainty of emission reductions or removals associated with an activity type and/or require that the mitigation activity proponent assess the overall uncertainty in accordance with an approved methodology. In estimating overall uncertainty all causes of uncertainty shall be considered, including assumptions (e.g., baseline scenario), estimation equations or models, parameters (e.g., representativeness of default values), and measurements (e.g., the accuracy of measurement methods). The overall uncertainty shall be assessed as the combined uncertainty from individual causes.

#### https://science.isometric.com/standard

The Isometric Standard requires a conservative approach to be taken regarding uncertainty in relation to carbon removal calculations. This is set out in sections <u>2.5.5</u> ("Default Emission Factors, Proxies and Models") and <u>2.5.7</u> ("Uncertainty in Removals").

The various causes of uncertainty are taken into account as set out below, and the overall uncertainty is assessed as the combined uncertainty from all sources.

- Assumptions (e.g. baseline scenarios):
- Where there is uncertainty as to the most appropriate baseline, conservative assumptions are
  used. For example, for biomass feedstocks the highest-value alternative use in a region will be
  used. Project Proponents are able to provide evidence to verifiers to justify the use of less
  conservative counterfactual scenarios and the allowable types of evidence are laid out in relevant
  protocol

sections.

- Where there is uncertainty in pathways such as enhanced weathering, Isometric requires a
  control plot to determine counterfactual weathering and requires enough measurements to be
  taken by Project Proponents to be able to show a statistically significant increase in CO<sub>2</sub>
  drawdown at their deployment sites than in this counterfactual.
- Estimation equations or models:
- Isometric works with technical experts within each pathway to determine the appropriate use of
  models. Due to uncertainty inherent in the current state of the relevant pathways, Isometric does
  not rely solely on modeling results, and generally emphasizes the importance of direct
  measurements. In order to support the refinement of models and potential usage of such models
  in the future, Isometric has collaborations in place with relevant academic groups e.g. US-based
- National Renewable Energy Laboratory in relation to the applicability of the GTAP model to alternative uses of biomass feedstocks. Where models and equations are used, Isometric requires Project Proponents to follow a procedure for incorporating uncertainty into a conservative estimation of carbon removal:



- Option A: Conservative estimate of input parameters: this will lead to a more conservative removal estimate and therefore is suitable for projects where it is difficult to obtain detailed information on input parameter distributions.
- **Option B: Variance propagation**: this is appropriate if parameters follow normal distributions and errors are linear and independent.
- **Option C: Monte Carlo Simulations**: this is suitable for projects where sufficient information is available for all input variables so that Monte Carlo Simulations can be conducted. Where models are used, a sensitivity analysis must be undertaken and the distribution of outcomes is treated in line with section
  - 2.5.7.1 ("Conservative Estimate of Removals") of the Isometric Standard.
- Measurements and Parameters:
- Uncertainty information and sources: Isometric mandates that information for all parameters
  must be specified, including information about the type of distribution and parameters needed to
  describe uncertainty. Isometric also requires the source for the uncertainty information to be
  specified for each input parameter.
- **Expert reviews:** Isometric requires that parameters based on expert judgment and with the most significant impact on removal calculations, as determined by sensitivity analysis, will be subject to expert review. This will be conducted by both Isometric and, where relevant, third-party experts.

The Isometric Standard sets a strict approach to the usage of default emissions factors, and requires a conservative approach to be taken regarding uncertainty in relation to the total amount of CO2 removed from the atmosphere. This is set out in sections <u>2.5.5</u> ("Default Emission Factors, Proxies and Models") and <u>2.5.7</u> ("Uncertainty in Removals").

### 6) have a systematic approach to ensuring the conservativeness of quantification methodologies it approves for use.

#### https://science.isometric.com/standard

Isometric requires a conservative approach in the quantification of credits, a principle underlying the entire Isometric Standard. In order for a Protocol to be certified by Isometric, it must undergo several stringent layers of review, as set out by section 2 ("Protocol Requirements") of the Isometric Standard. This review will thoroughly test whether the Protocol has embodied the high degree of conservativeness as required by the Isometric Standard. The collective input of independent external scientists further ensures a systematic approach to embedding the conservativeness of quantification methods in Protocols. Relevant sections of the Isometric Standard include:

- Conservative baseline estimation ("Baselines"), section <u>2.5.2</u>.
- Selection of conservative factors, proxies, and models ("Default Emission Factors, Proxies and Models"), section 2.5.5.
- Explicit requirements and approaches to uncertainty estimation ("Uncertainty in Removals"), section 2.5.7.
- Selection of conservatively-estimated engineering and/or scientific methods regarding containment of stored CO2 ("Durability and Monitoring"), section <u>2.5.8</u>.
- 7) require in its program documents that existing government policies and legal requirements that lower GHG emissions (e.g., feed-in tariffs for renewable energy, minimum product efficiency standards, air quality requirements, or carbon taxes) be included when determining the baseline emissions. Your organisation may have provisions to consider the level of enforcement of such policies and legal requirements as well as any associated grace periods.



#### https://science.isometric.com/standard

The Isometric Standard sets out requirements related to additionality in section 2.5.3 ("Additionality"). This includes guidance on how to include existing government policies and legal requirements to lower GHG emissions when determining baseline emissions. Project Proponents must confirm whether their project is required by existing laws, regulations, policies, or other binding obligations, which would include air quality requirements or carbon taxes. Where such requirements apply, for credits to be issued, the Project Proponent would need to demonstrate that the carbon removal resulting from the project's activities exceeds the minimum regulatory requirements. Only the amount of carbon removal in excess of what is legally required may be considered additional, provided all other additionality requirements (financial and environmental) outlined under section 2.5.3 are met as well. If a project is legally required but removals do not exceed regulatory requirements, there is no "regulatory surplus" and the project is deemed not additional and no credits can be issued. These rules apply regardless of the level of enforcement of the relevant government policies, and any grace periods.

#### 5.3 Ex-Post Determination of Emission Reductions or Removals

Please respond to each question below.

a) Carbon credits that are issued ex-ante are not CCP eligible. If your organisation supports both ex-ante and ex-post issuance, confirm it has procedures in place to transparently identify units that are issued ex- post and are thus eligible under the ICVCM.

#### https://science.isometric.com/standard

Isometric does not issue credits ex-ante. Credits are exclusively issued ex-post, for carbon removals which have been independently verified against a certified Protocol. This is set out in section <u>5.1 ("Credit Attributes")</u> of the Isometric Standard. In all cases, crediting decisions follow conservative assumptions as outlined in the relevant Protocol, and include calculation and verification of all life cycle emissions.

#### 6.1 No Double Issuance (Double Registration)

- a) Confirm your organisation has provisions in place to:
- 1) prevent the registration of any mitigation activity that has been registered under another carbon- crediting program and is still active under that program; and

#### https://science.isometric.com/standard

Section 5.7 ("No Double Counting") of the Isometric Standard is clear that any carbon removal project listed on the Isometric Registry must not be listed on another program, and may not be used to make a separate carbon removal claim elsewhere. Standard contractual provisions with Project Proponents require that they work exclusively with Isometric for the purposes of a given project, and Project Proponents are required to complete a declaration of exclusion registration, as part of PDD submission. Due diligence on publicly available information is conducted on Project Proponents before Isometric contracts with them, which helps identify whether there is any previous activity that a Project Proponent cannot register again.

