KernelDAO (KERNEL)
White paper

In accordance with Title II of Regulation (EU) 2023/1114 (MiCA)

N	Field	Content
0	Table of content	

01	Date of notification	2025-06-26
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 operator of the trading platform 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 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 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	false
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. The crypto-asset referred to in this white paper is not covered by the deposit guarantee schemes under Directive 2014/49/EU of the European Parliament and of the Council.

<table>
<tr><td colspan="3">Summary</td></tr>
<tr><td>07</td><td>Warning in accordance with Article 6(7), second subparagraph of Regulation (EU) 2023/1114</td><td>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 admission to trading 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 (36) or any other offer document pursuant to Union or national law.</td></tr>
<tr><td>08</td><td>Characteristics of the crypto-asset</td><td>KERNEL has several core purposes within the KernelDAO omnichain ecosystem.

KERNEL holders can participate in governance relating to the Kernel platform, fees, slashing conditions etc.

KERNEL can be restaked to provide economic security (backstop liquidity) to the ecosystem, including middleware and dApps. Staking KERNEL tokens also offers coverage against rsETH slashing while letting stakers earn a share of the protocol’s rewards.

KERNEL has a maximum supply of 1 000 000 000 which was distributed as follows:

<table>
<tr><th>Category</th><th>Allocation</th></tr>
<tr><td>Future rewards</td><td>35%</td></tr>
<tr><td>Airdrops</td><td>20%</td></tr>
<tr><td>Team</td><td>20%</td></tr>
<tr><td>Private sale</td><td>20%</td></tr>
<tr><td>Ecosystem fund</td><td>5%</td></tr>
</table>

KERNEL tokens are freely transferable, in whole or in part, to third parties, and all associated usage rights and obligations follow the token upon transfer.</td></tr>
</table>

09	Information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability	N/A
10	Key information about the offer to the public or admission to trading	Kraken seeks admission to trading of the KERNEL token so as to be compliant with MiCA and in keeping with its mission to make available for trading to its clients a wide range of assets.
Part I – Information on risks		
I.1	Offer-Related Risks	**General Risk Factors Associated with Crypto-Asset Offerings** The admission to trading of crypto-assets, including KERNEL, is subject to general risks inherent to the broader cryptocurrency market. **Market Volatility** The value of KERNEL may experience substantial fluctuations driven by investor sentiment, macroeconomic developments, and market conditions. **Regulatory Risks** Changes in legislation, applicable laws, compliance requirements or the implementation of new regulatory frameworks could affect the availability, trading, or use of such assets. **Security Risks** The risk of exploitation, hacking or security vulnerabilities of the underlying protocol and/or contracts of the token leading to a loss. **Reputational Risks** The potential for damage to an organization's credibility or public trust, which can negatively impact stakeholder confidence and overall business viability**.**
I.2	Issuer-Related Risks	**Legal and Regulatory Risks** Evercrest Technologies Inc. must comply with applicable laws and regulations (including those beyond crypto-specific laws, such as data protection and financial regulations). Any legal challenges, regulatory investigations, or

		compliance failures involving the company could disrupt operations or tarnish its reputation. **Competition and Business Environment** KernelDAO operates in the liquid staking sector, which is competitive and rapidly evolving. Competing platforms could reduce KernelDAO's market share. If KernelDAO fails to continue innovating or to respond to competitive pressures, user adoption of its platform (and demand for KERNEL) may not grow as projected, posing a risk to the token's utility value.
I.3	Crypto-Assets-related Risks	**Market Volatility** The crypto-asset market is subject to significant price volatility, which may affect the value of KERNEL. Prices can fluctuate rapidly and unpredictably due to various factors, including market sentiment, economic indicators, technological developments, regulatory news, and macroeconomic trends. This high level of volatility may lead to sudden gains or losses and can impact the liquidity and tradability of the crypto-asset. **Liquidity** Liquidity refers to the ability to buy or sell a crypto-asset without causing significant price impact. KERNEL may experience periods of low liquidity, meaning that it could be difficult to enter or exit positions at desired prices or volumes. Reduced liquidity may result from limited market participation, exchange restrictions, or broader market conditions. This can lead to increased price volatility, slippage, and difficulty in executing transactions. **Cybersecurity & Technology Risks** Risks arising from vulnerabilities in the blockchain technology used by the project or platforms. Example risks include smart contract exploits, compromise of platforms, forking scenarios, compromise of cryptographic algorithms. **Adoption Risks** The risk associated with the project not achieving its goals leading to lower than expected adoption and use within the ecosystem, the impact leading to a reduced utility and value proposition. **Custody & Ownership Risk** The risk related to the inadequate safekeeping and control of crypto-assets e.g. loss of private keys, custodian insolvency leading to a loss.
I.4	Project Implementation-Related Risks	**Adoption and Network Effect Risks** The value of KERNEL's utility is correlated with the KernelDAO platform's user base and community participation. There is a risk that the platform may not attract or retain a large active user community.

