



**BUREAU
VERITAS**



ANALYSIS REPORT

Project support New International Standard *Ecological and Sustainable Services*



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1. CONTEXT

1.1. The ASES project – New International Standard

ASES, a Franco-Mexican company specialising in ecological engineering, sustainable development and climate change, offers tailor-made solutions following the ERRC (Avoid, Reduce, Restore, Compensate) sequence.

Presenting itself as an ally of the ecological transition, ASES has developed a range of services to help their various clients comply with environmental, social and climate obligations, by taking charge of both environmental studies and operational work to restore the environment.

For several years now, ASES has been developing its activity on carbon projects (compensatory measures or voluntary carbon market via afforestation projects for example), so it is in the continuity of their projects, and in response to the requests of their customers, that they would now like to be able to issue carbon credits.

Unable to find a relevant answer on current international standards, the ASES working team worked on the creation and development of their own international standard, in collaboration with university partners in France and Mexico.

In addition to the Carbon parameter, this new standard should also make it possible to value soil, climate, water and biodiversity, thus offering a global approach to restoration.

In the field, this standard is also distinguished by the use of innovative technologies, which allow permanent monitoring of projects and follow-up over time.

Today, this draft New Standard is coming to an end with the launch of a public consultation to gather input and feedback from stakeholders (businesses, NGOs, governments, local communities). This wide-ranging consultation thus ensures that the standard is aligned with the needs and expectations of its users, making it likely to be widely adopted and have a positive impact on the ecosystem restoration initiatives and projects it aims to support.

1.2. The challenges of the project

In this context, in order to finalize the launch of its standard, and with the aim of credibility and scientific guarantee with its customers, ASES is calling on Bureau Veritas around 3 issues:

- The Standard and the Tools
- Governance
- Project Audits

2. METHODOLOGY

2.1. Methodology and phasing of the mission

In order to meet the needs and expectations of the ASES team, Bureau Veritas Living Resources offers a tailor-made intervention structured around 3 main steps articulated as follows.

- ✓ **OBJECTIVE** : Audit (critical study) of the model developed by ASES
- ✓ **DELIVERABLES** : Audit report with summary of strengths and areas for improvement, Standards comparative study, critical review of the audit scheme

STEP 1 - Critical review of the standard and comparative study

On this first step, the model developed by ASES has been reviewed and challenged on each indicator, references and reference systems selected for the construction of this new scheme, with regard to existing standards or a demanding and recent documentary study / scientific bibliography.

In particular, the following points, a common basis of international standards, have been revised:

- Carbon/Climate/Water/Biodiversity;
- Social criteria;
- Measurability;
- Verifiability ;
- Continuity ;
- Additionability ;
- Uniqueness.

The Standard has been also the subject of a comparative study with existing international standards (VERRA, GOLD STANDARD and PLAN VIVO) on each of the above-mentioned criteria. A score by criterion has been established for comparison purposes.

STEP 2 - Challenge of tools (mapping, remote sensing, GPS readings, etc.)

This second step was dedicated to the evaluation of any shortcomings on each tool specifically developed for the new standard.

The tools have been integrated into the comparative study initiated in Step 1.

STEP 3 - Critical review of the project verification scheme by ASES – Support on the qualification of auditors

This third and final step, as an entry point for the certification of each project, should make it possible to anticipate and save time on future field audits.

The following has been reviewed:

- Criteria for choosing the qualification of auditors;
- Auditor training methods ;
- Definition of audit rules ;
- Methods of carrying out audits (documentary, field) ;
- Audit grids ;
- Detail of requirements and/or implementation/recording of evidence;
- Procedures for reporting audit results ;
- Procedures for processing audits and certification decisions.

3. RESULTS

3.1 Critical review of the standard and analysis

3.1.1 General comparative review

The result of the review comparing the ASES system with the main standards for Carbon credits (VERRA, Gold Standard and Plan Vivo) shown that the ASES system reach a level of performance similar to Gold Standard (table 1) despite the fact that Gold Standard and ASES don't perform on same aspects. Gold Standard has implemented a stronger certification process (verifiability and transparency) and better displays all the calculation tools used for evaluation and monitoring of the projects, but ASES is more demanding regarding the biodiversity and other ecosystem services and better takes into account precautionary approach.

System	ASES	VERRA	GOLD STANDARD	PLAN VIVO
General scoring	53	47	53	33

Table 1: Summary of general comparative evaluation

3.1.2 Carbon/Climate/Water/Biodiversity/Soil

ASES system requests a preliminary evaluation to guarantee that the project activity does not adversely affect ecosystems or society in any way. Safeguards requirements are mentioned and include:

- Human rights;
- Gender Equality and women's empowerment;
- Accountability ;
- Biodiversity Conservation and Sustainable Natural Resource Management;
- Climate Change and Disaster Risks ;
- Community Health, Safety, and Security ;
- Cultural Heritage ;
- Displacement and Resettlement ;
- Indigenous Peoples ;
- Labour and Working Conditions ;
- Pollution Prevention and Resource Efficiency.

