SustainCERT's core feedback to the draft standard is as follows: the draft standard misses the opportunity to unlock the potential of digitization to scale credible climate action in a cost-effective, accelerated way.

Draft Standard relies on Conventional Validation and Verification

We recognize that the draft Standard is designed to ensure art 6.4 activities have real and credible climate impact. The role of third party audits is crucial to the credibility of the art 6.4 mechanism. We recognize that art 6.4 Standard promotes best practices of conventional validation and verification (V&V) activities. Conventional V&V activities are performed by human experts -auditors- that gather and analyze information to assess impact of art 6.4 project. Conventional V&V activities have demonstrated some persistent weaknesses. They

• rely heavily on manual processes that can be costly and error prone.

• are labor intensive and time consuming. Current processes are too long to deliver the climate action the carbon market was created to deliver

• are difficult to scale because of dependence on limited human resources

While digitization is changing carbon markets

We experience everyday how the power of computers and data science make our life easier. This power is changing how participants in the carbon market operate. Digitization is changing the way projects are designed, implemented and monitored. As a consequence digitization also changes the way validation and verification can be done.

The major standards in the voluntary carbon markets Verra and Gold Standard recognize the importance of digitization. Verra launched Digital Monitoring, Reporting and Verification (DMRV) working group in January 2022 and will publish DMRV guidelines later this year New Digital MRV Working Group: Invitation to Apply - Verra. Verra works to digitize the project cycle Verra Launches First Step of Digital Platform for Climate, Sustainability Projects - Verra Gold Standard did the same Digitising MRV | The Gold Standard. SustainCERT works closely with Verra and Gold Standard to unlock the value of digitization for carbon markets. We are part of DMRV working groups.

The benefits of digitization

Digital technologies provide the opportunity to improve integrity in carbon markets and benefits such as:

• Stronger predictability – less human and data error, automatic data flow.  Near real-time insight into data quality and performance

• Increased data quality – data science detects inconsistencies and outliers.  All monitoring data is verified and used for ER calculation. Example, an auditor will spend 1 day to check 1% of a large data set, while an algorithm will take 1 minute to check 100% of the data.

• Higher credit issuance frequency – more flexibility for project developers to choose multiple monitoring periods per year

• Increased process efficiency – faster onboarding process, reduced workload for project developers and auditors. Verification report available after monitoring period in near real time.

Digital documents, digital meters, cloud based data management, algorithms, automated workflows, real time dashboards change how projects are designed, implemented and monitored. World Bank Publication: Digital Monitoring, Reporting, and Verification Systems and Their Application in Future Carbon Markets

SustainCERT has run digital verification pilots with renewable energy projects for 1.5 year. The results of our renewable energy pilots show digital monitoring, reporting and verification is faster, cheaper and better than conventional MRV. Automated workflows and data management reduce the need for manual labor, making it less error prone, leveraging the processing power of computers to check the quality of large data sets.

A DMRV readiness assessment by Gold Standard DMRV working group shows that the use of these digital tools is well established in the energy and industrial sectors. It is upcoming in community services (cookstoves) and land use and forestry.

How draft Standard can facilitate the evolution of digital carbon market.

Validation and verification are a crucial link in the evolution of digital carbon markets. Art 6.4 Standard may facilitate or hinder the emergence of a digital carbon market.

Art 6.4 Standard may facilitate the evolution of a digital art 6.4 carbon market if

•        Digital validation and verification are explicitly recognized as a credible alternative to conventional validation and verification, (similar to annex 1 Guidance on remote inspection as an alternative means to an on-site inspection)

•        Allow for changes to the project cycle,  such as real time issuances based on digital verification of GHG data.

•        Allow for digital verification of data that is digitally monitored and reported by activity participant and decoupling from verification of non GHG data

•        Allow for remote inspection of projects that are digitally verified.

The emergence of digital carbon market would also mean a rethinking of roles and responsibilities between activity participants, DOE and Standard body. Digital integration creates the possibility for activity participants to share monitoring data in real time with the DOE. Emission reduction calculations would be done by the DOE with the verified data.

SustainCERT published PRINCIPLES FOR BEST-PRACTICE DIGITAL VERIFICATION. If so invited, we are eager to contribute to the drafting of art 6.4 Standard with our expertise and experiences with digital validation and verification.

About SustainCERT

SustainCERT is an established accredited verifier with a track record in climate impact project verification.

Our verification services align with ISO requirements, ensuring that our processes meet the highest level of credibility and integrity in assessing emission reductions and removals.

ISO accredited: We are an approved validation and verification body (VVB) for Verra's Verified Carbon Program, accredited under ISO 14065: 2013, greenhouse gases by ANAB. This ensures our processes meet the highest level of credibility and integrity.

We are an official certification body for Gold Standard.

Climate expertise: Our validation & verification team's extensive knowledge of carbon markets, deep climate expertise and rigor ensure a reliable and expert verification service – one that meets the needs of carbon project developers.