USD Coin (USDC)

Mandatory information on principal adverse impacts on the climate and other environment-related adverse impacts of the consensus mechanism, published under Article 66(5) of Regulation (EU) 2023/1114 (MiCA) and Commission Delegated Regulation (EU) 2025/422.

Mandatory information

- V2.0 Last updated on: 20th October 2026
- Whitepaper link: https://www.circle.com/legal/mica-usdc-whitepaper

Code	Field	Content	Source
S.1	Name	Payhound Limited	
S.2	Relevant legal entity identifier	9845001DD90AF543DC90	
S.3	Name of the crypto-asset	USD Coin (USDC)	R1
S.4	Consensus mechanism	Not applicable at token level: USDC is a token and relies on the consensus mechanisms of the networks it is issued on. These are mostly Proof-of-Stake blockchains and layer-2 networks that settle on them. Circle ceased minting USDC on Tron in February 2024 and ended support on Flow in September 2024; only redemptions remain on those networks.	R1
S.5	Incentive mechanisms and applicable fees	Each network has its own validator incentives and charges its own transaction fees, which users pay in the network's native asset (for example,	R1

		gas on Ethereum and its layer-2 networks). Circle charges no additional fee on these mechanisms.	
S.6	Beginning of the period to which the disclosure relates	2025-07-09	R1
S.7	End of the period to which the disclosure relates	2026-07-08	R1
S.8	Energy consumption (kWh per year)	76,453.68 (breakdown by network below)	R1
S.9	Energy consumption sources and methodologies	Figures are from Part G of Circle's white paper, which states that the data was provided by the MiCA Crypto Alliance with no deviations from the calculation guidance in Article 6(5) of Delegated Regulation (EU) 2025/422 [R2]. Each network's energy use is estimated from node power draw and attributed to USDC in proportion to USDC's activity on that network. The total is the sum across all 36 networks.	R1, R2

Supplementary key indicators

Code	Field	Value	How Derived	Source
S.10	Renewable energy consumption (% of	33.8%	Node locations for the 36 networks are not	R4

	total energy used per year)		published, so the 2025 global average renewables share of electricity generation is applied to all of S.8.	
S.11	Energy intensity (kWh per validated transaction)	See R1, Part G, S.11	No open source gives USDC transaction counts for Solana and Monad, which account for 69% of S.8, so this figure cannot be calculated independently. Circle publishes it per network and in total.	R1
S.12	Scope 1 DLT GHG emissions – controlled (t CO2eq per year)	0	Neither Circle nor the token operates generation assets	R1
S.13	Scope 2 DLT GHG emissions – purchased (t CO2eq per year)	32.40	Ethereum: 16,660.18 kWh × 0.301 kg CO2e/kWh (CCAF, 2.37 ktCO2e ÷ 7.87 GWh) = 5.02 t. All other networks: 59,793.50 kWh × 0.458 kg CO2e/kWh (2025 global average) = 27.39 t.	R1, R3, R5
S.14	GHG intensity (kg CO2eq per	See R1, Part G, S.14	As for S.11: depends on	R1

	validated transaction)		USDC transaction counts that are not openly available for all networks.	

Sources and Methodologies

Code	Field	Value
S.15	Key energy sources and methodologies	Energy consumption (S.8) is taken from Part G of Circle's white paper, which states that the MiCA Crypto Alliance calculated it in line with Article 6(5) of Delegated Regulation (EU) 2025/422 [R1][R2]. Each network's node energy use is attributed to USDC in proportion to USDC's activity on that network. The renewable share (S.10) applies Ember's 2025 global average renewables share [R4] because node locations are not published. Energy intensity (S.11) is Circle's published figure [R1]. No offsetting or market-based instruments are applied.
S.16	Key GHG sources and methodologies	Emissions (S.13) are location-based. For Ethereum, CCAF's network emissions-to-energy ratio is applied [R3]; for all other networks, the 2025 global average grid intensity of 458 g CO2e/kWh [R4][R5]. Scope 1 is zero. GHG intensity (S.14) is Circle's published figure [R1]. No offsetting or renewable-energy certificates are applied.

References

1. **R1** – Circle Internet Financial Europe SAS, MiCA USDC White Paper, notified to the ACPR 31 May 2024 and amended 12 September 2024, 16 December 2025, 10 July 2026 and 15 September 2026, Part G (sustainability indicators).
2. **R2** – Commission Delegated Regulation (EU) 2025/422, Article 6(5) (calculation guidance for sustainability indicators), EUR-Lex.

3. **R3** – Cambridge Judge Business School, New report maps Ethereum's climate footprint with new precision, 10 July 2026 (Ethereum 7.87 GWh, 2.37 ktCO2e).
4. **R4** – Ember, Global Electricity Review 2026 (renewables 33.8% of global electricity in 2025).
5. **R5** – Down To Earth, Clean energy meets all global power demand growth as renewables overtake coal: Ember report 2026, April 2026 (global average 458 g CO2e/kWh in 2025, from Ember).