This is evaluated in a risk assessment and action plans to reduce those risks are requested. But minimum eligibility criteria should be clearly stated such as:

- The project shall demonstrate that the ILO core convention and ILO 169 are respected;
- The project shall demonstrate that high conservation values areas are protected and that the project did not involve destructions of habitats;
- The project shall demonstrate that the local communities have been consulted as well as indigenous peoples and they have provided their Free and Prior Informed Consent when indigenous people have been identified based on mandatory studies that the project owner shall provide.

Moreover some elements should require more analysis such as the initial context both for water, soil and biodiversity (see appendix 1). The analysis of the initial context for biodiversity should request a deep analysis of the ecological and social context using publicly available tools (see more details in chapter 2).

Additionally to those requirements, the ASES On chain Protocol includes dedicated methodologies for evaluation for the following type of credits:

- Verified Carbon Removal (VCCs)
- Verified Biodiversity-Based Credits (VBBCs)
- Verified Water Credits (VWCs)
- Verified Soil Credits (VSCs)

For each type of credits, a dedicated methodology has been designed.

Methodologies are robust and based on scientific considerations as well as recognized public data.

3.1.3 Social criteria

As outlined in 3.1.1, the standards require an analysis of the respect of social criteria, but clear requirements could be requested with a reference to ILO core labour conventions and ILO 169 convention to ensure that the indigenous peoples' rights are respected and especially Free Prior and Informed Consent.

Consultation with local communities and a definition of local communities should be requested.

Local communities could be defined as such: Communities of any size that are in or adjacent to the Project Unit, and also those that are close enough to have a significant impact on the economy or the environmental values of the Project Unit or to have their economies, rights or environments significantly affected by the management activities or the biophysical aspects of the Project Unit.

Clear social and environmental impact studies should be requested.

3.1.4 Measurability

ASES publishes methodologies on their website¹ but it is not easy to access to all the documentation quickly.

The calculation tool (Excel format) seems not to be available.

A process for validation of methodologies is set up as described in “Procedures”. But for all documents made by ASES or made by “methodologies recognized owners” a process similar to forest management certification processes could be adopted as presented in figure 1.