As explained in Section <u>5.7 ("No Double Counting")</u> of the Isometric Standard, different rules and procedures were established by Isometric in order to avoid different forms of double counting:

 Double issuance: Any project listed on the Isometric Registry must be listed there exclusively, and not on any other programme. This is to ensure that credits are issued and counted to only one registry.

The same rule holds for the claims associated with a particular project.

Double use: Double use is mitigated through the publicity and transparency of the Isometric
Registry, enabling public record of the full life-cycle of credits and allowing unique identification
of the project that credits were issued against. Credits can only have one owner at a given time,
and can only be retired to one beneficiary. Once a credit is retired, it cannot be used further. On
retirement, a unique and publicly available Retirement Certificate is produced.



 Double claiming: To avoid double claiming, the Isometric Standard requires that no separate CO2 removal claims may be made for the underlying removal from which a given credit was issued.

Isometric monitors for instances of double claiming, which would result in suspension of accounts engaging in double claiming.

2) ensure that it does not issue carbon credits for GHG emission reductions or removals where another program has issued credits to the same mitigation activity and/or for the same GHG emission reductions or removals and has not cancelled those credits for the purpose of avoiding double issuance.

#### https://science.isometric.com/standard

The same provisions and procedures as outlined in our response to question 1 apply, which would also prevent a Project Proponent from seeking credit issuance on credits that have already been issued. As per section 3.3 ("Eligibility") of the Isometric Standard, credits can only be issued for projects that are exclusively registered with the Isometric Registry and that have been verified against an Isometric Protocol. The initial audit report produced by a VVB would be likely to identify potential double issuance. Isometric also performs its own review of publicly available registries when performing due diligence of Project Proponents, which would be expected to highlight which other registries, if any, Project Proponents have been working with and whether there are any concerns around double issuance that Isometric and/or the VVB will need to investigate further with the Project Proponent.

#### 6.2 No Double Use

Please respond to each question below.

a) Confirm your organisation has registry provisions that prevent the further transfer, retirement or cancellation of a carbon credit once it has been cancelled or retired.

#### https://science.isometric.com/standard

Rules related to the retirement of carbon removal credits on the Isometric Registry are set out in section 5.4 ("Retirement Rules") and 5.5 ("Retirement Certificates"), as well as section 5.7 ("No Double Counting") of the Isometric Standard. Retirement finalizes the ownership status of a credit, ensuring that the tonne of CO2 it represents cannot be used again by the owner, the beneficiary, or any other party (the same status applies if a credit is canceled). Evidence of the status is provided publicly in real-time through the Isometric Registry, which ensures that all retirements used as claims towards mitigation targets can be uniquely identified, and can be traced back to the specific removal activity a credit was issued against.



#### **C - Sustainable Development**

#### 7.1 Assessment and Management of Environmental and Social Risks - CORSIA

CORSIA requirements related to Safeguards System and Sustainable Development criteria

- 1) Confirm that your programme has safeguards in place to address:
  - environmental risks
  - social risks

#### https://registry.isometric.com/standard#environmental-and-social-impacts

Sections 3.6 ("Regulatory Requirements") and 3.7 ("Environmental and Social Impacts") of the Isometric Standard set out the safeguards in place to address environmental risks. Project Proponents of carbon removal activities must clearly state in their PDD the approaches they use to ensure compliance with regulations (including environmental) in all jurisdictions to which the Project is accountable, meeting all local, regional and national and international regulations and laws and, where relevant, international conventions and standards. Project Proponents are also specifically required to consider the environmental impacts which could potentially arise as a result of their activities, both within and beyond their boundary, and at minimum must demonstrate that they will do no net environmental harm by demonstrating a mitigation plan for each environmental and social risk identified. Section 3.7.1 ("Environmental Impacts") of the Isometric Standard explains the ways in which Project Proponents must demonstrate the absence of net harm by completing a range of assessments: environmental assessments in line with local regulations, ongoing monitoring, and a closure plan. These assessments must be performed by an independent third-party and are required to include aspects drawn from the ICVCM's Core Carbon Principles.

Section 3.7.2 ("Social Impacts") of the Isometric Standard sets out the safeguards in place to address social risks. The absence of social harm should be demonstrated through a social impact assessment or equivalent, which must be conducted by a third party if impacts are considered significant and/or if required by the host jurisdiction. The assessments on social impacts must consider a variety of social risks, outlined in the same section and including labor rights and working conditions, land acquisition and involuntary resettlement, impacts on indigenous people and local communities ("IPLCs"), human rights, and stakeholder engagement.

#### 2) Confirm that your program uses sustainable development criteria

#### https://registry.isometric.com/standard#sustainable-development-impacts

In accordance with section 3.7.3 ("Sustainable Development Impacts") of the Isometric Standard, Project Proponents must demonstrate in their PDD, where relevant and feasible, how their carbon removal activities are consistent with the United Nations Sustainable Development Goals.

### 3) Confirm that your program has provisions for monitoring, reporting and verification in accordance with these criteria

#### https://registry.isometric.com/standard#sustainable-development-impacts

If applicable, a qualitative assessment should be included for any positive impacts identified in relation to SDGs other than SDG13. Project Proponents should provide information on any standardized assessment tools and methods used as part of this explanation. This is set out in section 3.7.3 ("Sustainable Development Impacts") of the Isometric Standard.

#### 7.1 Assessment and Management of Environmental and Social Risks

Please respond to each question below.

a) In addition to CORSIA requirements relating to Safeguards System and Sustainable Development Criteria, confirm your organisation requires mitigation activity proponents to:



#### **Copy of Application**

1) abide by national and local laws, objectives, programs and regulations and where relevant, international conventions and agreements.

https://www.un.org/development/desa/indigenouspeoples/wp-

- content/uploads/sites/19/2018/11/UNDRIP E web.pdf
- https://www.ohchr.org/en/what-are-human-rights/international-bill-human-rights

#### https://science.isometric.com/standard

Section 3.3 ("Eligibility") of the Isometric Standard requires Project Proponents to abide by all relevant laws and regulations in the jurisdiction in which they operate. If applicable, this also includes international conventions, as outlined further in section 3.7.2 ("Social Impacts") of the Isometric Standard.

2) assess associated risks of negative environmental and social impacts with regard to the safeguards contained in criteria 7.2 to 7.8 (inclusive), taking into account the scope and scale of the mitigation activity.

#### https://science.isometric.com/standard

Project Proponents must clearly explain in their PDD how their approach ensures compliance with relevant regulations, including environmental. This is set out in section 3.7 ("Environmental and Social Impacts") of the Isometric Standard. Project Proponents are also specifically required to consider the environmental and social impacts which could potentially arise as a result of their carbon removal activities, both within and beyond their boundary, and at minimum must demonstrate that they will do no net environmental or social harm. This definition is inclusive of criteria 7.2 through to 7.8 — for example, any expected impact on gender equality would be considered a relevant social impact, for which mitigation will need to be explained.

