

**White paper drafted under the
European Markets in Crypto-
Assets Regulation (EU) 2023/1114
for FFG 6T49BCSXZ**

Preamble

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01. Date of notification

2025-10-24

02. Statement in accordance with Article 6(3) of Regulation (EU) 2023/1114

This crypto-asset white paper has not been approved by any competent authority in any Member State of the European Union. The person seeking admission to trading of the crypto-asset is solely responsible for the content of this crypto-asset white paper.

03. Compliance statement in accordance with Article 6(6) of Regulation (EU) 2023/1114

This crypto-asset white paper complies with Title II of Regulation (EU) 2023/1114 of the European Parliament and of the Council and, to the best of the knowledge of the management body, the information presented in the crypto-asset white paper is fair, clear and not misleading and the crypto-asset white paper makes no omission likely to affect its import.

04. Statement in accordance with Article 6(5), points (a), (b), (c), of Regulation (EU) 2023/1114

The crypto-asset referred to in this crypto-asset white paper may lose its value in part or in full, may not always be transferable and may not be liquid.

05. Statement in accordance with Article 6(5), point (d), of Regulation (EU) 2023/1114

Since the token has multiple functions (hybrid token), these are already conceptually not utility tokens within the meaning of the MiCAR within the definition of Article 3, 1. (9), due to the necessity "exclusively" being intended to provide access to a good or a service supplied by its issuer only.

06. Statement in accordance with Article 6(5), points (e) and (f), of Regulation (EU) 2023/1114

The crypto-asset referred to in this white paper is not covered by the investor compensation schemes under Directive 97/9/EC of the European Parliament and of the Council or the deposit guarantee schemes under Directive 2014/49/EU of the European Parliament and of the Council.

Summary

07. Warning in accordance with Article 6(7), second subparagraph, of Regulation (EU) 2023/1114

Warning: This summary should be read as an introduction to the crypto-asset white paper. The prospective holder should base any decision to purchase this crypto-asset on the content of the crypto-asset white paper as a whole and not on the summary alone. The offer to the public of this crypto-asset does not constitute an offer or solicitation to purchase financial instruments and any such offer or solicitation can be made only by means of a prospectus or other offer documents pursuant to the applicable national law. This crypto-asset white paper does not constitute a prospectus as referred to in Regulation (EU) 2017/1129 of the European Parliament and of the Council or any other offer document pursuant to union or national law.

08. Characteristics of the crypto-asset

The FLOW tokens referred to in this white paper are crypto-assets other than EMTs and ARTs, and are issued on the Flow blockchain (2025-10-18, and according to DTI FFG shown in F.14) with a total number of 1,250,000,000 FLOW created in the genesis block. The first activity on the Flow network could not be fully verified through publicly accessible block explorers at the time of writing. However, according to publicly available information on the official Flow website (<https://flow.com/token-distribution>, accessed on 2025-10-22), the genesis block occurred in June 2020.

09. Information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability

Not applicable.

10. Key information about the offer to the public or admission to trading

Crypto Risk Metrics GmbH is seeking admission to trading on any Crypto Asset Service Provider platform in the European Union in accordance to Article 5 of REGULATION (EU) 2023/1114 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937. In accordance to Article 5(4), this crypto-asset white paper may be used by entities admitting the token to trading after Crypto Risk Metrics GmbH as the person responsible for drawing up such white paper has given its consent to its use in writing to the respective Crypto Asset Service Provider.

Part A – Information about the offeror or the person seeking admission to trading

A.1 Name

Crypto Risk Metrics GmbH

A.2 Legal form

2HBR

A.3 Registered address

DE, Lange Reihe 73, 20099 Hamburg, Germany

A.4 Head office

Not applicable.

A.5 Registration date

2018-12-03

A.6 Legal entity identifier

39120077M9TG001FE242

A.7 Another identifier required pursuant to applicable national law

Crypto Risk Metrics GmbH is registered with the commercial register in the the city of Hamburg, Germany, under number HRB 154488.

A.8 Contact telephone number

+4915144974120

A.9 E-mail address

info@crypto-risk-metrics.com

A.10 Response time (Days)

030

A.11 Parent company

Not applicable.

A.12 Members of the management body

Name	Position	Address
Tim Zölitz	Chairman	Lange Reihe 73, 20099 Hamburg, Germany

A.13 Business activity

Crypto Risk Metrics GmbH is a technical service provider, who supports regulated entities in the fulfillment of their regulatory requirements. In this regard, Crypto Risk Metrics GmbH acts as a data-provider for ESG-data according to article 66 (5). Due to the regulations laid out in article 5 (4) of the REGULATION (EU) 2023/1114 OF THE

EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937, Crypto Risk Metrics GmbH aims at providing central services for crypto-asset white papers in order to minimize market confusion due to conflicting white papers for the same asset.

A.14 Parent company business activity

Not applicable.

A.15 Newly established

Crypto Risk Metrics GmbH has been established since 2018 and is therefore not newly established (i. e. older than three years).

A.16 Financial condition for the past three years

Crypto Risk Metrics GmbH's profit after tax for the last three financial years are as follows:

2024 (unaudited): negative 50.891,81 EUR

2023 (unaudited): negative 27.665,32 EUR

2022: 104.283,00 EUR.

As 2023 and 2024 were the years building Software for the MiCAR-Regulation which was not yet in place, revenue streams from these investments are expected to be generated in 2025.

A.17 Financial condition since registration

This point would only be applicable if the company were newly established and the financial conditions for the past three years had not been provided in the bulletpoint before.

Part B – Information about the issuer, if different from the offeror or person seeking admission to trading

B.1 Issuer different from offeror or person seeking admission to trading

Yes

B.2 Name

Based on the publicly available information, it appears that Dapper Labs Inc. is the legal entity most likely standing behind the Flow blockchain project and, by extension, may be regarded as the issuer of the FLOW token for the purposes of this white paper.

B.3 Legal form

YG5M

B.4. Registered address

CA-BC, 565 Great Northern Way #600, Vancouver, V5T 0H8

B.5 Head office

Not applicable.

B.6 Registration date

2018-02-02

B.7 Legal entity identifier

Could not be found while drafting this white paper (2025-10-22).

B.8 Another identifier required pursuant to applicable national law

Business Number (BN): 771709318

Registry ID: BC1151627

B.9 Parent company

Not applicable.