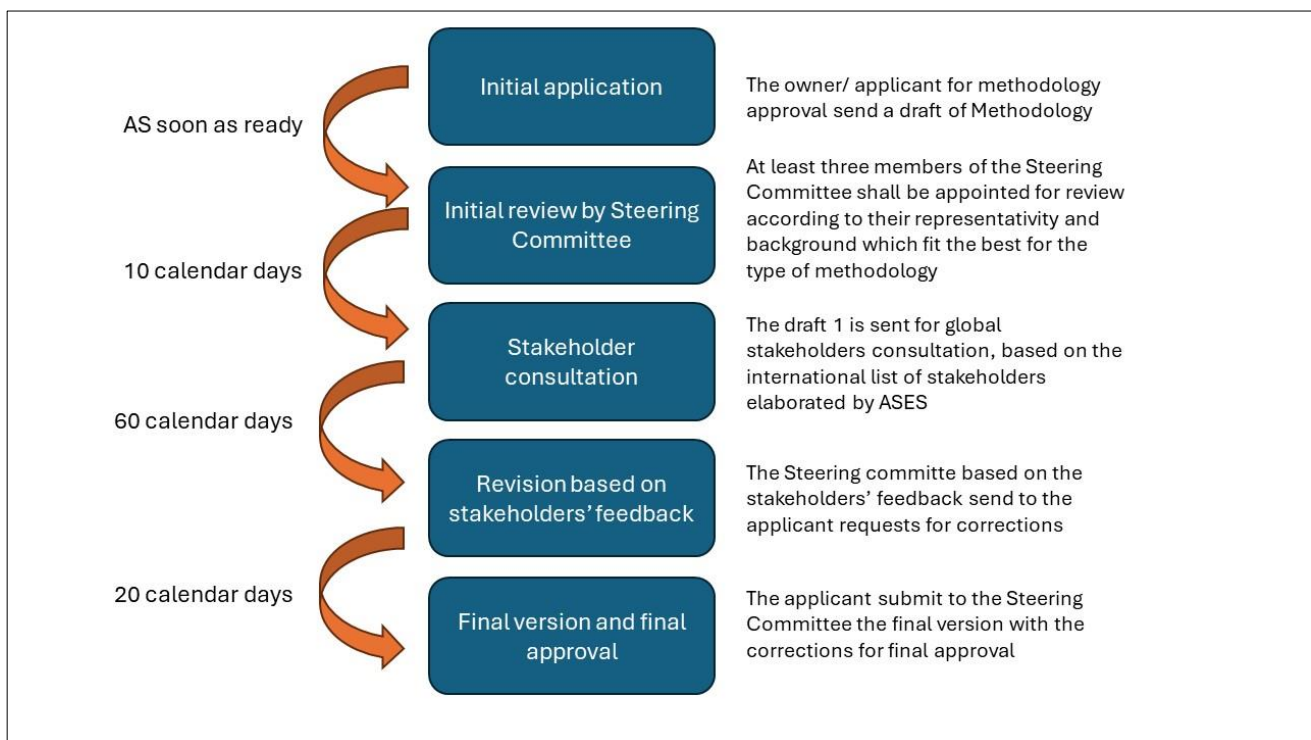


Figure 1: Proposal for a methodology validation process similar to forest management certification systems certification processes.

Leakage is mentioned in the general documents (manual) but a deep evaluation of possible leakage is not subject of evaluation or reduction of credits. For example, this issue could be added in the table 5 of the “Procedires”: Nat5 scoring variables, with a weighting of 0,75 in case of high rate of deforestation in the country that could involve a deforestation of another area due to the implementation of the project.

¹ <https://www.nat5.bio/index.php/what-is-aocp/#section>

3.1.5 Verifiability

The ASES system plans to publish documentation but it should be written in the “procedures” or in “manual” the list of documents to be publicly available. The list should contain at least:

- All Procedures and templates;
- Result of initial evaluation/ verification of the project;
- The monitoring reports;
- Excel table with description of the calculation;
- Validation/ verification audit reports made by the independent verification/ certification body;
- Result of consultation with stakeholders (comments and how comments have been addressed).

The ASES system plans a verification by a “validation body” but the requirements for the recognition of the validation body could be more detailed.

Moreover, if ASES aligns its processes to the forest certification processes a requirement for accreditation by Assurance Serives International (ASI²) or COFRAC³ should be added. In such way this adds credibility in verification as the validation body would be also evaluated independently to check that the verification process is correctly applied.

Verification process should also be based on requirement for minimum duration of the audits such as proposed in table 2. A formula could be also designed taking into account the risk. In case of low risk a factor of 0,5 is applied.

Area of the project/ number of credits issued	Less than 10 T CO2 éq.	Between 10 and 50 TCO2 éq.	Between 50 and 500 T CO2 éq.	More than 500 TCO2 éq.
Less than 10 ha	0,5 DAY	0,5 DAY	1 DAY	2 DAYS
Between 10 and 100 ha	0,5 DAY	1 DAY	1 DAY	2 DAYS
Between 100 ha and 500 ha	1 DAY	2 DAYS	2 DAYS	3 DAYS
More than 500 ha	2 DAYS	2 DAYS	3 DAYS	3 DAYS

Table 2 : Proposal for audit duration according to the size of the project

3.1.6 Continuity

It seems that the ASES system plans a validity of the projects over ten years.

Carbon credit claims duration should be defined as well.

The project should be subject of monitoring by an evaluation every year during the five first years and from the fifth year every five years.

² <https://www.asi-assurance.org/s/>

³ <https://www.cofrac.fr/en/>

Carbon calculations are also very conservative in the sense that they ensure that the Carbons removal identified is not underestimated which is a very good approach.

Nevertheless, the buffer credits could be higher.

This buffer credits are subject to critics from the stakeholders ⁴. In order to avoid critics and to be the system who have the best precautionary approach towards buffer credits the best would be to apply 50% of buffer credits.

Another solution could be to define this percentage regarding the risk evaluated based on analysis result using the tool “risk assessment and follow up action LT 001”, as proposed in the table 3.

Risk evaluated ⁵	Applied buffer credit
Low	30%
Moderate	40%
Substantial	50%
High	50%

Table 3: Proposal for buffer credit according to the risk identified

3.1.7 Additionability

Reference scenarios are important for additionality.

Environmental additionality, legal additionality and financial additionality have been assessed.

The assessment of financial additionality is missing in the ASES processes.

Methodologies should request a comparative economic analysis of the project with and without financial support. The conclusion should clearly state (based on this analysis) that the project could never be implemented without financial support.

The environmental (and carbon removal) additionality is evaluated through comparison of the benefits allowed by the project and a “business as usual” scenario (baseline).

This scenario “business as usual” is crucial for the credibility of the project.