3) ensures FPIC processes for IPs and LCs, where applicable; and conduct stakeholder consultations, including local stakeholders as part of project design and implementation in a manner that is inclusive, culturally appropriate, and respectful of local knowledge, take these consultations into account and respond to local stakeholders' views.

#### https://science.isometric.com/standard

Stakeholder consultation requirements are set out in section 3.5 ("Stakeholder Input Process") of the Isometric Standard. The consultation must be inclusive, culturally appropriate, and respectful of local knowledge. The input gathered through these consultations needs to be documented, taken into account, and responded to. The key elements of the process are:

- The Project Proponent must inform all relevant stakeholders about its proposed and current activities.
- There must be a first consultation meeting prior to project development, with stakeholder invitations to be issued with a minimum notice of 14 days before.
- Stakeholders and rights-holders should be invited to consultation meetings via methods including but not limited to the post, email, or notices in newspapers and public places.
- Consultation meetings should be scheduled to maximize attendance, taking note of cultural or religious holidays and heritage.
- The intention of each consultation meeting should be communicated to all stakeholders prior to the meeting.
  - All documentation and correspondence must be respectful of local knowledge, accessible to a non- technical audience, and in the local language or a translator must be provided to facilitate communication.
  - A summary of consultation meetings should be made available to all stakeholders no later than a month after the meeting.
  - All stakeholder or Project Proponent conflicts of interests should be declared.
  - A mechanism for stakeholders to voice and address grievances must be implemented and any grievances must be resolved or escalated no later than 60 days after receipt.



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All correspondence, meeting invitations, and meeting summaries must be saved and either published on the Project Proponent's website or made available upon reasonable request.

- Where applicable (e.g. where a project is taking place within an indigenous people's community) Project Proponents must also conduct FPIC processes.
- b) Where, pursuant to 7.1 a) 2), the mitigation activity proponents have assessed that the mitigation activity poses risks of negative environmental and/or social impacts with regard to any of criteria 7.2 -
- 7.8 (inclusive) confirm your organisation requires the mitigation activity proponents to:
- 1) include measures, commensurate with the identified risks, to minimise and address such negative environmental and/or social impacts, in validated design documents prior to registration.

#### https://science.isometric.com/standard

As outlined in section 3.2 ("Documentation") of the Isometric Standard, the PDD provided by any Project Proponent must, among other things, include information on the findings of an environmental impact assessment and how identified risks will be minimized and addressed. This must take place and be validated prior to any new carbon removal project being registered with Isometric for the purpose of credit issuance. As outlined by section 3.7 ("Environmental and Social Impacts") of the Isometric Standard, the consideration of these impacts as well as continuous assessments should be ongoing throughout a project's lifespan, and should include environmental monitoring, maintenance, remediation strategies, and provisions for post- project closure. Mitigation strategies should specifically consider, where applicable, the project's impact upon factors aligning with the ICVCM Core Carbon Principles, outlined in detail under sections 3.7.1 ("Environmental Impacts") and 3.7.2 ("Social Impacts") of the Isometric Standard.

### 2) include information on the measures implemented pursuant to 1), commensurate with the identified risks in the monitoring report.

#### https://science.isometric.com/standard

Project Proponents must include information on measures implemented to manage any identified environmental or social risks in ongoing monitoring reports. This is set out in section <u>3.7 ("Environmental and Social Impacts")</u> of the Isometric Standard.

#### 7.2 Labour Rights and Working Conditions

Please respond to each question below.

- a) Confirm your organisation requires mitigation activity proponents to ensure that the mitigation activity:
- 1) provides safe and healthy working conditions for employees.

#### https://science.isometric.com/standard

All Project Proponents must demonstrate the absence of net social harm as a result of their activities within and beyond their boundary, as set out in section 3.7.2 ("Social Impact") of the Isometric Standard. In doing so, they need to consider labor rights and working conditions, including confirming that safe and healthy working conditions for employees are provided.

#### 2) provides fair treatment of all employees, avoiding discrimination and ensuring equal opportunities.

#### https://science.isometric.com/standard

As set out in section <u>3.7.2 ("Social Impacts")</u> 1b) of the Isometric Standard, Project Proponents are required to provide fair treatment and equal opportunities to all employees, regardless of age, gender,



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race, ethnicity, religion, disability, sexual orientation, sexual identity, education, national origin, or any other distinguishing characteristic or trait.

### 3) prohibits the use of forced labour, child labour, or trafficked persons, and protects contracted workers employed by third parties.

#### https://science.isometric.com/standard

This is set out in section 3.7.2 ("Social Impacts") 1c) and d) of the Isometric Standard, which explains that the use of forced labor, child labor or labor by trafficked persons is prohibited and that Project Proponents must protect third-party contracted personnel.

# b) Confirm your organisation requires that mitigation activity proponents confirm in validated design documents that the mitigation activity adheres to the above safeguards or that it has put in place the measures referred to in 7.1 b) 1).

#### https://science.isometric.com/standard

As set out by section <u>3.7 ("Environmental and Social Impacts")</u> of the Isometric Standard, PDDs must set out the findings on each aspect of social and environmental impacts and include information on the strategies employed to manage risks, including those related to labor rights and working conditions wherever relevant. If no such risks are applicable to the project, this must be justified within the PDD.

#### 7.3 Resource Efficiency and Pollution Prevention

Please respond to each question below.

- a) Your organisation requires mitigation activity proponents to ensure that the mitigation activity minimises:
- pollutant emissions to air
- 2. pollutant discharges to water, noise and vibration
- 3. generation of waste and release of hazardous materials, chemical pesticides and fertilisers

#### https://science.isometric.com/standard

Section <u>3.7.1 ("Environmental Impacts")</u> of the Isometric Standard requires Project Proponents to do no net environmental or social harm within and beyond the project's boundary. This specifies mandatory consideration of all the pollutants and other risks listed above and the need to minimize such pollutants.

### b) Confirm your organisation requires that mitigation activity proponents confirm in validated design documents:

- whether the mitigation activity results in pollutant emissions to air, pollutant discharges to water, noise and vibration, the generation of waste, the release of hazardous materials, chemical pesticides and fertilisers.
- 2. where the mitigation activity results in any of the impacts listed in 1) above, that it has put in place the measures referred to in 7.1 b) 1).

#### https://science.isometric.com/standard

As set out in section <u>3.7.1 ("Environmental Impacts")</u> of the Isometric Standard, Project Proponents must demonstrate no net harm, including consideration of the pollutants noted above. Any such risks and mitigation strategies must be summarized in each PDD prior to Validation.

#### 7.4 Land Acquisition and Involuntary Resettlement



Please respond to each question below.

a) Confirm your organisation requires mitigation activity proponents to ensure that the mitigation activity avoids, or where this is not feasible, minimises forced physical and/or economic displacement.