B.10 Members of the management body

Name	Position	Business Address
Roham Gharegozlou	Chief Executive Officer, Dapper Labs	CA-BC, #600-565 Great Northern Way, Vancouver, British Columbia, Canada, V5T 0H8
Sam Gharegozlou	Director	Not applicable
David Pakman	Director	Not applicable
Hamilton Helmer	Director	Not applicable
Stephanie Lemmerman	Director	Not applicable
Info	The above information is based on publicly available sources (https://www.dapperlabs.com/board).	N.A.

B.11 Business activity

Cannot be confirmed with certainty based on the information provided while drafting this white paper (2025-10-22).

B.12 Parent company business activity

Not applicable.

Part C – Information about the operator of the trading platform in cases where it draws up the crypto-asset white paper and information about other persons drawing the crypto-asset white paper pursuant to Article 6(1), second subparagraph, of Regulation (EU) 2023/1114

C.1 Name

Not applicable.

C.2 Legal form

Not applicable.

C.3 Registered address

Not applicable.

C.4 Head office

Not applicable.

C.5 Registration date

Not applicable.

C.6 Legal entity identifier

Not applicable.

C.7 Another identifier required pursuant to applicable national law

Not applicable.

C.8 Parent company

Not applicable.

C.9 Reason for crypto-Asset white paper Preparation

Not applicable.

C.10 Members of the Management body

Not applicable.

C.11 Operator business activity

Not applicable.

C.12 Parent company business activity

Not applicable.

C.13 Other persons drawing up the crypto-asset white paper according to Article 6(1), second subparagraph, of Regulation (EU) 2023/1114

Not applicable.

C.14 Reason for drawing the white paper by persons referred to in Article 6(1), second subparagraph, of Regulation (EU) 2023/1114

Not applicable.

Part D – Information about the crypto-asset project**D.1 Crypto-asset project name**

Long Name: "Flow", Short Name: "FLOW" according to the Digital Token Identifier Foundation (www.dtif.org, DTI see F.13, FFG DTI see F.14 as of 2025-10-22).

D.2 Crypto-assets name

See F.13.

D.3 Abbreviation

See F.13.

D.4 Crypto-asset project description

According to public information available on the official website (<https://flow.com/>) and developer documentation (<https://developers.flow.com/>), Flow is a decentralized Layer-1 blockchain network developed by Dapper Labs. It operates under a modular

architecture in which the responsibilities for consensus, execution, verification, and data collection are distributed across specialized node types. Consensus is achieved through a Proof-of-Stake mechanism based on the HotStuff protocol, under which validators stake FLOW tokens to participate in block production and verification.

The native crypto-asset of the network is FLOW. FLOW is used for transaction fees, staking rewards, governance participation, and storage payments within the protocol. A total of 1,250,000,000 FLOW were created in the genesis block in June 2020 (source: <https://flow.com/token-distribution>, accessed on 2025-10-22). The overall token supply is not fixed, as new tokens are periodically issued as epoch rewards to validators and delegators. This results in a gradual increase in total supply compared to the initial genesis amount.

D.5 Details of all natural or legal persons involved in the implementation of the crypto-asset project

Name	Position	Address
Roham Gharegozlou	Chief Executive Officer and Founder of Dapper Labs	CA-BC, #600-565 Great Northern Way, Vancouver, British Columbia, V5T 0H8, Canada
Dieter Shirley	Chief Technology Officer of Dapper Labs and Chief Architect of Flow	Could not be identified.
Mik Naayem	Chief Business Officer of Dapper Labs	Could not be identified.
Dapper Labs Inc.	Core Developer and Corporate Entity Behind Flow	CA-BC, #600-565 Great Northern Way, Vancouver, British Columbia, V5T 0H8,

		Canada
Flow Foundation	Non-profit Organization Supporting the Flow Network and Ecosystem Development	Could not be identified.
Sources	https://flow.com/flow-foundation; https://www.dapperlabs.com/; https://www.dapperlabs.com/board; https://flow.com/post/meet-the-team-dieter-shirley; https://flow.com/post/meet-the-team-mik-naayem-on-startups-and-crypto-partnerships	Not applicable.

D.6 Utility Token Classification

The token does not classify as a utility token.

D.7 Key Features of Goods/Services for Utility Token Projects

Not applicable.

D.8 Plans for the token

According to the information published on the official project website (<https://flow.com/flow-roadmap>, accessed on 2025-10-22), the development of the Flow ecosystem has followed several identifiable historical milestones. The following overview summarizes past milestones and publicly communicated future plans, according to the official project documentation.

Past Milestones:

- Flow Mainnet Launch (December 2020): Creation of the Flow blockchain and issuance of 1.25 billion FLOW tokens in the genesis block.

- Crescendo Upgrade (2024-09-04): Activation of the EVM-equivalent environment alongside the native Cadence VM, enabling Solidity contracts, cross-VM token bridge, and interoperability between EVM and Cadence assets.
- Cadence 1.0 (October 2024): Deployment of Flow's upgraded native resource-oriented smart-contract language.

Future milestones:

- Forte Upgrade (2025-10-22): Major protocol upgrade introducing Flow Actions for native cross-protocol composability, Scheduled Transactions for autonomous on-chain execution, and enhanced developer tooling.

D.9 Resource allocation

According to the information published by Flow (<https://flow.com/token-distribution>, accessed 2025-10-22), the genesis block was created in June 2020 with a total of 1,250,000,000 FLOW tokens. The allocation at genesis was structured as follows: 32 % (400,200,000 FLOW) to the Ecosystem Fund, 30 % (374,800,000 FLOW) to pre-launch backers and community sale participants, 20 % (250,000,000 FLOW) to Dapper Labs Inc., and 18 % (225,000,000 FLOW) to the development team.

The Ecosystem Development Fund, administered by the Flow Foundation (the legal status and registration of the Flow Foundation could not be publicly verified at the time of writing, on 2025-10-22), is used to support network bootstrapping, developer grants, validator leases, and community growth. Tokens allocated to the development team were subject to a three-year vesting period and were fully unlocked in October 2023. Dapper Labs, as the corporate entity that funded the initial Flow technology development, holds 250 million FLOW as part of its long-term treasury.

Following the genesis event, the total FLOW supply increased gradually through the issuance of validator and delegator rewards. Approximately 5 % of the total supply is distributed annually as staking rewards. Inflation results from the minting of new coins to fund these rewards when transaction fees collected are insufficient to meet the

target reward rate. According to protocol rules, inflation $\approx 5\%$ per year under current fee conditions.

The temporary token distribution can be traced on-chain via:

<https://www.flowscan.io/account>

Investors must be aware that a public blockchain address cannot necessarily be attributed to a single natural or legal person, which limits the ability to determine precise economic control or potential future market actions. Such limitations, as well as future token unlocks or vesting changes, may affect the circulating supply and could have an impact on the token's market value.