The scenario should be specific to a project.

For example, initial situation could be defined as “historic situation” based on information on similar management system around the project that are carried out without any project for Carbon removal or ecosystem services credits.

A kind of witness project area (similar land, ecosystem, soils, social context) could be identified and the monitoring system could also assess the evolution of this other type of management system to confirm the benefits comparing to a “business as usual”

⁴ <https://www.lesechos.fr/thema/articles/la-compensation-carbone-sous-le-feu-des-critiques-1151452>

⁵ Based on the criteria used in the “risk assessment and follow up action LT 001” tool, such as climate change consequences, politics etc.

management of the land. Another area could be included in the assessment of the benefits without the project by defining a land with similar context and check the benefits in case of full conservation of the land (no exploitation, no management, no plantation).

3.1.8 Uniqueness

The ASES system plans the elaboration of a unique register to records all the projects. The system should make sure that it is clearly stated when a credit has been withdrawn.

The system should also make sure that a unique code number as proposed in figure 4 (chapter 3.3.4) is issued to each project and all documentation could be easily identifiable using this unique code number.

The system plans to indicate when the credits are sold but it is not clear whether the system identifies who is the buyer of the credits. Information about credit transfer, if any, should be indicated as well.

To avoid double counting it is also necessary to add a requirement during the initial evaluation of the project that this is not sold throughout another standard/ system (including public system if any exist in the country). This could be done by requesting an engagement letter to the other standards/ systems to confirm that the project is not subject of credit carbon selling through their system.

3.1.9 Transparency

Transparency is clearly linked to verifiability.

All documents, procedures, templates and reports for each project should be published.

The stakeholders should be consulted for the elaboration of the core documents, procedures and methodologies of the ASES system but also during verification and validation of projects.

A platform as detailed in the chapter "procedures for reporting audit result" should be designed.

For a better a clearer communication with the stakeholders and the buyers it is better to systematically use the unit Tons of CO₂ equivalent: "TCO₂ éq."

3.2 Challenge on the tools

3.2.1 Tools for preliminary studies

The ASES standards uses a lot the satellite imagery to evaluate and monitor the projects, which is a very good approach. In order to detect potential ecological in the preliminary analysis the tools such as GLOBAL FOREST WATCH MAP (figure 2)⁶ or WWF Deforestation map⁷.

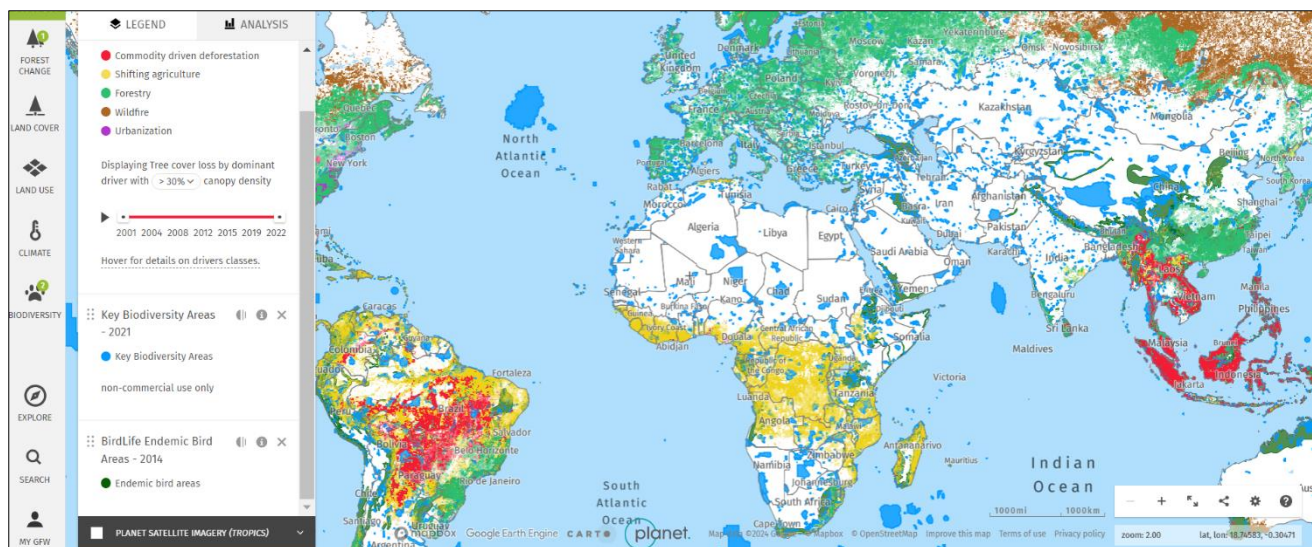


Figure 2 : Example of image obtain combining deforestation layer with high biodiversity layers, using Global Forest Watch map.

