Overview

The aim of this document is to outline DOVU's current process for building out workflows and a general/basic flow for encapsulating actors, data, and approvals, taking into account the current challenges, and to provide an outline of how we are moving forward to formulate a generic policy based on the ongoing work from the guardian vocabulary and Ecological Benefits (EBF lexicon activator) communities.

While in this pass we aren't trying to complete cover all custom workflows we seek a "80/20" solution that makes it easier to digitise a given methodology and then later on if required we can create different processes that can be reused for different data requirements.

Current Approach

Over the last 24 months DOVU's solutions have evolved significantly, currently we have deployed 10 MRVs as part of 10 policies. We use the same overarching template to encapsulate the MRVs, meaning that it can be backward compatible with our other projects.

Our template comprises of:

- 3 actors
    - A registry
        - Their role is act as the overarching agent to keep control
    - A project developer (preferred) or supplier
        - Their role is to provide all evidence and data that relate to the project this could be anything from text, to document URLs
    - A verifier or VVB (common speak)
        - This role is about the approval of data submissions, the final step usually ends in the mint of a token or digitised form.
- 3 Document Submissions (all data submissions can be any schema or data needed (n) levels deep)
    - The creation or the registration of a project (include PDD, and other pre-planning things)
    - The creation of an ecological or carbon project that is connected to a site, installation or geographical location
    - The submission of a claim with that includes MRV data to be the expected minted value of carbon units (or NFTs) connected to the guardian.
- 3 Approval steps
    - Steps 1 & 2 are an approval from DOVU or a registry/verifier

- The final step is the approval from a reputable verifier who is used to the current MRV, or verified data source.

Note: Every single project requires a new policy to be deployed, and amongst other things a new token needs to be provisioned, then promptly assigned to a project. There is a current admin overhead, which is workable for the current small amount of projects we currently have.

Although we will be creating tools to automatically generate policies, to simplify the process of onboarding new projects, adding new MRV on-the-fly introduces a scalability and integrity problem.

If we were to strictly use the guardian schema system as per design, adding a new schema to describe an MRV would not be useful as in our current state the MRV is tightly coupled to a policy. Furthermore any new technology that could be used as MRV, be it in a supporting measure, could not be used against an older project, without a policy reissue.

Current demand market signals have indicated that a project, which may not be linked to a registry, requires a broader body of evidence, building proof. Thus it is an appropriate assertion that any project could be linked to any MRV.

In turn, we believe that the MRV section of a policy should describe the container of an MRV rather than simply fields of an explicit MRV.

Moving forward with policies

Our philosophy is that the creation of carbon credits should be simple and accessible for anyone. Millions of tonnes of carbon offsets should be issued with a click of a button. Technology, blockchain, and other **magic** although powerful isn't the deciding factor to the price of a credit. What matters is the verification of assets, or the relationships between people.

DOVU enables the onboarding of any carbon credit, using any MRV.

DOVU has been creating a generic policy, and will be creating tools to rapidly onramp projects within minutes. The next step is solving the *generic MRV gap*, this is where any project could connect to any kind of MRV without the registry getting in the way.

MRV Selection

As different MRV will likely produce different results for carbon counts, ecological benefit, and more it would be important at the start of the project to define a *primary MRV* within the policy of a project*. (This is to be defined, and potentially be reworked incase a project wanted a different MRV to be used)*

MRV Schema (in progress)

Field	Description	Optional	Datatype
Type	Describe the act of MRV import, such as: self-assessed, signed, audited, or verified.	No	String
Integrity	The amount of data transformation or formatting that has occurred to get to the carbon credit number	Yes	String, Nullable
Methodology	Name of the MRV, in snakecase, like agrecalc, cool-farm-tool, or others	No	String
Carbon Amount	The calculated carbon figure to be minted, in kilograms	No	Int
DID	Decentralised Identity of entity sending MRV data	Yes	String
Source	An object or JSON of source data the MRV service can send to the service, this is dynamic and used for proof.	Yes	Object/JSON, Nullable
Verification	This is the cryptographic proof of a service signing a MRV data source from source to registry/market. A valid verification object will ensure that there is no way that the market or registry could have tampered with the carbon count or additional data and can be continually checked with a third party verification at any time. Composed of algorithm, message, public_key, signature. (encoding might be required)	Yes	Object/JSON, Nullable, Defined Below
Properties	These would be properties related to the Methodology or MRV in question. Additionally, they may include information relating to ESG standardization. One example would be “fidelity_grade”, which is an integer representation of “type”	Yes	Object/JSON, Nullable

Is Primary Source	Indicates if the submitted MRV is considered “primary” this means that the tonnes of CO2e will be taken into account to be approved and minted by a verifier.	Yes	Boolean

Verification Object Schema (HMAC-lite verification)

The purpose of this object is to verify the “signed” state of an inbound MRV, this will ensure that an MRV service can provide a guarantee of source-of-origin for measurements from a trusted source.

A use case could be a satellite imagery company, like carbonspaces, that provide the full gamut of carbon and ecological benefit measurement.

Field	**Description**	**Options / Type**
algorithm	The alg that is use for signing the message against a public key, any alg may be supported that supports signature verification.	String, one of; ed25519, ecdsa, RSA
message	The message that has been signed, this is to be injected into “Source” for the MRV payload	String
public_key	Public key that is used in the verification/signing process	String
signature	Generated signature from the public key through the message using the supplied alg	String