D.10 Planned use of Collected funds or crypto-Assets

Not applicable, as this white paper was drawn up for the admission to trading and not for collecting funds for the crypto-asset-project.

Part E – Information about the offer to the public of crypto-assets or their admission to trading

E.1 Public offering or admission to trading

The white paper concerns the admission to trading (i. e. ATTR) on any Crypto Asset Service Providers platform that has obtained the written consent of Crypto Risk Metrics GmbH as the person drafting this white paper.

E.2 Reasons for public offer or admission to trading

As already stated in A.13, Crypto Risk Metrics GmbH aims to provide central services to draw up crypto-asset white papers in accordance to COMMISSION IMPLEMENTING REGULATION (EU) 2024/2984.

E.3 Fundraising target

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.4 Minimum subscription goals

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.5 Maximum subscription goals

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.6 Oversubscription acceptance

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.7 Oversubscription allocation

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.8 Issue price

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.9 Official currency or any other crypto-assets determining the issue price

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.10 Subscription fee

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.11 Offer price determination method

Once the token is admitted to trading its price will be determined by demand (buyers) and supply (sellers).

E.12 Total number of offered/traded crypto-assets

The total supply of the crypto-asset is set at 1,250,000,000 FLOW units. Following the genesis event, the total FLOW supply increased gradually through the issuance of validator and delegator rewards. Approximately 5 % of the total supply is distributed annually as staking rewards.

Inflation results from the minting of new coins to fund these rewards when transaction fees collected are insufficient to meet the target reward rate. According to the current protocol parameters, the annual inflation rate is approximately 5 % per year under existing fee conditions.

Investors should note that changes in the token supply can have a negative impact. The effective amount of tokens available on the market depends on the number of tokens released by the issuer or other parties at any given time, as well as potential reductions through token “burning.” As a result, the circulating supply may differ from the total supply.

E.13 Targeted holders

ALL

E.14 Holder restrictions

The Holder restrictions are subject to the rules applicable to the Crypto Asset Service Provider as well as additional restrictions the Crypto Asset Service Providers might set in force.

E.15 Reimbursement notice

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.16 Refund mechanism

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.17 Refund timeline

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.18 Offer phases

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.19 Early purchase discount

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.20 Time-limited offer

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.21 Subscription period beginning

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.22 Subscription period end

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.23 Safeguarding arrangements for offered funds/crypto- Assets

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.24 Payment methods for crypto-asset purchase

The payment methods are subject to the respective capabilities of the Crypto Asset Service Provider listing the crypto-asset.

E.25 Value transfer methods for reimbursement

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.26 Right of withdrawal

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.27 Transfer of purchased crypto-assets

The transfer of purchased crypto-assets are subject to the respective capabilities of the Crypto Asset Service Provider listing the crypto-asset.

E.28 Transfer time schedule

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

E.29 Purchaser's technical requirements

The technical requirements that the purchaser is required to fulfil to hold the crypto-assets of purchased crypto-assets are subject to the respective capabilities of the Crypto Asset Service Provider listing the crypto-asset.

E.30 Crypto-asset service provider (CASP) name

Not applicable.

E.31 CASP identifier

Not applicable.

E.32 Placement form

Not applicable.

E.33 Trading platforms name

The trading on all MiCAR-compliant trading platforms is sought.

E.34 Trading platforms Market identifier code (MIC)

Not applicable.

E.35 Trading platforms access

This depends on the trading platform listing the asset.

E.36 Involved costs

This depends on the trading platform listing the asset. Furthermore, costs may occur for making transfers out of the platform (i. e. "gas costs" for blockchain network use that may exceed the value of the crypto-asset itself).

E.37 Offer expenses

Not applicable, as this crypto-asset white paper concerns the admission to trading and not the offer of the token to the public.

E.38 Conflicts of interest

MiCAR-compliant Crypto Asset Service Providers shall have strong measurements in place in order to manage conflicts of interests. Due to the broad audience this white-paper is addressing, potential investors should always check the conflicts of Interest policy of their respective counterparty.

E.39 Applicable law

Not applicable, as it is referred to on "offer to the public" and in this white-paper, the admission to trading is sought.

E.40 Competent court

Not applicable, as it is referred to on "offer to the public" and in this white-paper, the admission to trading is sought.

Part F – Information about the crypto-assets

F.1 Crypto-asset type

The crypto-asset described in the white paper is classified as a crypto-asset under the Markets in Crypto-Assets Regulation (MiCAR) but does not qualify as an electronic money token (EMT) or an asset-referenced token (ART). It is a digital representation of value that can be stored and transferred using distributed ledger technology (DLT) or similar technology, without embodying or conferring any rights to its holder.

The asset does not aim to maintain a stable value by referencing an official currency, a basket of assets, or any other underlying rights. Instead, its valuation is entirely market-driven, based on supply and demand dynamics, and not supported by a stabilization mechanism. It is neither pegged to any fiat currency nor backed by any external assets, distinguishing it clearly from EMTs and ARTs.

Furthermore, the crypto-asset is not categorized as a financial instrument, deposit, insurance product, pension product, or any other regulated financial product under EU law. It does not grant financial rights, voting rights, or any contractual claims to its holders, ensuring that it remains outside the scope of regulatory frameworks applicable to traditional financial instruments.

F.2 Crypto-asset functionality

According to the official documentation (<https://flow.com/flow-tokenomics/technical-overview>, accessed 2025-10-22), the FLOW token represents the native governance crypto-asset of the Flow blockchain network. It serves as the principal medium of exchange, coordination, and security within the Flow ecosystem.

The main functions of FLOW are:

- (i) participation in network governance, including voting on protocol upgrades, ecosystem funding, and operational parameters, by staking or locking tokens to obtain voting rights;
- (ii) staking by validators and delegators to participate in the network's proof-of-stake consensus and to receive staking and delegation rewards;

(iii) payment of transaction and storage fees for on-chain operations such as smart-contract deployment, account creation, transfers, and interactions with decentralized applications;

(iv) maintaining a minimum FLOW balance in each account as a storage deposit to reserve on-chain storage capacity; and

(v) serving as a medium of exchange and collateral in decentralized finance applications and within the broader Flow ecosystem.

FLOW does not confer ownership, redemption, or profit-sharing rights in any legal entity. Its value and functionality derive exclusively from its use within the Flow network.

