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**28. October 2022**

**Opinion on**  
***Conditions for consenting to tokenisation of Gold Standard-issued credits***

- *Do you agree that Gold Standard should explore and enable organisations to create digital tokens representing Gold Standard credits, using blockchain technology? Why?*

Yes. Blockchain is an innovative technology that uniquely enables fast, cheap, and almost arbitrarily divisible transactions. It is the only technology that allows for public verification of issuance volumes and individual transactions. However, due to the fact that at the current moment carbon credit registries are working on centralized systems, all existing blockchain solutions are simply adding an additional layer of complexity.

The goal of any technology innovation in the voluntary carbon credit market should be to provide additional liquidity and funding for project development. So far the existing initiatives in the digitalization/tokenization of carbon credits (combined with a lack of regulation) have led to a fragmentation with inexperienced players and hence an even less efficient carbon credit market. This has been associated with an increase in production costs of generating carbon credits ("Crypto money chasing deals in the forest") which did not result in an improvement but rather in a worsening of funding conditions for project developers. In addition, some activities of the early players of the crypto carbon space have spurred wide negative press coverage (e.g., "Wolf of Amazon", "WeCrash", "Hedge Fund of carbon credits") harmful to the reputation of the whole voluntary carbon market.

Therefore any exploring activities of Gold Standard with respect to endorsing and enabling organizations to create digital carbon credit tokens need to evaluate the potential economic and reputational impact on the voluntary carbon market. A sound regulation of carbon credit token issuance by Gold Standard could mitigate these reputational risks while allowing to benefit from the advantages of distributed ledger technologies. A passive stance on the side of Gold Standard will not inhibit the issuance of carbon tokens, still exposing Gold Standard to reputational risks beyond their control.

- *Do you consider there to be potential advantages or disadvantages for your organisation if this were enabled?*

No.

- *Would you like to share any additional comments not covered by questions included in this consultation?*

The economics and the microstructure of the voluntary carbon market is deeply related to all questions raised in this consultation. This has a direct impact on the prices, volume, and liquidity of carbon credits. However, economic and market-design aspects of carbon credit tokenisation are neither sufficiently covered in the questions of this consultation nor in the composition of the participants of the Working group on “Digital Assets for Climate Impact”. A Tokenisation approach based entirely on technical considerations and the needs of issuers raises the risk of a sub-optimal market design and less-than-achievable funding available for climate projects.

- *Do you consider there to be uses of blockchain technology that should be distinguished and treated differently from others?*

No.

## 1.1 MODEL

- *Do you consider the custodial account model to be workable in the short-term while other solutions are explored?*

Yes, but only for a transitory period with a possible grandfathering rule for the tokenisation of existing “vintage” carbon credits.

- *Do you consider it appropriate for Gold Standard to explore ‘native tokenisation’ in the future?*

Yes, in order to exploit the full benefits of blockchain technology, Gold Standard should move its whole registry on chain. For buyers of carbon credits who require non-digital assets, tokenized carbon credits could be securitized as an additional service.

- *Would you like to share any additional comments on this topic?*  
No.

## 1.2 HOLDING, RETIREMENT AND REPORTING

- *Do you consider these proposals to be workable and proportionate?*

No. All of these complicated proposed rules would not be necessary, if Gold Standard would move its entire registry on chain and do “native tokenization”. The task of “de-tokenisation” could simple be achieved by securitization of native digital carbon credits.

- *What do you consider to be an appropriate timeframe in which retirements must be made on the Gold Standard Registry, following their retirement on a third-party platform?*

Not relevant in the case of “native tokenization”.

- *We are aware that some organisations may wish to create and market tokens that represent fractional portions of one carbon credit. Do you have experience or ideas for how requirements may need to vary in such cases, for instance related to retirement in the Gold Standard Impact Registry?*

Again, in the case of “native tokenization” by Gold Standard, fractional tokens and the retirement thereof would be an integral part of any standard implementation.

- *Would you like to share any additional comments on this topic?*

No.

### 1.3 POOLING

- *Do you think that Gold Standard should consider restrictions on the ability of organisations to pool its issued credits with credits from other standards. Why?*

Yes, pooling should be regulated in a sound way.

Mass adoption of voluntary carbon credits will only be possible if standardized financial products, especially futures, are offered. For the buyer (usually large corporations) these standardized products should behave mostly like standardized commodity futures (oil, wheat, gold), which help to streamline procurement processes and mitigate risks. We expect this will lead to strong demand from large volume buyers. The level of permissibility and flexibility of pooling rules will determine whether pools endorsed by Gold Standard or other other organizations will attract this business. Financial exchanges very often have a winner takes it all economics, hence the largest and most widely accepted token will probably take most market share.

