Analysis of the sustainability disclosures under MiCA

Cécile Henry
General Manager, CLR & Co-Founder

Foreword

Reminders

The Markets in Crypto-Assets Regulation (MiCA) introduces sustainability regarding ESG (Environmental, Social, and Governance) disclosure requirements for Crypto-Asset Service Providers (CASPs) and issuers. These requirements aim to enhance transparency and accountability regarding the environmental impacts in the crypto-assets market and align it with broader European sustainability initiatives like the Corporate Sustainability Reporting Directive (CSRD) and Sustainable Finance Disclosure Regulation (SFDR).

Background and legal basis – MiCA, Recital (7)

«The consensus mechanisms used for the validation of transactions in crypto-assets might have principal adverse impacts on the climate and other environment-related adverse impacts. Such consensus mechanisms should therefore deploy more environmentallyfriendly solutions and ensure that any principal adverse impact that they might have on the climate, and any other environment-related adverse impact, are adequately identified and disclosed by issuers of crypto-assets and crypto-asset service providers. When determining whether adverse impacts are principal, account should be taken of the principle of proportionality and the size and volume of the crypto-asset issued»

Key Requirements

Scope and Applicability

MiCA applies to both EU-based and non-EU CASPs offering services within the EU market.

The regulation mandates that CASPs must display sustainability disclosure information prominently on their websites for all crypto-assets for which they provide services.

Disclosure requirements

CASPs are required to calculate and disclose sustainability indicators based on the annual energy consumption of each crypto-asset and the type of service provided.

Disclosure must include information on the principal adverse impacts on the climate and other environment-related impacts of the consensus mechanism used to issue the crypto-assets.

Sustainability indicators have to be reviewed at least annually and in case of material changes which means the obligation to have annual updates and continuous monitoring.

Implementation Timeline

The sustainability disclosure requirements for issuers of asset-referenced tokens (ARTs) and e-money tokens (EMTs) took effect on June 30, 2024, while those for other crypto-assets and CASPs will apply from December 30, 2024.

Sustainability indicators required for crypto-assets under MiCA

MiCA requires several specific sustainability indicators for crypto-assets and crypto-asset service providers (CASPs).

Mandatory indicators

Basic Disclosure (for all crypto-assets)
Energy consumption in kWh and sources/methodologies used to calculate it.

Enhanced Disclosure (for crypto-assets consuming over 500,000 kWh per year)

1. Energy consumption
2. Non-renewable energy consumption
3. Energy intensity
4. Scope 1 GHG emissions (controlled)
5. Scope 2 GHG emissions (purchased)
6. GHG intensity
7. Generation of waste electrical and electronic equipment (WEEE)
8. Non-recycled WEEE ratio
9. Generation of hazardous waste
10. Impact of equipment use on natural resources

Optional Supplementary Disclosures

- Energy mix
- Energy use reduction
- Scope 3 GHG emissions (and targets/commitments)
- Waste (including electrical waste)
- Impact on natural resources (and targets/commitments)
- Water usage

Disclosure Requirements for CASPs

CASPs must disclose information on their websites about all crypto-assets for which they provide services, including:

- Consensus mechanism details
- Mandatory key indicator information related to energy consumption
- Sources of disclosure content (white papers, third parties, etc.)

Sustainability indicators required for crypto-assets under MiCA

Implementation Considerations

The sustainability disclosure requirements apply differently based on the type of crypto-asset: For Asset-Referenced Tokens (ARTs) and E-Money Tokens (EMTs): Effective from June 30, 2024

For other crypto-assets and CASPs: Effective from December 30, 2024

ESMA has provided guidance on calculation methodologies, often referring to the European Sustainability Reporting Standards (ESRS) for many key indicators.

There are challenges in implementing these requirements, including technical difficulties in measuring energy consumption accurately and potential gaps in data availability, especially for existing crypto-assets without readily identifiable issuers.

These sustainability indicators aim to provide transparency on the environmental impact of crypto-assets, particularly focusing on energy consumption, greenhouse gas emissions, and waste generation associated with their creation and maintenance.

Additional Elements

Challenges and Considerations

Measuring energy consumption accurately poses technical challenges, which may increase compliance costs.

The regulation encourages innovation towards more energy-efficient technologies, potentially influencing investor behavior by attracting environmentally conscious investors.

Regulatory Developments

ESMA has submitted draft regulatory technical standards (RTS) detailing the content, methodologies, and presentation of sustainability indicators. These standards are pending adoption by the European Commission.

There is an emphasis on aligning MiCA's sustainability disclosure requirements with other EU regulations like the Corporate Sustainability Reporting Directive (CSRD) and the ESG (Environmental, Social and Governance) indicators.

Potential Solutions

Wide-scale voluntary cooperation among CASPs is suggested to address potential gaps in data availability for compliance with website disclosure obligations.

The regulation's framework might drive the industry towards adopting more sustainable practices, thereby contributing to a more resilient crypto ecosystem in the long term.