All functionalities depend on the continued technical operation and governance of the Flow blockchain and may evolve with protocol upgrades or governance decisions.

F.3 Planned application of functionalities

See D.8.

A description of the characteristics of the crypto asset, including the data necessary for classification of the crypto-asset white paper in the register referred to in Article 109 of Regulation (EU) 2023/1114, as specified in accordance with paragraph 8 of that Article

F.4 Type of crypto-asset white paper

The white paper type is "other crypto-assets" (i. e. "OTHR").

F.5 The type of submission

The white paper submission type is "NEWT", which stands for new token.

F.6 Crypto-asset characteristics

The FLOW tokens are crypto-assets other than EMTs and ARTs, which are available on the Flow blockchain. The tokens are fungible (up to 8 digits after the decimal point) with a total supply of 1,250,000,000 units created at genesis. The tokens are a digital representation of value used within the Flow network and have no inherent rights attached or intrinsic utility beyond their function in network operations.

F.7 Commercial name or trading name

See F.13.

F.8 Website of the issuer

<https://www.dapperlabs.com/>

F.9 Starting date of offer to the public or admission to trading

2025-11-24

F.10 Publication date

2025-11-24

F.11 Any other services provided by the issuer

It is not possible to exclude a possibility that the issuer of the token provides or will provide other services not covered by Regulation (EU) 2023/1114 (i.e. MiCAR).

F.12 Language or languages of the crypto-asset white paper

EN

F.13 Digital token identifier code used to uniquely identify the crypto-asset or each of the several crypto assets to which the white paper relates, where available

HFX40B3W9

F.14 Functionally fungible group digital token identifier, where available

6T49BCSXZ

F.15 Voluntary data flag

Mandatory.

F.16 Personal data flag

The white paper does contain personal data.

F.17 LEI eligibility

The issuer should be eligible for a Legal Entity Identifier.

F.18 Home Member State

Germany

F.19 Host Member States

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden

Part G – Information on the rights and obligations attached to the crypto-assets

G.1 Purchaser rights and obligations

The crypto-asset does not grant any legally enforceable or contractual rights or obligations to its holders or purchasers.

Any functionalities accessible through the underlying technology are of a purely technical or operational nature and do not constitute rights comparable to ownership, profit participation, governance, or similar entitlements known from traditional financial instruments.

Accordingly, holders do not acquire any claim capable of legal enforcement against the issuer or any third party.

G.2 Exercise of rights and obligations

As the crypto-asset does not establish any legally enforceable rights or obligations, there are no applicable procedures or conditions for their exercise.

Any interaction or functionality that may be available within the technical infrastructure of the project - such as participation mechanisms or protocol-level features - serves an operational purpose only and does not create or evidence a contractual or statutory entitlement.

G.3 Conditions for modifications of rights and obligations

Because the crypto-asset does not confer legally enforceable rights or obligations, there are no conditions or mechanisms under which such rights could be modified.

Adjustments to the technical protocol, smart contract logic, or related systems may occur in the ordinary course of development or maintenance.

Such changes do not alter any legal position of holders, as no contractual or regulatory rights exist. Holders should not interpret technical updates or governance-related changes as amendments to legally binding entitlements.

G.4 Future public offers

Information on the future offers to the public of crypto-assets were not available at the time of writing this white paper (2025-10-20).

G.5 Issuer retained crypto-assets

According to the information publicly disclosed by Dapper Labs Inc. (<https://flow.com/token-distribution>), the total initial genesis supply of FLOW amounted to 1,250,000,000 FLOW created in June 2020. Out of this amount, 250,000,000 FLOW (20% of the genesis supply) were allocated to Dapper Labs Inc. as the corporate entity that funded the initial development of the Flow technology. These tokens were subject to a vesting period of three years following the network launch, with full vesting completed by October 2023.

At the time of drafting, all allocations to Dapper Labs and other pre-launch participants have been fully unlocked, and the entire FLOW supply is now in circulation. No additional lock-ups or retention mechanisms are currently disclosed.

Source: Flow Token Distribution (<https://flow.com/token-distribution>), accessed 2025-10-23.

G.6 Utility token classification

No

G.7 Key features of goods/services of utility tokens

Not applicable.

G.8 Utility tokens redemption

Not applicable.

G.9 Non-trading request

The admission to trading is sought.

G.10 Crypto-assets purchase or sale modalities

Not applicable, as this white paper is written to support admission to trading and not for the initial offer to the public.

G.11 Crypto-assets transfer restrictions

The crypto-assets as such do not have any transfer restrictions and are generally freely transferable. The Crypto Asset Service Providers can impose their own restrictions in agreements they enter with their clients. The Crypto Asset Service Providers may impose restrictions to buyers and sellers in accordance with applicable laws and internal policies and terms.

G.12 Supply adjustment protocols

The Flow protocol operates under a target annual inflation rate of approximately 5% of the total token supply. If the total fees collected are insufficient to meet the target annualized 5% reward rate, the protocol mints new FLOW coins to cover the shortfall. The inflation is calculated as: $\text{Inflation (T)} = \text{Target Reward Rate (5\% of Total Supply per year)} - \text{Fees Collected during T}$. At network genesis in October 2020, a total of 1,250,000,000 FLOW coins were created and distributed among various stakeholders. Also, it is possible to decrease the circulating supply, by transferring crypto-assets to so called "burn-addresses", which are addresses that render the crypto-asset "non-transferable" after sent to those addresses.

G.13 Supply adjustment mechanisms

See G.12.

G.14 Token value protection schemes

No, the token does not have value protection schemes.

G.15 Token value protection schemes description

Not applicable.

G.16 Compensation schemes

No, the token does not have compensation schemes.

G.17 Compensation schemes description

Not applicable.

G.18 Applicable law

Applicable law likely depends on the location of any particular transaction with the token.

G.19 Competent court

Competent court likely depends on the location of any particular transaction with the token.

Part H – information on the underlying technology**H.1 Distributed ledger technology (DTL)**

See F.13.

H.2 Protocols and technical standards

The crypto-asset operates on a well-defined set of protocols and technical standards that are intended to ensure its security, decentralization, and functionality. It is running on the Flow blockchain, a Layer-1 network designed around a multi-role architecture (Collection, Consensus, Execution, and Verification nodes) and supporting both Cadence (its native smart contract language) and EVM-equivalent environments. Below are some of the key components:

1. Network Protocols

The Flow blockchain follows a decentralized, peer-to-peer (P2P) protocol that distributes responsibilities among multiple specialized node types:

- Collection Nodes aggregate and batch transactions into “collections” for efficient data transmission using the HotStuff BFT consensus algorithm.
- Consensus Nodes establish transaction ordering and finalize blocks through HotStuff-based Proof-of-Stake consensus.
- Execution Nodes perform computation of transactions, while Verification Nodes validate results.
- Access Nodes provide RPC and API endpoints for external users and developers.