Pooling in financial markets such as asset-backed securities (e.g., CDOs or mortgage-backed securities) is a trade-off between the negative effect of adverse selection of bad assets into the pool (“market for lemons”) and the positive effect of portfolio diversification. For example, the pooling of mortgage loans into different tranches assumes the benefit of lower uncorrelated default risk in comparison to the original loans. However, with carbon credits no such financial diversification benefits exist, except for increased liquidity. The pooling of carbon credits should therefore be regulated stricter in comparison.

- *If the answer to the above question is yes, do you have views on how any restrictions could operate?*

Carefully analyzing the dynamics and (positive or negative) experiences of the credit rating industry (in particular, their role in the subprime mortgage crisis) should give guidance on how the carbon credit market should and should not regulate pooling. The mutual recognition of Gold Standard and other standard validation criteria in joint pooling initiatives could be a viable path to be taken.

- *Would you like to share any additional comments on this topic?*

No.

## 1.4 DUE DILIGENCE

- *Is it sufficient for organisations intending to create original on-chain representations of Gold Standard credits to undergo our existing KYC checks, or should further due diligence requirements be introduced? If so, for whom?*

In our opinion, KYC of buyers of tokenized carbon credits is beyond the scope of Gold Standard.

- *Do you think that Gold Standard should introduce requirements related to the due diligence checks that organisations creating digital tokens representing Gold Standard credits apply for their own users?*

No. In our opinion, KYC of buyers of tokenized carbon credits is beyond the scope of Gold Standard.

- *Are there examples from other sectors that you believe could be learned from?*

Complying with the laws to be applied should be sufficient. Learning from other sectors might not be useful as other sectors might be regulated differently.

- *Would you like to share any additional comments on this topic?*

No.

## 1.5 SUSTAINABILITY

- *Do you agree that Gold Standard should apply restrictions related to the emissions footprint of blockchain technologies?*

Yes. Gold Standard should only approve energy-efficient blockchain technologies that apply a proof-of-stake mechanism at least.

- *Do you consider these proposals to be workable and, if not, why?*

No. Ideally Gold Standard should ensure that digital tokens exist only on a blockchain that is carbon-neutral (e.g. Algorand). In cases where a blockchain is proof-of-stake but not carbon-neutral, at least one independent, peer-reviewed analysis should demonstrate that the blockchain is 100% offsetting their emissions footprint.

- *Do you consider these proposals to be sufficient and, if not, why?*

No. See above.

- *Are you aware of, or would you recommend, a benchmark that Gold Standard could use to determine whether blockchain technologies have a sufficiently low emissions footprint for consent to be granted?*

Carbon neutrality should be the benchmark in order to preserve credibility of Gold Standard.

## 1.6 DATA SECURITY

- *Do you agree that Gold Standard should either introduce conditions or require information related to the IT security measures that an organisation is taking to protect data against breaches?*

No. This is beyond the scope of Gold Standard.

- *If so, do you have views or recommendations on what Gold Standard should require?*
- *What are the primary risks that you believe Gold Standard should consider when writing its requirements on this topic?*

- *Are there benchmarks, good practice codes or similar reference points for IT security requirements that you would recommend Gold Standard following or taking into account?*

## 1.7 PERMITTED UNITS

- *Do you agree with the proposal not to initially permit the tokenisation of these categories of credit, until tailored safeguards are developed?*

No. In general, if sound regulation and principles permit for the tokenization of VERs, there is no reason why those same principles and safeguards could not be applied to other categories of carbon credit. On the contrary, this may further enhance the necessary liquidity of the voluntary carbon market.

- *Do you believe there are other types of carbon credits that Gold Standard should consider creating tailored safeguards for? If so, why?*

Yes. See above.

- *Would you like to share any additional comments on this topic?*

No.

## 1.8 REPUTATIONAL HARM

- *Do you consider Gold Standard's existing conditions related to reputational harm to be suitable for the act of creating digital tokens representing Gold Standard credits?*

A sound regulation of carbon credit token issuance by Gold Standard can mitigate reputational risks while allowing to benefit from the advantages of distributed ledger technologies. A passive stance on the side of Gold Standard will not inhibit the issuance of carbon tokens, still exposing Gold Standard to reputational risks beyond their control.

Terms and conditions would be easier to enforce, if Gold Standard would move its entire registry on chain and perform "native tokenization".

- *If not, what amendments or additions do you believe are needed?*
- *Would you like to share any additional comments on this topic?*