SOURCES :
https://www.esma.europa.eu/sites/default/files/2024-07/ESMA75-453128700-1229_Final_Report_MiCA_CP2.pdf

https://www.esma.europa.eu/sites/default/files/2024-07/ESMA75-453128700-1229_Final_Report_MiCA_CP2.pdfpp. 189-196

Additional Elements

Useful elements of ESMA's final report Draft Technical Standards specifying certain requirements of the Markets in Crypto Assets Regulation (MiCA) - second package

25. The below table summarises the approach in revised draft RTS compared to the approach proposed in the Consultation Paper.

Entity in scope	Draft RTS	Revised draft RTS
Person drafting crypto-asset white paper	10 mandatory indicators for all crypto-assets	1 mandatory key indicator and 5 supplementary key indicators for crypto-assets whose consensus mechanism consumes more than 500 000 kWh per year 1 mandatory key indicator for crypto-assets whose consensus mechanism consumes less than 500 000 kWh per year
CASPs providing one or more of the following services: **- Operating a trading platform,** **- Exchanging crypto-assets for funds or** **- Exchanging crypto-assets for other crypto-assets**	10 mandatory indicators for all crypto-assets in relation to which services are provided	1 mandatory key and 5 supplementary key indicators in relation to all crypto-assets whose consensus mechanism consumes more than 500 000 kWh per year, 1 mandatory key indicator in relation to crypto-assets whose consensus mechanism consumes less than 500 000 kWh per year
CASPs only providing services other than those listed above	10 mandatory indicators for all crypto-assets in relation to which services are provided	1 mandatory key indicator for all crypto-assets in relation to which services are provided

Additional Elements

ANNEX

Template for the presentation of the information on principal adverse impacts on the climate and other environment-related adverse impacts in the crypto-asset white paper and on the website of a crypto-asset service provider

Table 1

Legend for Tables 2, 3 and 4

SYMBOL	DATA TYPE	DEFINITION
{DATEFORMAT}	ISO 8601 date format	Dates shall be formatted in the following format: YYYY-MM-DD.
{DECIMAL-n/m}	Decimal number of up to n digits in total of which up to m digits can be fraction digits	Numerical field for both positive and negative values. Decimal separator is '.' (full stop); Negative numbers are prefixed with '-' (minus); Values are rounded and not truncated.

Table 2

Mandatory information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism

N	Field	Content to be reported	Format and standards to be used
General information			
S.1	Name	Name reported in field A.1, B.2 or C.1 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms and templates for the crypto-asset white paper], in field A.1 of table 3 or table 4 of that Annex, or name of the crypto-asset service provider	Free alphanumerical text
S.2	Relevant legal entity identifier	Identifier referred to in field A.2, B.3 or C.2 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms and templates for the crypto-asset white paper], in field A.3 of table 3 or table 4 of that Annex, or identifier of the crypto-asset service provider referred to in Article XX of the [Delegated Regulation (EU) 2024/XXX on authorisation of crypto-asset service providers]	Free alphanumerical text
S.3	Name of the crypto-asset	Name of the crypto-asset, as reported in field D.2 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms and templates for the crypto-asset white paper], in field B.1 of table 3 or table 4 of that Annex, where relevant	Free alphanumerical text

Additional Elements

S.4	Consensus Mechanism	The consensus mechanism, as reported in field H.4 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms, formats and templates for the crypto-asset white paper], in field E.4 of table 3 of that Annex, in field E.5 of table 4 of that Annex, where relevant, including the information referred to in Article 6(1), point (b) of this Regulation.	Free alphanumerical text
S.5	Incentive Mechanisms and Applicable Fees	Incentive mechanisms to secure transactions and any fees applicable, as reported in field H.5 of table 2 of the Annex II to the [Implementing Regulation (EU) 2024/XXX on standard forms and templates for the crypto-asset white paper], in field E.5 of table 3 of that Annex, in field E.6 of table 4 of that Annex, where relevant. For persons drafting a crypto-asset white paper pursuant to Articles 6, 19 or 51 of Regulation (EU) 2023/1114, the information may be provided by including a cross-reference to the aforementioned fields.	Free alphanumerical text
S.6	Beginning of the period to which the disclosure relates	Beginning of the period to which the disclosure relates	{DATEFORMAT}
S.7	End of the period to which the disclosure relates	End of the period to which the disclosure relates	{DATEFORMAT}
Mandatory key indicator on energy consumption			
S.8	Energy consumption	Total amount of energy used for the validation of transactions and the maintenance of the integrity of the	Amount in kilowatt-hours (kWh) {DECIMAL-18/5}

		distributed ledger of transactions, expressed per calendar year	
Sources and methodologies			
S.9	Energy consumption sources and methodologies	Sources and methodologies used in relation to the information reported in field S.8	Free alphanumerical text

Table 3

Supplementary information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism

Supplementary key indicators on energy and GHG emissions			
S.10	Renewable energy consumption	Share of energy used generated from renewable sources, expressed as a percentage of the total amount of energy used per calendar year, for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions.	Percentage {DECIMAL-11/10}
S.11	Energy intensity	Average amount of energy used per validated transaction	Amount in kWh {DECIMAL-18/5}
S.12	Scope 1 DLT GHG emissions – Controlled	Scope 1 GHG emissions per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions	Amount in tonnes (t) carbon dioxide equivalent (CO2e) {DECIMAL-18/5}
S.13	Scope 2 DLT GHG emissions – Purchased	Scope 2 GHG emissions, expressed in tCO2e per calendar year for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions	Amount in tCO2e {DECIMAL-18/5}

Additional Elements

S.14	GHG intensity	Average GHG emissions (scope 1 and scope 2) per validated transaction	Amount in kilogram (kg) CO2e (Tx) {DECIMAL-18/5}
Sources and methodologies			
S.15	Key energy sources and methodologies	Sources and methodologies used in relation to the information reported in fields S.10 and S.11	Free alphanumerical text
S.16	Key GHG sources and methodologies	Sources and methodologies used in relation to the information reported in fields S.12, S.13 and S.14	Free alphanumerical text

Table 4

Optional information on principal adverse impacts on the climate and on other environment-related adverse impacts of the consensus mechanism

N	Field	Content to be reported	Format and standards to be used
Optional indicators			
S.17	Energy mix	Description of the relative contributions of each different primary energy source used for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, expressed as percentages	Percentage {DECIMAL-11/10}

S.18	Energy use reduction	Energy use reduction targets or commitments, expressed in absolute or relative reduction of energy use over one calendar year	Amount in kWh {DECIMAL-18/5} or Percentage {DECIMAL-11/10}
S.19	Carbon intensity	Carbon intensity of the energy used for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions	Amount in kgCO2e per kWh {DECIMAL-18/5}
S.20	Scope 3 DLT GHG emissions - Value chain	Scope 3 GHG emissions for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions per calendar year	Amount in tCO2e {DECIMAL-18/5}
S.21	GHG emissions reduction targets or commitments	GHG emissions reduction targets or commitments, expressed in terms of absolute or relative reduction in GHG emissions over one calendar year	Free alphanumerical text
S.22	Generation of waste electrical and electronic equipment (WEEE)	Total amount of WEEE generated for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions per calendar year	Amount in t {DECIMAL-18/5}
S.23	Non-recycled WEEE ratio	Share of the total amount of WEEE generated for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, not recycled per calendar year	Percentage {DECIMAL-11/10}
S.24	Generation of hazardous waste	Total amount of hazardous waste generated for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions per calendar year	Amount in t {DECIMAL-18/5}

Additional Elements

S.25	Generation of waste (all types)	Total amount of waste generated by the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions	Amount in t {DECIMAL-18/5}
S.26	Non-recycled waste ratio (all types)	Share of the total amount of waste generated for the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions not recycled per calendar year	Percentage {DECIMAL-11/10}
S.27	Waste intensity (all types)	Total amount of waste generated per transaction validated	Amount in grams (g) per Tx {DECIMAL-18/5}
S.28	Waste reduction targets or commitments (all types)	Waste reduction targets or commitments, expressed in absolute or relative reduction in waste generation over one calendar year	Free alphanumerical text
S.29	Impact of the use of equipment on natural resources	Description of the impact on natural resources of the production, the use and the disposal of the devices of the DLT network nodes	Free alphanumerical text
S.30	Natural resources use reduction targets or commitments	Natural resources use reduction targets or commitments, expressed in absolute or relative reduction in use of natural resources over one calendar year	Free alphanumerical text
S.31	Water use	Total water consumption linked to the validation of transactions and the maintenance of the integrity of the distributed ledger of transactions, expressed in cubic meters	Amount in cubic meters {DECIMAL-18/5}
S.32	Non recycled water ratio	Share of the total water consumed not recycled and not reused linked to the validation of transactions and the	Percentage {DECIMAL-11/10}

		maintenance of the integrity of the distributed ledger of transactions per calendar year, expressed as a percentage	
Sources and methodologies			
S.33	Other energy sources and methodologies	Sources and methodologies used in relation to the information reported in fields S.17 and S.18	Free alphanumerical text
S.34	Other GHG sources and methodologies	Sources and methodologies used in relation to the information reported in fields S.19, S.20 and S.21	Free alphanumerical text
S.35	Waste sources and methodologies	Sources and methodologies used in relation to the information reported in fields S.22, S.23, S.24, S.25, S.26, S.27 and S.28	Free alphanumerical text
S.36	Natural resources sources and methodologies	Sources and methodologies used in relation to the information reported in fields S.29, S.30, S.31 and S.32	Free alphanumerical text

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contact@seqlense.com
www.seqlense.com
+33 3 72 39 63 31