In addition, Flow EVM runs fully equivalent to the Ethereum Virtual Machine, supporting Solidity smart contracts. EVM transactions are encapsulated and executed within Flow's Cadence environment, inheriting Flow's consensus.

2. Transaction and Address Standards

- Address Format: Flow addresses are 16-character hexadecimal identifiers (e.g., 0x1cf0e2f2f715450), deterministically assigned by the protocol rather than derived from public keys.
- Key and Signature Standards: Accounts support ECDSA_P256 and ECDSA_secp256k1 curves with SHA2-256 or SHA3-256 hashing for digital signatures. Multi-key and multi-signature configurations are natively supported.
- Transaction Types: Transactions consist of Cadence scripts or EVM-compatible bytecode.
- Fee Model: Each transaction includes an Execution Fee, Inclusion Fee, and Surge Factor, denominated in FLOW. Fees are proportional to computational effort and storage consumption.
- Storage Deposits: A minimum of 0.001 FLOW is required to bootstrap an account, reserving on-chain storage capacity and preventing state-exhaustion attacks.

3. Blockchain Data Structure & Block Standards

The Flow blockchain organizes data through a combination of blocks, collections, and execution receipts:

- Block Header: Contains the block ID, parent ID, height, timestamp, and a payload hash. The block ID is derived by hashing the header (including the payload hash) using SHA3-256. The payload hash itself is built from Merkle roots of collection guarantees, seals, execution receipts, and execution results.

- Finalization & Sealing: Blocks are finalized once consensus nodes agree on their inclusion via the HotStuff Proof-of-Stake consensus algorithm, and sealed once verification nodes validate execution results and sign corresponding block seals.

4. Upgrade & Improvement Standards

Flow employs the Flow Improvement Proposal (FLIP) process for protocol and language upgrades, analogous to Ethereum's EIP framework.

H.3 Technology used

The following applies to Flow:

1. Decentralized Ledger: The Flow blockchain operates as a decentralized ledger that records all token transactions, account balances, and smart contract executions. Each block contains an ordered list of transactions, identified by a cryptographic hash of its contents and linked to the parent block to preserve immutability.

2. Private key management: Each account can be associated with multiple public keys of varying weights, enabling multi-signature and key rotation features. Accounts use ECDSA with either the P-256 or secp256k1 curve for signing transactions, in combination with SHA2-256 or SHA3-256 for hashing. Users are responsible for securely managing their private keys and recovery phrases; loss of these keys results in permanent loss of access to their assets.

3. Cryptographic integrity of the network is maintained through elliptic-curve signatures and hashing functions. Each transaction and block header is hashed with SHA3-256, while signatures are verified against the corresponding public keys using ECDSA.

H.4 Consensus mechanism

Core Components of Flow's Consensus:

1. Proof of Stake with Multi-Role Architecture: Specialized Node Roles: Flow's PoS model features a multi-node architecture where node roles are divided among different types of specialized nodes, each responsible for specific tasks. This separation enhances scalability by allowing nodes to focus on particular operations, leading to efficient transaction processing and high throughput.

2. HotStuff Consensus Algorithm: Optimized for High Throughput and Fast Finality: Flow utilizes an optimized version of the HotStuff consensus protocol, which is designed to support high-speed, low-latency transactions essential for Flow's performance-oriented blockchain.

2.1. BFT Compliance: HotStuff is a BFT protocol, allowing it to tolerate up to one-third of nodes acting maliciously without compromising the network's security. This resilience ensures the network remains secure and functional, even with potential faults or dishonest nodes.

3. Leader-Based Block Proposal: Leader and Replica Nodes: HotStuff operates with a leader-based approach where a designated leader node proposes new blocks, and other nodes (replicas) validate these blocks. This method simplifies the consensus process, reducing complexity and improving efficiency.

3.1. Leader Rotation Mechanism: To prevent centralization and enhance fault tolerance, HotStuff incorporates a leader rotation system, replacing the leader if it becomes unresponsive or acts maliciously. This rotation ensures continuous network reliability and minimizes downtime.

H.5 Incentive mechanisms and applicable fees

Flow's incentive model rewards validator nodes, supports ecosystem growth, and maintains affordable fees for developers and users.

Incentive Mechanisms:

1. Staking Rewards for Specialized Nodes:

Role-Based Rewards: Validators earn Flow tokens according to their specific roles and contributions within the multi-node architecture, aligning rewards with each node's responsibilities to encourage balanced and effective network participation.

2. Transaction Fees:

Stable and Consumer-Friendly Fees: Flow's fee structure is designed for predictability, keeping transaction costs stable for both developers and users. Fees are based on transaction complexity and provide an ongoing income stream for validators.

3. Misbehavior Penalties:

Penalties for Downtime or Malicious Behavior: To maintain network stability, Flow imposes penalties on validators for misbehavior or downtime. This incentivizes high-quality validator participation and ensures consistent performance.

4. Ecosystem and Developer Support:

Dedicated Portion of Fees and Rewards: A portion of Flow's transaction fees and rewards is allocated to developer initiatives, ecosystem growth, and community engagement. This investment fosters innovation, supports long-term network health, and aligns incentives for ecosystem development.

H.6 Use of distributed ledger technology

No, DLT not operated by the issuer, offeror, a person seeking admission to trading or a third-party acting on the issuer's their behalf.

H.7 DLT functionality description

Not applicable.

H.8 Audit

Since the question of "technology" is understood in a broad sense, the answer to the question of whether an examination of the "technology used" has been carried out is "no, we cannot guarantee that all parts of the technology used have been examined." This is because this report focuses on risks and we cannot guarantee that every part of the technology used has been examined.

H.9 Audit outcome

Not applicable.

Part I – Information on risks

I.1 Offer-related risks

1. Regulatory and Compliance

This white paper has been prepared with utmost caution; however, uncertainties in the regulatory requirements and future changes in regulatory frameworks could potentially impact the token's legal status and its tradability. There is also a high probability that other laws will come into force, changing the rules for the trading of the token. Therefore, such developments shall be monitored and acted upon accordingly.

2. Operational and Technical

Blockchain Dependency: The token is entirely dependent on the blockchain the crypto-asset is issued upon. Any issues, such as downtime, congestion, or security vulnerabilities within the blockchain, could adversely affect the token's functionality.