Other tools should be requested. For France for example the project about Victoria Miyawaki Forest mentions Corine Biotope to define habitats which is the right tool for France. But to define potential ecological issues in order to make sure that the project doesn't threat potential habitats or species data from INPN⁸ should be used. For example, the map as shown in figure 3 could be elaborated for the Victoria Miyawaki forest project.

⁶ <https://www.globalforestwatch.org/map/>

⁷ <https://panda.maps.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=e7415ab9256949e4994f711a99cac758>

⁸ <https://inpn.mnhn.fr/accueil/index>

3.2.2 Tools used for reporting and monitoring

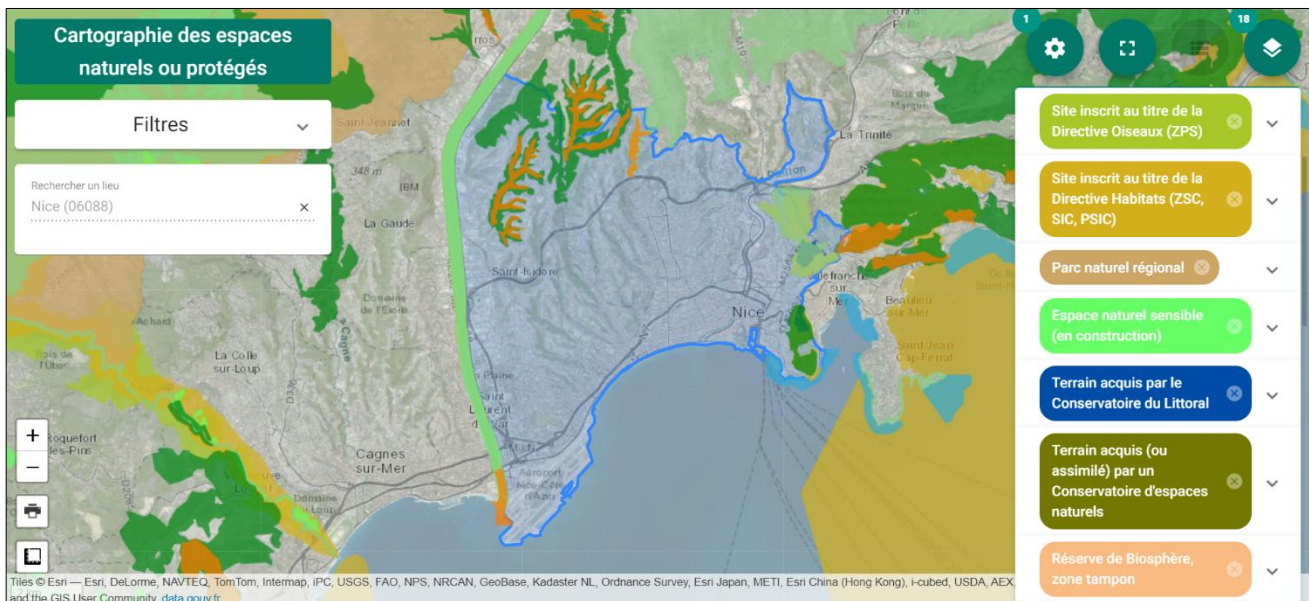


Figure 3 : Example of map elaborated to detect potential ecological issues to take into account before the project implementation.

The template for audit is fully compliant with a certification system, but an Excel table document could be created with the formulas entered into the template in order to be able to have automatic calculation by entering the data collected from the project. A “spreadsheets” is mentioned in the document “Ases On Chain Protocol V2.0 Procedures” but the content of this document was not available for review.

A monitoring system using satellite images is also a very good tool, but annual field visit should be requested for the first five years and one visit every 5 years from year 5 seems need in a context of potential drastic change in environmental and climate context. It is clear that “yearly field visits” have been planned for Miyawaki Forest Victoria⁹ but it is not clear in the standard whether this is a requirement for all the projects.

⁹ Monitoring Plan LT-001-VMF-112022

3.3 Critical review of the project verification scheme by ASES – Support on the qualification of auditors

3.3.1 Criteria for choosing the qualification of auditors and Auditor training methods

Auditors should be at least **qualified as auditor for forestry evaluation** (as ISO 19011 requirements are requested for such qualification). This should be the minim criteria requirement with additional ones regarding the experience and the initial qualification:

1. Tertiary education (college or university qualification) in a relevant discipline (e.g. ecology, forestry, sociology, economics, anthropology) and ;
2. Three (3) years of professional experience in Carbon projects and;
3. Three (3) years of professional experience in ecosystem services (Biodiversity, Water, Soil) and;
4. ASES training on relevant documentation and tools.