#### https://science.isometric.com/standard

This requirement is set out in sections 3.7.1 ("Environmental Impacts") and 3.7.2 ("Social Impacts") of the Isometric Standard. All impact assessments must include information on risks and mitigation of land acquisition and involuntary resettlement. Given the type of Projects that Isometric is involved in crediting (noting the high durability threshold in particular) it is considered highly unlikely that any Project would involve acquisition of inhabited land and involuntary resettlement.

- b) Confirm your organisation requires that mitigation activity proponents confirm in validated design documents:
- 1. whether the mitigation activity results in forced physical and/or economic displacement.;
- 2. where the mitigation activity results in the impacts listed in 1) above, that it has put in place the measures referred to in 7.1 b) 1)

#### https://science.isometric.com/standard

As set out in section 3.7 ("Environmental and Social Impacts") of the Isometric Standard, the results of environmental and social impact assessments and any relevant mitigation strategies must be summarized in each PDD prior to Validation.

#### 7.5 Biodiversity Conservation

Please respond to each question below.

- a) Confirm your organisation requires mitigation activity proponents to ensure that the mitigation activity:
- 1) avoids, or where this is not feasible, minimises negative impacts on terrestrial and marine biodiversity and ecosystems.

#### https://science.isometric.com/standard

Section <u>3.7.1 ("Environmental Impacts")</u> of the Isometric Standard requires projects to avoid, or where this is not feasible, minimize negative impacts on terrestrial and marine biodiversity and ecosystems.

2) protects the habitats of rare, threatened, and endangered species, including areas needed for habitat connectivity.

#### https://science.isometric.com/standard

Section <u>3.7.1 ("Environmental Impacts")</u> of the Isometric Standard requires projects not to impinge on the habitats of rare, threatened, and endangered species, including areas needed for habitat connectivity.

3) does not convert natural forests, grasslands, wetlands, or high conservation value habitats.

#### https://science.isometric.com/standard

Section <u>3.7.1 ("Environmental Impacts")</u> of the Isometric Standard requires projects not to convert natural forests, grasslands, wetlands, or high conservation value habitats.

4) minimises soil degradation and soil erosion.

https://science.isometric.com/standard



Section <u>3.7.1 ("Environmental Impacts")</u> of the Isometric Standard requires projects to minimize soil degradation and soil erosion

## 5) minimises water consumption and stress in the mitigation activity.

#### https://science.isometric.com/standard

Section <u>3.7.1 ("Environmental Impacts")</u> of the Isometric Standard requires projects to minimize water consumption and water stress in the mitigation activity.

# b) Confirm your organisation requires that mitigation activity proponents confirm in validated design documents:

- 1. whether the mitigation activity has negative impacts on terrestrial and marine biodiversity and ecosystems, on habitats of rare, threatened, and endangered species, on soil degradation and soil erosion, and on water consumption and water stress.
- 2. where the mitigation activity results in any of the impacts listed in 1) above, that it has put in place the measures referred to in 7.1 b) 1).

## https://science.isometric.com/standard

The results of the environmental impact assessment and mitigation strategies must be summarized in each PDD prior to Validation. As outlined in response to question 7.1 b) 1, PDDs must contain the findings on impacts and include information on the strategies employed to manage any risks identified, including any related to biodiversity conservation.

#### 7.6 Indigenous Peoples, Local Communities and Cultural Heritage

Please respond to each question below.

- a) Where the mitigation activity directly or indirectly impacts IPs & LCs, including livelihoods, ancestral knowledge and cultural heritage, confirm your organisation requires mitigation activity proponents to ensure that the mitigation activity:
- 1) recognises, respects and promotes the protection of the rights of IPs & LCs in line with applicable international human rights law, and the <u>United Nations Declaration on the Rights of Indigenous Peoples</u> and ILO Convention 169 on Indigenous and Tribal Peoples.

https://science.isometric.com/standard

As set out in section <u>3.7.2 ("Social Impacts")</u> of the Isometric Standard, Project Proponents must recognize, respect and promote the protection of the IPLCs rights in line with applicable international human rights laws and UN Declarations.

# 2) identifies the rights-holders possibly affected by the mitigation activity (including customary rights of local rights holders).

#### https://science.isometric.com/standard

As set out in section 3.7.2 ("Social Impacts") of the Isometric Standard, Project Proponents must identify any direct or indirect impacts on IPLCs, including customary rights.

Additionally, section <u>3.5 ("Stakeholder Input Process")</u> of the Isometric Standard requires Project Proponents to identify relevant local stakeholders and conduct consultation with stakeholders and rightsholders. All stakeholders must be equitably represented, involved and able to contribute freely. This includes but is not limited to IPLCs.

## 3) when relevant to circumstances, has applied the FPIC process.

https://science.isometric.com/standard



Section <u>3.7.2. ("Social Impacts")</u> requires Project Proponents to implement an FPIC process, where any potential negative impacts of the activity have been identified in relation to IPs and LCs.

4) does not force eviction or any physical or economic displacement of IPs & LCs, including through access restrictions to lands, territories, or resources, unless agreed upon with IPs & LCs during the FPIC process.

## https://science.isometric.com/standard

Section <u>3.7.2. ("Social Impacts")</u> of the Isometric Standard states that Project Proponents must not force eviction or physical or economic displacement of IPs & LCs. Any negative impacts in this regard must be agreed upon through an FPIC process with the relevant IPs / LCs.

5) preserves and protects cultural heritage consistent with IPs & LCs protocols/rules/plans on the management of cultural heritage or UNESCO Cultural Heritage conventions.

## https://science.isometric.com/standard

Section <u>3.7.2. ("Social Impacts")</u> of the Isometric Standard requires Project Proponents to preserve and protect cultural heritage and ancestral knowledge aligned with IPLCs and any UNESCO Cultural Heritage Conventions.

b) Where the mitigation activity directly or indirectly impacts IPs & LCs, including livelihoods, ancestral knowledge and cultural heritage, confirm your organisation requires that mitigation activity proponents confirm in validated design documents that the mitigation activity adheres to the above safeguards or that it has put in place the measures referred to in 7.1 b) 1).

#### https://science.isometric.com/standard

The results of environmental and social impact assessments and any mitigation strategies must be summarized in each PrDD prior to Validation. As outlined in response to question 7.1 b) 1, PDDs must contain the findings on social impacts and include information on the strategies employed to manage risks, including any identified related to indigenous peoples, local communities, their livelihoods, ancestral knowledge, and cultural heritage.

### 7.7 Respect for Human Rights, Stakeholder Engagement

Please respond to each question below.

- a) Confirm your organisation requires mitigation activity proponents to ensure that the mitigation activity:
- 1) avoids discrimination and respects human rights.

#### https://science.isometric.com/standard

As set out in section <u>3.7.2 ("Social Impacts")</u> of the Isometric Standard, Project Proponents must, as part of the assessment of social and environmental impacts, show that the mitigation activity avoids discrimination and respects human rights.