Smart Contract Risks: Smart contracts governing the token may contain hidden vulnerabilities or bugs that could disrupt the token offering or distribution processes.

Connection Dependency: As the trading of the token also involves other trading venues, technical risks such as downtime of the connection or faulty code are also possible.

Human errors: Due to the irrevocability of blockchain-transactions, approving wrong transactions or using incorrect networks/addresses will most likely result in funds not being accessible anymore.

Custodial risk: When admitting the token to trading, the risk of losing clients assets due to hacks or other malicious acts is given. This is due to the fact the token is held in custodial wallets for the customers.

3. Market and Liquidity

Volatility: The token will most likely be subject to high volatility and market speculation. Price fluctuations could be significant, posing a risk of substantial losses to holders.

Liquidity Risk: Liquidity is contingent upon trading activity levels on decentralized exchanges (DEXs) and potentially on centralized exchanges (CEXs), should they be involved. Low trading volumes may restrict the buying and selling capabilities of the tokens.

4. Counterparty

As the admission to trading involves the connection to other trading venues, counterparty risks arise. These include, but are not limited to, the following risks:

General Trading Platform Risk: The risk of trading platforms not operating to the highest standards is given. Examples like FTX show that especially in nascent industries, compliance and oversight-frameworks might not be fully established and/or enforced.

Listing or Delisting Risks: The listing or delisting of the token is subject to the trading partners internal processes. Delisting of the token at the connected trading partners could harm or completely halt the ability to trade the token.

5. Liquidity

Liquidity of the token can vary, especially when trading activity is limited. This could result in high slippage when trading a token.

6. Failure of one or more Counterparties

Another risk stems from the internal operational processes of the counterparties used. As there is no specific oversight other than the typical due diligence check, it cannot be guaranteed that all counterparties adhere to the best market standards.

Bankruptcy Risk: Counterparties could go bankrupt, possibly resulting in a total loss for the clients assets held at that counterparty.

7. Information asymmetry

Different groups of participants may not have the same access to technical details or governance information, leading to uneven decision-making and potential disadvantages for less informed investors.

I.2 Issuer-related risks

1. Insolvency

As with every other commercial endeavor, the risk of insolvency of entities involved in the project is given. This could be caused by but is not limited to lack of interest from the public, lack of funding, incapacitation of key developers and project members, force majeure (including pandemics and wars) or lack of commercial success or prospects.

2. Counterparty

In order to operate, entities involved in the project have most likely engaged in different business relationships with one or more third parties on which they and the network strongly depend on. Loss or changes in the leadership or key partners of entities involved in the project and/or the respective counterparties can lead to disruptions, loss of trust, or project failure. This could result in a total loss of economic value for the crypto-asset holders.

3. Legal and Regulatory Compliance

Cryptocurrencies and blockchain-based technologies are subject to evolving regulatory landscapes worldwide. Regulations vary across jurisdictions and may be subject to significant changes. Non-compliance can result in investigations, enforcement actions, penalties, fines, sanctions, or the prohibition of the trading of the crypto-asset impacting its viability and market acceptance. This could also result in entities involved in the project to be subject to private litigation. The aforementioned would most likely also lead to changes with respect to trading of the crypto-asset that may negatively impact the value, legality, or functionality of the crypto-asset.

4. Operational

Failure to develop or maintain effective internal control, or any difficulties encountered in the implementation of such controls, or their improvement could harm the business,

causing disruptions, financial losses, or reputational damage of entities involved in the project.

5. Industry

The network and all entities involved in the project are and will be subject to all of the risks and uncertainties associated with a crypto-project, where the token issued has zero intrinsic value. History has shown that most of these projects resulted in financial losses for the investors and were only set-up to enrich a few insiders with the money from retail investors.

6. Reputational

The network and all entities involved in the project face the risk of negative publicity, whether due to, without limitation, operational failures, security breaches, or association with illicit activities, which can damage the reputation of the network and all entities involved in the project and, by extension, the value and acceptance of the crypto-asset.

7. Competition

There are numerous other crypto-asset projects in the same realm, which could have an effect on the crypto-asset in question.

8. Unanticipated Risk

In addition to the risks included in this section, there might be other risks that cannot be foreseen. Additional risks may also materialize as unanticipated variations or combinations of the risks discussed.

I.3 Crypto-assets-related risks

1. Valuation

As the crypto-asset does not have any intrinsic value, and grants neither rights nor obligations, the only mechanism to determine the price is supply and demand. Historically, most crypto-assets have dramatically lost value and were not a beneficial investment for the investors. Therefore, investing in these crypto-assets poses a high risk, and the loss of funds can occur.

2. Market Volatility

Crypto-asset prices are highly susceptible to dramatic fluctuations influenced by various factors, including market sentiment, regulatory changes, technological advancements, and macroeconomic conditions. These fluctuations can result in significant financial losses within short periods, making the market highly unpredictable and challenging for investors. This is especially true for crypto-assets without any intrinsic value, and investors should be prepared to lose the complete amount of money invested in the respective crypto-assets.

3. Liquidity Challenges

Some crypto-assets suffer from limited liquidity, which can present difficulties when executing large trades without significantly impacting market prices. This lack of liquidity can lead to substantial financial losses, particularly during periods of rapid market movements, when selling assets may become challenging or require accepting unfavorable prices.

4. Asset Security

Crypto-assets face unique security threats, including the risk of theft from exchanges or digital wallets, loss of private keys, and potential failures of custodial services. Since crypto transactions are generally irreversible, a security breach or mismanagement can result in the permanent loss of assets, emphasizing the importance of strong security measures and practices.

5. Scams

The irrevocability of transactions executed using blockchain infrastructure, as well as the pseudonymous nature of blockchain ecosystems, attracts scammers. Therefore, investors in crypto-assets must proceed with a high degree of caution when investing in if they invest in crypto-assets. Typical scams include – but are not limited to – the creation of fake crypto-assets with the same name, phishing on social networks or by email, fake giveaways/airdrops, identity theft, among others.

6. Blockchain Dependency

Any issues with the blockchain used, such as network downtime, congestion, or security vulnerabilities, could disrupt the transfer, trading, or functionality of the crypto-asset.

7. Smart Contract Vulnerabilities

The smart contract used to issue the crypto-asset could include bugs, coding errors, or vulnerabilities which could be exploited by malicious actors, potentially leading to asset loss, unauthorized data access, or unintended operational consequences.