A data base of qualified audits should be created. The auditors must receive qualification according to point 3 of the criteria. For example, a specialist in Water services could not evaluate a project claiming Verified Biodiversity Based Credit. One auditor can have more than one "qualification scope".

Auditor performance should be evaluated following a proposed scenario:

1. Initial evaluation of the auditor's performance during the first audit;
2. Evaluation of the auditors' performance every five years.

The evaluation of the auditor's performance should be carried out by a qualified auditor and a report of the performance should be recorded including a decision on issuance and maintenance of qualification.

3.3.2 Definition of audit rules, methods of carrying out audits (documentary, field) and audit grids

The template for project validation report has been evaluated.

The sampling methods used for evaluation should be described in a specific section of the report.

In the report the method for calculation of carbon emissions should have bigger place to show the calculation method and justification of the data used in the report.

In the audit/ verification report all the validation points as detailed in the document "Procedure" should be reported for evaluation:

- Validation of the quarterly and annual reports stipulated in the Monitoring Plan;

- Validation of the implementation of the project as reported in the registered PSF;
- Validation of the risk mitigation measures according to the management plan;
- Validation of the safeguards regarding protection against negative impacts to ecosystems or society;
- Validation of monitoring reports.

The report should also add a section for description of stakeholder feedback (in a general manner) and how the feedback from stakeholders have been addressed.

Moreover, if ASES wants to be align with ISO 19011 audit requirements, the report should add sections to provide justifications (on which elements, such as documents, interview or observations, the auditor base its evidence of compliance and evidence of non-conformities).

3.3.3 Detail of requirements and/or implementation/recording of evidence

The ASES system should include requirements for recognition of the verifiers such as:

- To have the capacity for realisation of verifications;
- To have set up a system of qualification of auditors according to the defined rules presented in chapter 3.3.2;
- To be ASI or COFRAC accredited;
- To have set up rules to ensure impartiality of the auditors;
- To have set up a system of review of audit reports and certification decisions;
- To have clear rules for the assignment of decision makers and technical reviewers of the verification reports (the technical reviewer and certification decision maker could be the same person);
- To have set up clear requirements for stakeholder consultation, for identification of audit team and audit duration for the realisation of the verifications.

The audit reports and all procedures and information about auditors should be maintained recorded for at least 10 years.

The audit internal rules should clearly request auditors to collect evidence and justify compliance with the requirements of the methodologies to claim carbon, soil, water or biodiversity credits.

The verification body should publish the list of qualified auditors and make sure that this list is updated at least every years.

A complaints and appeals process and a procedure to manage it should be publicly available. The complaints could be any feedback from stakeholders raising issues regarding the respect of the procedures or issues regarding credibility of the credit verified. The appeals could be any request of the project owner to revise the decision on its project

or any request about the amount calculated credits. The procedure should describe what would be accepted as complaint and what would be accepted as appeal.

3.3.4 Procedures for reporting audit results

In the document « Manual » it is explained that the audit report will be publicly available but a public platform with the records of all the project unique code with the report, information and geographical location should be available as proposed in figure 4.