#### 2) abides by the <u>International Bill of Human Rights</u> and universal instruments ratified by the host country.

#### https://science.isometric.com/standard

Projects must abide by all relevant laws and regulations in the jurisdiction in which they operate, which includes international legal instruments ratified by the host country. This is set out in section 3.3 ("Eligibility") of the Isometric Standard. In addition, as set out in section 3.7.2 ("Social Impacts") 4b), Project Proponents must, as part of the mandatory assessment of social and environmental impacts, avoid any adverse human rights impacts as defined by international human rights legislation, including



the International Bill of Human Rights.

## 3) takes into account and responds to local stakeholders' views.

### https://science.isometric.com/standard

Requirements around stakeholder consultations, including local stakeholder consultations, are described in section 3.5 ("Stakeholder Input Process") of the Isometric Standard. Project Proponents must conduct thorough public local consultation to ensure that the interests of local stakeholders are incorporated into the design of any carbon removal activity. This includes but is not limited to IPs & LCs, stakeholders with land- tenure rights, local policymakers, national government officials and local NGOs. Each consultation must be designed to be iterative, accessible, transparent, free from external manipulation, systematically documented, and contain a mechanism for grievances. Consultation should take place prior to project initiation and all results must be documented as part of the Project Design Document, prior to validation. The key elements of the process are:

- The Project Proponent must inform all relevant stakeholders about its proposed and current activities
- There must be a first consultation meeting prior to project development, with stakeholder invitations to be issued with a minimum notice of 14 days before.
- Stakeholders and rights-holders should be invited to consultation meetings via methods including but not limited to the post, email, or notices in newspapers and public places
- Consultation meetings should be scheduled to maximize attendance, taking note of cultural or religious holidays and heritage
- The intention of each consultation meeting should be communicated to all stakeholders prior to the meeting
- All documentation and correspondence must be respectful of local knowledge, accessible to a non-technical audience, and in the local language or a translator must be provided to facilitate communication
- A summary of consultation meetings should be made available to all stakeholders no later than a month after the meeting
- All stakeholder or Project Proponent conflicts of interests should be declared
- A mechanism for stakeholders to voice and address grievances must be implemented and any grievances must be resolved or escalated no later than 60 days after receipt
- All correspondence, meeting invitations, and meeting summaries must be saved and either published on the Project Proponent's website or made available upon reasonable request
  - b) Confirm your organisation requires that mitigation activity proponents confirm in validated design documents that the mitigation activity adheres to the above safeguards, or that it has put in place the measures referred to in 7.1 b) 1) above.

#### https://science.isometric.com/standard

As defined under sections <u>3.2 ("Documentation"</u>) and <u>3.7.2 ("Social Impacts"</u>) of the Isometric Standard, both the assessment of potential impacts on human rights as well as documentation of local stakeholder consultations must be included in the validated PDD.

## 7.8 **Gender Equality**

Please respond to each question below.

- a) Confirm your organisation requires mitigation activity proponents to ensure that the mitigation activity:
  - i. provides for equal opportunities in the context of gender



- ii. protects against and appropriately responds to violence against women and girls
- iii. provides equal pay for equal work

#### https://science.isometric.com/standard

Section 3.7.2 ("Social Impacts") of the Isometric Standard requires Project Proponents to ensure a healthy work environment, fair treatment and equal opportunities to all employees, regardless of gender, sexual orientation, sexual identity, and other distinguishing characteristics. As part of assessing the social impact of the project, Project Proponents would be expected to consider any risks related to individuals impacted by the activity, including any potential violence against women and girls, and if such risks were identified, ensure appropriate mitigation.

b) Confirm your organisation requires that mitigation activity proponents confirm in validated design documents that the mitigation activity adheres to the above safeguards or that it has put in place the measures referred to in 7.1 b) 1).

### https://science.isometric.com/standard

As required by section 3.7 ("Environmental and Social Impacts") of the Isometric Standard, for each aspect of the environmental and social impact assessment, including impacts on gender, the project must demonstrate in its PDD how these risks have been assessed and, if applicable, what mitigation plan is in place to prevent them.

## 7.9 Robust Benefit-Sharing

- a) If your organisation requires arrangements for benefit-sharing with IPs & LCs, confirm that you require that mitigation activity proponents:
- 1) include in validated design documents information on how benefit-sharing arrangements that are appropriate to the context and consistent with applicable national rules and regulations will be designed and implemented through a benefit-sharing plan.

N/A

Isometric does not require arrangements for benefit-sharing with IPs & LCs and therefore we do not have specific requirements for proponents to set out the detail of such plans in a specified format within design documents. Isometric's long-duration threshold for crediting carbon dioxide removal activities means that projects are not generally associated with the same kind of impacts on IPs & LCs as more traditional (e.g. forestry-related) carbon offset activities. Where co-benefits do occur (for example, in the context of soil health for enhanced rock weathering in agriculture), such benefits would be explained during stakeholder engagement activities, which would therefore be incorporated within that portion of the validated design documents.

2) confirm in	validated design	documents that the	e draft and final	benefit-sharing	plan have
been shared	with the affected	IPs & LCs in a form	, manner, and la	nguage understa	ndable to
them.					

N/A

N/A

3) make benefit-sharing outcomes that result from the benefit-sharing plan publicly available, subject to applicable legal restrictions.

N/A

N/A

## 7.10 Cancun Safeguards



Please respond to each question below.

a) Confirm your organisation requires for all REDD+ mitigation activities that the mitigation activity is consistent with all relevant Cancun Safeguards as set out in paragraph 71 of decision 1/CP.16 of the United Nations Framework Convention on Climate Change.

N/A

Isometric engages exclusively in carbon crediting of atmospheric CO2 removal and REDD+ does not fall under the scope of mitigation activities covered by Isometric and its Protocols.

## 7.11 Ensuring Positive SDG Impacts

- a) Confirm your organisation requires that mitigation activity proponents, in validated design documents:
- 1) provide information on how the mitigation activity is consistent with the SDG objectives of the host country, where the SDG objectives are relevant, and such is feasible.

N/A

The requirement for this is set out in section <u>3.7.3 ("Sustainable Development Impacts")</u> of the Isometric Standard. It is also reflected in the PDD template (uploaded directly as part of this application).

2) demonstrate, if applicable, through qualitative assessment how the mitigation activity delivers positive SDG impacts for certain SDGs (excluding SDG 13), if any.

N/A

The requirement for this is set out in section <u>3.7.3 ("Sustainable Development Impacts")</u> of the Isometric Standard. It is also reflected in the template PDD (uploaded directly as part of this application).

3) provide information on any standardised tools and methods that were used to assess the SDG impacts.

N/A

Due to Isometric's high durability threshold, the current set of Project Proponents crediting against Isometric Protocols typically run industrial operations where the applicability for SDGs beyond SDG13 may be limited. Where it is applicable, it will likely be unique to the circumstances of the individual project. This means no standardized tools are in use and instead the above requirements are implemented on a case-by-case basis.



## D – CORSIA Requirements Related to ICVCM Category Assessment

#### 8. Additionality Demonstration - CORSIA

Please respond to all questions below.

1) Confirm that your Program's carbon credits 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.