8. Privacy Concerns

All transactions on the blockchain are permanently recorded and publicly accessible, which can potentially expose user activities. Although addresses are pseudonymous, the transparent and immutable nature of blockchain allows for advanced forensic analysis and intelligence gathering. This level of transparency can make it possible to link blockchain addresses to real-world identities over time, compromising user privacy.

9. Regulatory Uncertainty

The regulatory environment surrounding crypto-assets is constantly evolving, which can directly impact their usage, valuation, and legal status. Changes in regulatory frameworks may introduce new requirements related to consumer protection, taxation, and anti-money laundering compliance, creating uncertainty and potential challenges for investors and businesses operating in the crypto space. Although the crypto-asset do not create or confer any contractual or other obligations on any party, certain regulators may nevertheless qualify the crypto-asset as a security or other financial instrument under their applicable law, which in turn would have drastic consequences for the crypto-asset, including the potential loss of the invested capital in the asset. Furthermore, this could lead to the sellers and its affiliates, directors, and officers being obliged to pay fines, including federal civil and criminal penalties, or make the crypto-asset illegal or impossible to use, buy, or sell in certain jurisdictions. On top of that, regulators could take action against the network and all entities involved in the project as well as the trading platforms if the the regulators view the token as an unregistered offering of securities or the operations otherwise as a violation of existing law. Any of these outcomes would negatively affect the value and/or functionality of the cryptot-

asset and/or could cause a complete loss of funds of the invested money in the crypto-asset for the investor.

10. Counterparty risk

Engaging in agreements or storing crypto-assets on exchanges introduces counterparty risks, including the failure of the other party to fulfill their obligations. Investors may face potential losses due to factors such as insolvency, regulatory non-compliance, or fraudulent activities by counterparties, highlighting the need for careful due diligence when engaging with third parties.

11. Reputational concerns

Crypto-assets are often subject to reputational risks stemming from associations with illegal activities, high-profile security breaches, and technological failures. Such incidents can undermine trust in the broader ecosystem, negatively affecting investor confidence and market value, thereby hindering widespread adoption and acceptance.

12. Technological Innovation

New technologies or platforms could render the network's design less competitive or even break fundamental parts (i.e., quantum computing might break cryptographic algorithms used to secure the network), impacting adoption and value. Participants should approach the crypto-asset with a clear understanding of its speculative and volatile nature and be prepared to accept these risks and bear potential losses, which could include the complete loss of the asset's value.

13. Community and Narrative

As the crypto-asset has no intrinsic value, all trading activity is based on the intended market value is heavily dependent on its community.

14. Interest Rate Change

Historically, changes in interest, foreign exchange rates, and increases in volatility have increased credit and market risks and may also affect the value of the crypto-asset. Although historic data does not predict the future, potential investors should be aware

that general movements in local and other factors may affect the market, and this could also affect market sentiment and, therefore most likely also the price of the crypto-asset.

15. Taxation

The taxation regime that applies to the trading of the crypto-asset by individual holders or legal entities will depend on the holder's jurisdiction. It is the holder's sole responsibility to comply with all applicable tax laws, including, but not limited to, the reporting and payment of income tax, wealth tax, or similar taxes arising in connection with the appreciation and depreciation of the crypto-asset.

16. Anti-Money Laundering/Counter-Terrorism Financing

It cannot be ruled out that crypto-asset wallet addresses interacting with the crypto-asset have been, or will be used for money laundering or terrorist financing purposes, or are identified with a person known to have committed such offenses.

17. Market Abuse

It is noteworthy that crypto-assets are potentially prone to increased market abuse risks, as the underlying infrastructure could be used to exploit arbitrage opportunities through schemes such as front-running, spoofing, pump-and-dump, and fraud across different systems, platforms, or geographic locations. This is especially true for crypto-assets with a low market capitalization and few trading venues, and potential investors should be aware that this could lead to a total loss of the funds invested in the crypto-asset.

18. Timeline and Milestones

Critical project milestones could be delayed by technical, operational, or market challenges.

19. Legal ownership: Depending on jurisdiction, token holders may not have enforceable legal rights over their holdings, limiting avenues for recourse in disputes or cases of fraud.

20. Jurisdictional blocking: Access to exchanges, wallets, or interfaces may be restricted based on user location or regulatory measures, even if the token remains transferable on-chain.

21. Token concentration: A large proportion of tokens held by a few actors could allow price manipulation, governance dominance, or sudden sell-offs impacting market stability.

22. Ecosystem incentive misalignment: If validator, developer, or user rewards become unattractive or distorted, network security and participation could decline.

23. Governance deadlock: Poorly structured or fragmented governance processes may prevent timely decisions, creating delays or strategic paralysis.

24. Compliance misalignment: Features or delivery mechanisms may unintentionally conflict with evolving regulations, particularly regarding consumer protection or data privacy.

I.4 Project implementation-related risks

As this white paper relates to the "Admission to trading" of the crypto-asset, the implementation risk is referring to the risks on the Crypto Asset Service Providers side. These can be, but are not limited to, typical project management risks, such as key-personal-risks, timeline-risks, and technical implementation-risks.

I.5 Technology-related risks

As this white paper relates to the "Admission to trading" of the crypto-asset, the technology-related risks mainly involve the DLT networks where the crypto asset is issued in.

1. Blockchain Dependency Risks

Network Downtime: Potential outages or congestion on the involved blockchains could interrupt on-chain token transfers, trading, and other functions.

2. Smart Contract Risks

Vulnerabilities: The smart contract governing the token could contain bugs or vulnerabilities that may be exploited, affecting token distribution or vesting schedules.

3. Wallet and Storage Risks

Private Key Management: Token holders must securely manage their private keys and recovery phrases to prevent permanent loss of access to their tokens, which includes Trading-Venues, who are a prominent target for dedicated hacks.

Compatibility Issues: The tokens require compatible wallets for storage and transfer. Any incompatibility or technical issues with these wallets could impact token accessibility.

4. Network Security Risks

Attack Risks: The blockchains may face threats such as denial-of-service (DoS) attacks or exploits targeting its consensus mechanism, which could compromise network integrity.

Centralization Concerns: Although claiming to be decentralized, the relatively smaller number of validators/concentration of stakes within the networks compared to other blockchains might pose centralization risks, potentially affecting network resilience.

5. Evolving Technology Risks: Technological Obsolescence: The fast pace of innovation in blockchain technology may make the used token standard appear less competitive or become outdated, potentially impacting the usability or adoption of the token.