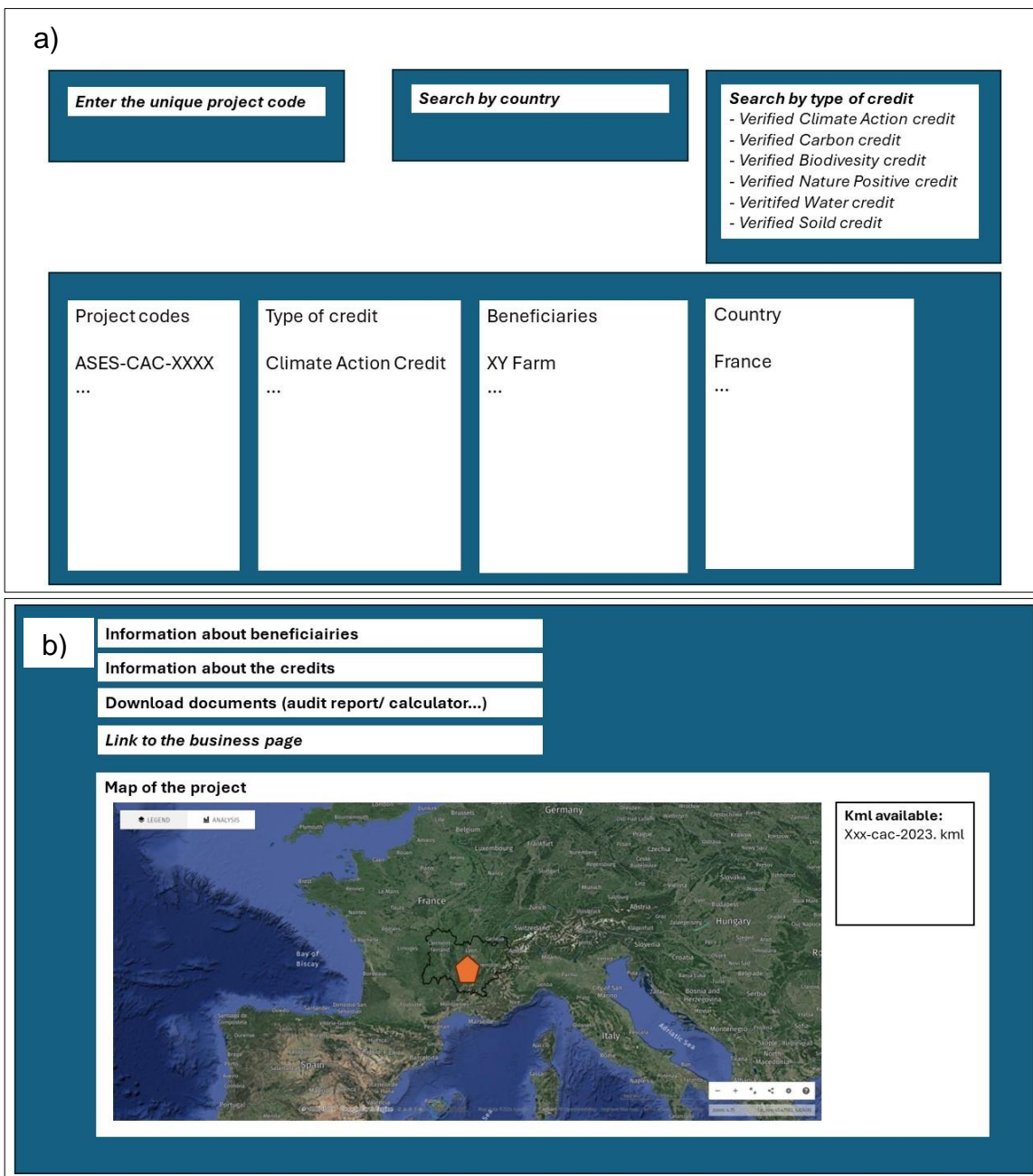


Figure 4 : a) Example of public platform for data centralization about all the projects
b) Example of view when selecting a specific project.

There is a webpage dedicated to buyers to buy credits for a specific project, but it should be also a dedicated page for all stakeholders with all information easily accessible in order to give information about the projects. A link to the market page for each project could be also added.

By using this system, it is also a guarantee for not doubling counting as the map could show at the same time all the projects selling carbon, biodiversity, water or soil credits. Different colour per type of credits could be used to easily differentiate on the map and allow superposition of colours in only one shape in case of one project sells carbon and other type of credits.

3.3.5 Procedures for processing audits and certification decisions.

The audit process for verification of the project should be clearly indicated in the procedure of the verification body and subject to annual review by an accreditation body, based on ISO 1721 standard.

The audit process and certification decision should be split into different steps as proposed in figure 5.