### https://registry.isometric.com/standard#regulatory-and-policy-additionality-considerations

The high-level additionality requirements outlined in section 2.5.3 ("Additionality") of the Isometric Standard can be subdivided into three overarching areas, of which regulatory additionality is one. As per section

2.5.3.2 ("Regulatory and Policy Additionality Considerations") of the Isometric Standard, it must be shown that the Project is not already required by any regulatory (national, state, municipality, local), policy, or other legal requirement. If the Project is required by law, regulation, or any similar legally binding mandate as outlined above, but delivers removals surpassing the legal mandate, the surplus removals beyond legal obligation may be deemed additional, provided that the other criteria for additional status are met. If a Project is legally required but removals do not exceed regulatory requirements, there is no "regulatory surplus" and the Project is deemed not additional and no credits can be issued. These rules apply regardless of the level of enforcement of the relevant government policies, and any grace periods.

# 2) Confirm that your Program's carbon credits exceed any greenhouse gas reductions or removals that would otherwise occur in a conservative, business-as-usual scenario.

#### https://registry.isometric.com/standard#additionality

In addition to the legal and regulatory additionality described in the answer above, there are two further additionality criteria that must be met, thus ensuring that credits are only provided for removals that would not otherwise have occurred in a conservative, business-as-usual scenario. This detail is set out in section

# 2.5.3 ("Additionality") of the Isometric Standard:

- Financial additionality: Project Proponents of carbon removal activities must demonstrate that removals are the Project's main source of revenue and without the revenues from carbon finance, Project implementation would be prevented by economic barriers. The Isometric Standard requires Projects to provide evidence in the form of Project financials and a comparison of those financials to a Project-specific baseline analysis. More detailed requirements for this are delineated under section 2.5.3.1 ("Financial Additionality Considerations") of the Isometric Standard.
- Emissions additionality: The life cycle emissions of the Project must be net negative compared to a counterfactual scenario. The underlying analysis should be conducted in accordance with the Greenhouse Gas ("GHG") Statement framework defined by the relevant Protocol. More information on counterfactual baseline scenarios is accessible in the Isometric Standard under sections 2.5.3 ("Additionality") and 2.5.2 ("Baselines").

These high-level requirements are then implemented alongside any more specific measures in the Protocols, as determined by the removal pathways or specific circumstances of the Project. An example of this is section 6.4 ("Additionality") of the Bio-oil Geological Storage Protocol, which sets out that the determination of additionality may be affected by increased waste feedstock tipping fees, sale of coproducts, e.g. pyrolysis by-products, or reduced rates for capital access.

The method for baseline assessment depends on the type of Project and is also set out in each individual Protocol. Section 3.2 ("Documentation") of the Isometric Standard requires that Project Proponents provide documentation of the conditions prevailing before Project initiation so that the counterfactual scenario can be understood. Sections 2.5.2 ("Baselines"), 2.5.5 ("Default Emission Factors, Proxies and Models"), and



2.5.7 ("Uncertainty in Removals") of the Isometric Standard set out the requirement to employ a conservative approach in quantifying baselines within each Protocol. In particular, additional information on how over- crediting is avoided through conservative counterfactual scenarios can be found under the above-mentioned section 2.5.2 ("Baselines") of the Isometric Standard.

# 3) Confirm that additionality and baseline-setting is assessed by an accredited and independent validation/verification entity.

#### https://registry.isometric.com/standard#validation-and-verification-process

As set out in section 4 ("Validation and Verification Requirements") of the Isometric Standard as well as the Isometric VVB Policy, Isometric appoints accredited VVBs to Validate Projects and Verify carbon removals in line with the Isometric Standard and a given Protocol. This includes an assessment of the compliance of the Project with the additionality and baseline-setting requirements of the Isometric Standard, the respective Protocol and any subordinate Modules. Assessment of project baselines and additionality are conducted during both initial project validation and at each subsequent verification, in line with this policy.

### 4) Confirm that your program reviews additionality and baseline-setting.

#### https://registry.isometric.com/standard#validation-and-verification-process

Section 4.2 of the Isometric Standard confirms that Isometric will review any validation or verification report received from a VVB in relation to an Isometric project, including its assessment of the project baseline and any additionality calculations. This is reaffirmed in section 5 of the Isometric VVB Policy, which states that Audit Reports produced by VVBs are further reviewed by Isometric prior to the issuance of credits and credits will only be issued if the Report is deemed to include all the necessary information to demonstrate compliance with Isometric's requirements on additionality and baseline-setting as set out in the Standard and the Protocol.

# 5) Which of the following methods below are used to assess that credited mitigation activities are additional:

Investment, cost, or other financial analysis; Legal or regulatory additionality analysis

### https://registry.isometric.com/standard#additionality

As set out in section 2.5.3.1 ("Financial Additionality Considerations") of the Isometric Standard, Project Proponents of carbon removal activities must demonstrate that removals are the Project's main source of revenue and without the revenues from carbon finance, Project implementation would be prevented by economic barriers. The Isometric Standard requires Project Proponents to provide evidence in the form of Project financials and a comparison of those financials to a Project-specific baseline analysis. Based on a 10- year period and non-depreciated residual values for any assets, Project Proponents must determine the Internal Rate of Return (IRR) for the Project without carbon finance revenues. It must be demonstrated that the IRR without carbon finance revenues is less than the cost of capital or return on equity for the Project. In addition to using IRR as a metric for additionality determination, the IRR analysis should also include a scenario analysis that demonstrates the ability to meet the above criteria for cases where important values in the IRR analysis change by +/- 20% or by a more appropriate value based on historical data or literature.

# 6) If your program provides for the use of method(s) not listed above, please describe the alternative procedures and how you ensure that mitigation activities are additional:

N/A

Not applicable.

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7) Confirm whether your program designates certain mitigation activities as automatically additional (e.g., through a "positive list" of eligible project types).

## https://registry.isometric.com/standard#additionality

Any project seeking to issue credits under an Isometric Protocol must be able to demonstrate additionality in line with the criteria in Section 2.5.3 of the Isometric Standard. While the assumed counterfactuals for different project types vary, no projects are considered automatically additional and Isometric does not make use of positive lists or similar approaches.

8) If your program designates certain mitigation activities as automatically additional, do you provide clear evidence on how the activity was determined to be additional?

N/A

N/A - Isometric does not designate any mitigation activities as automatically additional.

9) Confirm how the procedures described under the above criteria related to additionality provide a reasonable assurance that the mitigation activities would not have occurred in the absence of the carbon crediting program:

https://registry.isometric.com/standard#additionality

As set out above, there are multiple checks in place to ensure that mitigation would not have occurred in the absence of the offset program. By confirming the Project meets each of the additionality criteria tested for, assurance is obtained respectively that:

- The mitigation would not anyway have been needed to meet legal and regulatory requirements;
- The mitigation would not have been a profitable activity to undertake in the absence of generating carbon removal credits;
- The mitigation itself is what led to the net removal of carbon dioxide from the atmosphere i.e. absent the Project, the relevant level of carbon removal that was credited for would not have occurred naturally.

#### 9. Permanence - CORSIA

Please respond to all questions below.