6. Bridges: The dependency on multiple ecosystems can negatively impact investors. This asset bridge creates corresponding risks for investors, as this lock-in mechanism may not function properly for technical reasons or may be subject to attack. In that case, the supply may change immediately or the ownership rights to tokens may be changed.

7. Forking risk: Network upgrades may split the blockchain into separate versions, potentially creating duplicate tokens or incompatibility between different versions of the protocol.

8. Economic abstraction: Mechanisms such as gas relayers or wrapped tokens may allow users to bypass the native asset, reducing its direct demand and weakening its economic role.

9. Dust and spam attacks: Low-value transactions may flood the network, increasing ledger size, reducing efficiency, and exposing user addresses to tracking.

10. Frontend dependency: If users rely on centralised web interfaces or wallets, service outages or compromises could block access even if the blockchain itself continues to operate.

I.6 Mitigation measures

None.

Part J – Information on the sustainability indicators in relation to adverse impact on the climate and other environment-related adverse impacts

J.1 Adverse impacts on climate and other environment-related adverse impacts

S.1 Name

Crypto Risk Metrics GmbH

S.2 Relevant legal entity identifier

39120077M9TG001FE242

S.3 Name of the cryptoasset

Flow

S.4 Consensus Mechanism

Core Components of Flow's Consensus:

1. Proof of Stake with Multi-Role Architecture: Specialized Node Roles: Flow's PoS model features a multi-node architecture where node roles are divided among different types of specialized nodes, each responsible for specific tasks. This separation enhances scalability by allowing nodes to focus on particular operations, leading to efficient transaction processing and high throughput.

2. HotStuff Consensus Algorithm: Optimized for High Throughput and Fast Finality: Flow utilizes an optimized version of the HotStuff consensus protocol, which is designed to support high-speed, low-latency transactions essential for Flow's performance-oriented blockchain.

2.1. BFT Compliance: HotStuff is a BFT protocol, allowing it to tolerate up to one-third of nodes acting maliciously without compromising the network's security. This resilience ensures the network remains secure and functional, even with potential faults or dishonest nodes.

3. Leader-Based Block Proposal: Leader and Replica Nodes: HotStuff operates with a leader-based approach where a designated leader node proposes new blocks, and other nodes (replicas) validate these blocks. This method simplifies the consensus process, reducing complexity and improving efficiency.

3.1. Leader Rotation Mechanism: To prevent centralization and enhance fault tolerance, HotStuff incorporates a leader rotation system, replacing the leader if it becomes unresponsive or acts maliciously. This rotation ensures continuous network reliability and minimizes downtime.

S.5 Incentive Mechanisms and Applicable Fees

Flow's incentive model rewards validator nodes, supports ecosystem growth, and maintains affordable fees for developers and users.

Incentive Mechanisms:

1. Staking Rewards for Specialized Nodes:

Role-Based Rewards: Validators earn Flow tokens according to their specific roles and contributions within the multi-node architecture, aligning rewards with each node's responsibilities to encourage balanced and effective network participation.

2. Transaction Fees:

Stable and Consumer-Friendly Fees: Flow's fee structure is designed for predictability, keeping transaction costs stable for both developers and users. Fees are based on transaction complexity and provide an ongoing income stream for validators.

3. Misbehavior Penalties:

Penalties for Downtime or Malicious Behavior: To maintain network stability, Flow imposes penalties on validators for misbehavior or downtime. This incentivizes high-quality validator participation and ensures consistent performance.

4. Ecosystem and Developer Support:

Dedicated Portion of Fees and Rewards: A portion of Flow's transaction fees and rewards is allocated to developer initiatives, ecosystem growth, and community engagement. This investment fosters innovation, supports long-term network health, and aligns incentives for ecosystem development.

S.6 Beginning of the period to which the disclosure relates

2024-10-20

S.7 End of the period to which the disclosure relates

2025-10-20

S.8 Energy consumption

513571.72290 kWh/a

S.9 Energy consumption sources and methodologies

For the calculation of energy consumptions, the so called 'bottom-up' approach is being used. The nodes are considered to be the central factor for the energy consumption of the network. These assumptions are made on the basis of empirical findings through the use of public information sites, open-source crawlers and crawlers developed in-house. The main determinants for estimating the hardware used within the network are the requirements for operating the client software. The energy consumption of the hardware devices was measured in certified test laboratories.

The information regarding the hardware used and the number of participants in the network is based on assumptions that are verified with best effort using empirical data. In general, participants are assumed to be largely economically rational. As a precautionary principle, we make assumptions on the conservative side when in doubt, i.e. making higher estimates for the adverse impacts.

S.10 Renewable energy consumption

32.2255486008 %

S.11 Energy intensity

0.00025 kWh

S.12 Scope 1 DLT GHG emissions – Controlled

0.00000 tCO₂e/a

S.13 Scope 2 DLT GHG emissions – Purchased

170.92345 tCO₂e/a

S.14 GHG intensity

0.00008 kgCO₂e

S.15 Key energy sources and methodologies

To determine the proportion of renewable energy usage, the locations of the nodes are to be determined using public information sites, open-source crawlers and crawlers developed in-house. If no information is available on the geographic distribution of the nodes, reference networks are used which are comparable in terms of their incentivization structure and consensus mechanism. This geo-information is merged with public information from Our World in Data, see citation. The intensity is calculated as the marginal energy cost wrt. one more transaction. Ember (2025); Energy Institute - Statistical Review of World Energy (2024) - with major processing by Our World in Data. "Share of electricity generated by renewables - Ember and Energy Institute" [dataset]. Ember, "Yearly Electricity Data Europe"; Ember, "Yearly Electricity Data"; Energy Institute,

"Statistical Review of World Energy" [original data]. Retrieved from <https://ourworldindata.org/grapher/share-electricity-renewables>.

S.16 Key GHG sources and methodologies

To determine the GHG Emissions, the locations of the nodes are to be determined using public information sites, open-source crawlers and crawlers developed in-house. If no information is available on the geographic distribution of the nodes, reference networks are used which are comparable in terms of their incentivization structure and consensus mechanism. This geo-information is merged with public information from Our World in Data, see citation. The intensity is calculated as the marginal emission wrt. one more transaction. Ember (2025); Energy Institute - Statistical Review of World Energy (2024) - with major processing by Our World in Data. "Carbon intensity of electricity generation - Ember and Energy Institute" [dataset]. Ember, "Yearly Electricity Data Europe"; Ember, "Yearly Electricity Data"; Energy Institute, "Statistical Review of World Energy" [original data]. Retrieved from <https://ourworldindata.org/grapher/carbon-intensity-electricity> Licenced under CC BY 4.0.