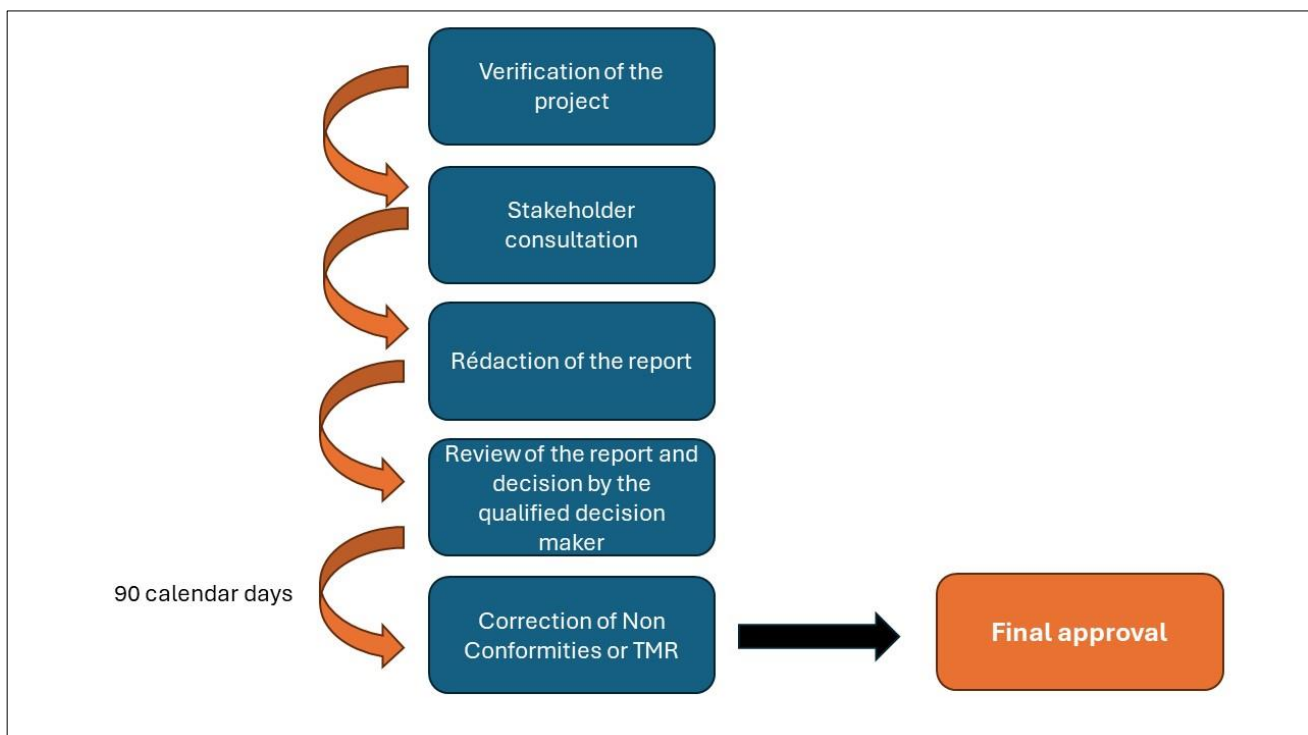


Figure 5 : Proposal for the audit process and certification decision.

4. GENERAL CONCLUSIONS

The system designed by ASES is very robust and includes relevant additional credits according to evaluation of biodiversity, water and soil for valorisation of ecosystem services. Scientific data and precautionary approach for the calculation of credits are used.

The general comparative analysis has given a score of 53 for all the criteria evaluated as described in the table 4. This makes this system equivalent to a Gold Standard system and can be used for issuance of Carbon credits but also biodiversity-based, water and soil credits.

Criteria	Score of ASES system
Financial additionality	0
Legal additionality	4
Environmental additionality	2
Permanence	3
Externalities	4
Double-counting vs uniqueness	2
Accuracy	3
Water (cf Methodology on Water)	3
Biodiversity (cf Methodology on Biodiversity)	4
Soil maintenance and restoration (cf Methodology on soils)	3
Stakeholder engagement	4
Social criteria in "no controversial credits"	3
Measurable	3
Verifiable	3
Efficiency	3
Additionality	3
Uniformity	3
Certification process	3

Table 4: Result of comparative analysis of ASES' system performance for all criteria.

In order to be a strong Carbon and other ecosystem services certification system, some opportunities for improvement have been identified. The biggest part for improvement detected is regarding the certification process.

In this sense two scenarios are possible.

- A certification system which is similar to forest management certification systems and ISO 19011 auditing technics;
- A certification system similar to others Carbon credit systems such as VERRA or Gold Standard.

These two scenarios are described in the figure 6.

SCENARIO 1: certification process similar to Forest management certification systems

- Processus for validation of methodologies which involves at least a stakeholder consultation of 60 days and publication of the draft for comments;
- A detailed standard for the criteria of recognition of the validation (certification) bodies and rules for impartiality management with an accreditation system by ASI or COFRAC;
- A standard to describe the qualification criteria of the verifiers (auditors) and a process to qualify and monitor the performance regularly according to ISO 19011 technics;
- Audit planned every year.
- Complaints and appeals process

SCENARIO 2: certification process similar to VERRA or GOLD STANDARD

- Processus for validation of methodologies which involves stakeholders consultation;
- A detailed standard for the criteria of recognition of the independent validation (certification) bodies no external accreditation needed, only own accreditation system and recognition by ASES with a list of verification bodies is published on ASES's website;
- A standard to describe the qualification criteria of the verifiers (auditors);
- Audit planned every five years.

Figure 6 : Two possible scenarios for the certification system.

In any case, additionally to the certification/ accreditation process, the percentage attributed as "buffer credits" and criteria for initial evaluation/ eligibility criteria and risk assessment should be revised.

Additionality criteria and baseline scenario and units used for Carbon removals credits should be also revised.

5. APPENDICES

Appendix 1 : Evaluation ASES system NOV 2023