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

https://registry.isometric.com/protocols

Isometric currently has certified protocols for the following activities:

- Biomass Carbon Removal and Storage (covering both biomass and bio-oil geological storage)
   Direct Air Capture
- Enhanced Weathering
- Ocean Alkalinity Enhancement (currently under public consultation, but due to be certified in the next few weeks)

Each Protocol contains detailed rules requiring the robust quantification of potential reversals related to a particular Project.

2) Confirm what the minimum scale of reversal (i.e. threshold of materiality) is for which your program provisions or measures require a response. (Quantify if possible)

https://registry.isometric.com/standard#materiality-threshold

As set out in section 5.6 ("Reversals and Buffer Pools") of the Isometric Standard, Project Proponents

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must monitor for reversals as prescribed by a Project's monitoring plan and promptly report reversals to Isometric if identified. There is no minimum scale for which Isometric requires a response. The necessary response to a reversal of any size is set out in the same section, and involves compensation from a Buffer Pool.

3) For those sectors/activity types identified in CORSIA requirement 9.1 in this section, confirm that procedures and measures are in place to require and support these activities to undertake a risk assessment that accounts for, inter alia, any potential causes, relative scale, and relative likelihood of reversals.

## https://registry.isometric.com/standard#appendix-b-risk-reversal-questionnaire

Appendix B: Risk Reversal Questionnaire provides a risk based assessment of the potential causes, relative scale and likelihood of reversals. This is used to calculate the relevant Buffer Pool contribution for any given Protocol. The graduated contributions are as follows:

- Very low risk of reversal → Buffer Pool: 2% of Verified credits issued
- Low risk of reversal → Buffer Pool: 5%
- Medium risk of reversal → Buffer Pool: 10%
- High risk of reversal → Buffer Pool: 20%

Individual Protocols specify the context-specific information relevant to the score determined from the Questionnaire, for example as described in section 3.3 "Risk of Reversal" of the Bio-oil Storage in Permeable Reservoirs Module.

4) For those sectors/activity types identified in CORSIA requirement 9.1 in this section, confirm that procedures and measures are in place to require and support these activities to monitor identified risks of reversals.

## https://science.isometric.com/module/salt-cavern-storage

High-level monitoring requirements are set out in section 2.5.8.2 ("Monitoring") of the Isometric Standard. This includes the requirements for a full risk assessment determining all potential reversal mechanisms posing a risk to durability, to establish a detailed monitoring plan, and to publish all monitoring reports to the Isometric Registry. Due to the specific characteristics of different carbon removal methods, detailed pathway specific requirements are further set out in the respective Protocol. For example, Protocols may have differing requirements on the frequency of measurement and reporting, re-evaluation of baselines at the end of the crediting period, or identification of reversal and remediation measures. More specifically, monitoring requirements to ensure durability of an approach are specified within a Protocol's Storage Modules; these Modules are specific to a storage mechanism.

For example, as set out in the Bio-oil Geological Storage v1.0 Protocol, bio-oil may be stored in permeable reservoirs (see relevant Module) or salt caverns (see relevant Module) and the monitoring requirements differ for each.

As an example, the Biomass or Bio-oil Storage in Salt Caverns v1.01 Module contains:

- 1) Potential reversal risks associated with storing biomass or bio-oil in salt caverns (section 1)
- 2) Permitting and cavern characterisation requirements (section 2)
- 3) Monitoring requirements pre, during and post injection of biomass or bio-oil (section 3)
- 4) Lastly, all monitoring requirements are summarized in the 'Monitoring Plan Requirements' (Appendix 1)
- 5) For those sectors/activity types identified in CORSIA requirement 9.1 in this section, confirm that procedures and measures are in place to require and support these activities to mitigate identified risks of reversals?

https://science.isometric.com/standard#durability-and-monitoring

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Overall risk mitigation requirements for Project Proponents are set out in sections 2.5.8 ("Durability and Monitoring") and 2.5.9 ("Risk of Reversal") of the Isometric Standard. Additionally, Project Proponents must follow a monitoring plan for their individual removal method as specified in section 5.6.1 ("Reversals") of the Isometric Standard and the respective Protocol. The required contents of monitoring plans include a set frequency of measurements and re-evaluations with respect to the uncertainty of a given method, provisions for reporting reversals to VVBs and regulatory bodies, and further requirements which are Protocol-specific. For example, Section 8 ("Bio-oil Storage") of the Bio-oil Geological Storage Protocol sets out information relevant to reversal risks and specifies the responsibility taken by Project Proponents to monitor, mitigate, and respond to any reversals.

The Protocol first sets out the potential risks, including:

- Until bio-oil solidifies, risk of migration out of the intended storage reservoir is a possibility
- Bio-oil could be converted to bio-gases in the subsurface reservoir such as CH4, CO2, and short chain hydrocarbons
- Bio-oil could react with the storage reservoir in a neutralization reaction outgassing CO<sub>2</sub>

To mitigate these risks, Project Proponents require post-emplacement monitoring plans which, among other measures, set requirements to:

- Prove the injection well is constructed in compliance with the EPA UIC permit (if US based).
- Undergo geologic reservoir and site characterization: the proposed storage site must have been properly characterized to demonstrate site suitability for storage and containment of bio-oil or other biomass or organic materials. This includes analysis of the porosity and permeability of sequestration zone strata and confirmation of low permeability and structural integrity of confining layer/cap rock.

To monitor for potential reversals, Project Proponents are required to:

- Test concentration and  $\delta 13C$  signature of DIC, DOC and carbon speciation in formation fluid as well as the  $\delta 13C$  of the compounds of the bio-oil. This is to determine the source of any produced biogas and extent of reactions (e.g. methanogenesis). Regular gas sampling (every 6 months) of CO2, CH4 and VOCs is also required after initial injection with a trigger condition for further measurements of CO2, CH4 and VOCs if the quantities of these in bio-gasses increase from baseline values.
- Test temperature, pH and salinity of geologic reservoir formation fluid/brine to determine the risk of reactivity of the bio-oil with surrounding rocks.
- 6) For those sectors/activity types identified in CORSIA requirement 9.1 in this section, confirm that procedures and measures are in place to require and support these activities to ensure full compensation for material reversals of mitigation issued as emissions units and used toward offsetting obligations under the CORSIA?

## https://registry.isometric.com/standard#reversals-and-buffer-pools

We confirm that Isometric has provisions and procedures in place to ensure full compensation for material reversals of activities that have resulted in carbon removal credits being issued and used toward offsetting obligations under the CORSIA. As per section 5.6 ("Reversals and Buffer Pools") of the Isometric Standard, a Project Proponent must notify Isometric immediately if a reversal was identified. Such a reversal is then compensated by credits from the Buffer Pool. If the Buffer Pool is depleted entirely, any additional credits obtained from removals by the Project Proponent will be directed to their Buffer Pool until all outstanding reversals are compensated.

# 7) Confirm that provisions are in place that confer liability on the activity proponent to monitor, mitigate, and respond to reversals in a manner mandated in the program procedures?

## https://registry.isometric.com/standard#reversals

Project Proponents must follow a monitoring plan as specified in section 5.6.1 ("Reversals") of the Isometric Standard and the relevant Protocol, and promptly report reversals to Isometric if identified.



Section 2.5.8.2 ("Monitoring") of the Isometric Standard sets out detailed requirements for monitoring plans, which are Protocol-specific and always include a set frequency of measurements and reevaluations. An example was provided in response to question 4.5 (c).

Where a reversal is identified, the commensurate number of credits will be canceled from the Project Proponent's Buffer Pool. At the Verification following a reversal, the Project Proponent must report relevant monitoring data for any reversal which has occurred, to be assessed by the VVB. Reversal data from Projects will be made public.

8) Confirm that provisions are in place that require activity proponents, upon being made aware of a material reversal event, to notify the program within a specified number of days.

https://registry.isometric.com/standard#reversals

Section 5.6.1 of the Isometric Standard requires project proponents to report any reversals within a maximum of three business days, with an expectation that they be reported within one business day.

9) Confirm that provisions are in place that confer responsibility to the program to, upon such notification, ensure and confirm that such material reversals are fully compensated in a manner mandated in the program procedures.

https://registry.isometric.com/standard#buffer-pools-uncertainty-in-storage

https://registry.isometric.com/standard#buffer-pools-uncertainty-in-storage

As outlined in section 5.6.2 ("Buffer Pools") of the Isometric Standard, Isometric is responsible for managing a Buffer Pool of credits specific to each Project Proponent, which is funded by contributions from the Project. Where a reversal is identified, Isometric will retire the commensurate amount of credits from this Buffer Pool in order to compensate for the reversal. Isometric sets out the required contributions to the Buffer Pool based on each Project's reversal risk categorization. This is defined in the relevant Protocol and ranges from 2% (very low risk), 5% (low), 10% (medium), to 20% (high).

Following an "avoidable" reversal, Isometric requires Project Proponents to reimburse their Buffer Pool account by transferring an equivalent number of credits to the Buffer Pool account. Where a Buffer Pool is drawn down entirely, all further credits issued from removals conducted by the Project Proponent will be assigned to their Buffer Pool, until outstanding reversals have been fully compensated. More detailed information on Isometric's reversals requirements and Buffer Pool mechanism and procedures for handling reversals can be found in section 5.6 ("Reversals and Buffer Pools") of the Isometric Standard.

#### 12. Sustainable Development Benefits And Safeguards – CORSIA

Please respond to each question below.

1) Confirm that your program has procedures in place to ensure that mitigation activities do not violate local, state/provincial, national or international regulations or obligations.

https://registry.isometric.com/standard#eligibility

Section 3.3 of the Isometric Standard requires project proponents to be compliant with all relevant laws and regulations in the jurisdiction in which they operate. Project proponents that are not compliant with those laws are not eligible for crediting under the Isometric Standard. Projects are additionally required to comply with national and local laws and regulations and, where relevant, international conventions and standards, relating to their environmental and social impacts, as specified in Section 3.7 of the Isometric Standard.

2) Confirm that your program demonstrates it complies with social and environmental safeguards. https://drive.google.com/file/d/19f8jmXWTnTnmGUbkIZs-eErOQwdLq\_Qe/view

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Isometric has an Environmental and Social Policy that governs its operations, aligned with best practices such as ISO14001. The policy ensures compliance with fundamental environmental and social safeguards, and outlines Isometric's intent to go beyond existing requirements and create environmental and social benefit, in line with Isometric's mission.

As per section 3.7 ("Environmental and Social Impacts") of the Isometric Standard, Project Proponents must consider the material environmental and social impacts that could potentially arise as a result of their activities, both within and beyond the Project boundary, and at minimum must do no net environmental or social harm. For each aspect of the environmental and social impact assessment, the Project Proponent must demonstrate how these risks have been assessed and, if applicable, what mitigation plan is in place to prevent them. Remediation of any unintentional harm, caused directly or indirectly by a Project, must be carried out by a Project Proponent. Failure to adequately remediate any harm caused may lead to a Project being subject to Credit cessation and cancellation.

Illustrative summary examples below, drawn from Vaulted Deep's Great Plains Facility Organic Waste Sequestration Project in the United States, which injects biomass slurry into salt caverns (more information can be found in section D- "Environmental and social impacts" and section E- "Stakeholder input process" of the published PDD):

- Social: Multiple sessions were held at the facility to educate the local community on the site. A site tour was conducted, as well as two community meetings held to address concerns and questions. Project consultation documents were part of the materials provided to Isometric and the relevant VVB (350 Solutions) for assessment to Validate and Verify the Great Plains Project. Stakeholders considered relevant for this Project include:
- o Local, state, and federal regulators (generally, state and local EPA)
- o Members of local government
- o Nearby residents and landowners (especially within the anticipated radius of injectate migration/influence)
- o Waste partners who provide Vaulted Deep with the waste
- o Environmental interest groups/NGOs

Vaulted Deep continues to engage each stakeholder throughout the Project, and their sites require regular re-permitting and reporting to regulatory and local government agencies. These activities generally involve public engagement via notices, hearing, regular quantification and reporting of net environmental impacts, and public access. The cadence of these activities ensures regular input from the public via their elected representatives, responses to public notices, and feedback received at public presentations.

- Environmental: Vaulted Deep is the sole operator of the Great Plains facility and has ownership over, and liability for, all injected materials. It conducted all necessary pre-injection studies and analyses before their Great Plains facility was built. This included geologic feasibility studies, local environment and groundwater assessments, and engagement with local community groups and regulators. The absence of net environmental or social harm was demonstrated. Before receiving Class V injection permits, the Project Proponent conducted environmental impact assessments, and no material environmental issues were found. The Great Plains site was fully permitted and operational prior to Validation and Verification. Vaulted Deep submits monthly and quarterly reports to the Kansas Department of Health and Environment. This includes groundwater testing, lab-analyses and volume reports on emplaced material, daily readouts of presses and stability of the subsurface caverns, as well as bi-annual elevation surveys to ensure ground stabilization and no cavern sinking is occurring.
- 3) Confirm that your program publicly discloses the institutions, processes, and procedures that are used to implement, monitor and enforce safeguards to identity, assess and manage environmental and social risks.

https://registry.isometric.com/standard#stakeholder-input-process

The main processes in place to implement, monitor and enforce such safeguards include:

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- Requirements for local community engagement by Project Proponents, as detailed in section 3.5 ("Stakeholder Input Process") of the Isometric Standard. Such engagement must be designed to be iterative, accessible, transparent, free from external manipulation and systematically documented.
- A mechanism for stakeholders to voice and address grievances. Project Proponents must put this in place (as per section 3.5) and Isometric also maintains a publicly available Grievance Policy enabling concerns to be raised and responded to in a transparently defined manner.
- Regular renewal and Re-validation of the PDD, which includes the mandatory assessment of environmental and social risks. This must take place at a minimum cadence of every 5 years (the maximum crediting period) as set out in section 3.4 ("Project Crediting") of the Isometric Standard. The PDD is published on the Isometric website before credits are issued.

**End Copy of Application** 

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