		Reliance on Third-Party Technology KERNEL relies on certain third-party technologies and integrations (for example, the underlying staked asset contracts. If any critical external technology encounters problems, such as the underlying blockchains facing performance problems, the implementation of KernelDAO services could be disrupted. This could prevent users from accessing features, damaging the token's utility and the project's reputation.
I.5	Technology-Related Risks	**Smart contract risks** KERNEL uses smart contracts to facilitate automated transactions and processes. While these contracts enhance efficiency and decentralization, they also introduce specific technical risks. Vulnerabilities such as coding errors, design flaws, or security loopholes within the smart contract code may be exploited by malicious actors. Such exploits could result in the loss of assets, unauthorized access to sensitive information, or unintended and irreversible execution of transactions. **Blockchain Network Risks** KERNEL operates on a public blockchain infrastructure, which is maintained by a decentralized network of participants. The functionality and reliability of the crypto-asset are dependent on the performance and security of the underlying blockchain. Risks may include network congestion, high transaction fees, delayed processing times, or, in extreme cases, outages and disruptions. Additionally, vulnerabilities or failures in the consensus mechanism, attacks on the network (e.g., 51% attacks), or protocol-level bugs could impact the operation and availability of KERNEL. **Risk of Cryptographic Vulnerabilities** Technological advancements, such as quantum computing, could pose potential risks to cryptocurrencies. **Privacy** Transactions involving KERNEL are recorded on a public blockchain, where transaction data is transparent and permanently accessible. While public addresses do not directly reveal personal identities, transaction histories can be analyzed and, in some cases, linked to individuals through data aggregation or external information sources. This transparency may pose privacy concerns for users seeking confidentiality in their financial activity. Participants should be aware that transaction data on public blockchains is not inherently private and could be subject to scrutiny by third parties, including regulators, analytics firms, or malicious actors.
I.6	Mitigation measures	**Security Audits**

		Kernel's related platform contracts have undergone security auditing by Bailsec and ChainSecurity. This audit process helps identify and address potential vulnerabilities, thereby reducing the risk of smart contract failures or exploits. **Multisig Treasury Controls** KernelDAO employs multisignature ("multisig") wallet arrangements for critical treasury holdings. This means multiple authorized signatures are required to move funds from the treasury wallets, mitigating the risk of a single point of failure or insider misappropriation of funds. **Community Governance** KernelDAO's governance system enables stakeholders to vote on protocol changes. This decentralized process allows the community to respond to risks (e.g. economic imbalances) by adjusting parameters, funding audits, or implementing emergency upgrades through transparent decision-making. While not a technical safeguard, governance serves as an adaptive mechanism to mitigate long-term systemic and coordination risks.
Part A - Information about the offeror or the person seeking admission to trading		
A.1	Name	N/A
A.2	Legal form	N/A
A.3	Registered address	N/A
A.4	Head office	N/A
A.5	Registration Date	N/A
A.6	Legal entity identifier	N/A

A.7	Another identifier required pursuant to applicable national law	N/A
A.8	Contact telephone number	N/A
A.9	E-mail address	N/A
A.10	Response Time (Days)	N/A
A.11	Parent Company	N/A
A.12	Members of the Management body	N/A
A.13	Business Activity	N/A
A.14	Parent Company Business Activity	N/A
A.15	Newly Established	N/A
A.16	Financial condition for the past three years	N/A
A.17	Financial condition since registration	N/A

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	true
B.2	Name	Evercrest Technologies Inc.
B.3	Legal form	Not available
B.4	Registered address	Not available
B.5	Head office	Not available
B.6	Registration Date	Not available
B.7	Legal entity identifier	Not available
B.8	Another identifier required pursuant to applicable national law	155745172
B.9	Parent Company	Not available
B.10	Members of the Management body	Not available
B.11	Business Activity	Not available

B.12	Parent Company Business Activity	Not available
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	Payward Global Solutions LTD
C.2	Legal form	N/A
C.3	Registered address	N/A
C.4	Head office	N/A
C.5	Registration Date	11-07-2023
C.6	Legal entity identifier of the operator of the trading platform	9845003D98SCC2851458
C.7	Another identifier required pursuant to applicable national law	N/A
C.8	Parent Company	N/A
C.9	Reason for Crypto-Asset White Paper Preparation	Kraken seeks admission to trading of the KERNEL token so as to be compliant with MiCA and in keeping with its mission to make available for trading to its clients a wide range of assets.

<table>
<tr><td>C.10</td><td>Members of the Management body</td><td>
<table>
<tr><th>Full Name</th><th>Business Address</th><th>Function</th></tr>
<tr><td>Shannon Kurtas</td><td>70 Sir John Rogerson's Quay, Dublin 2, Ireland</td><td>Board Member</td></tr>
<tr><td>Andrew Mulvenny</td><td>70 Sir John Rogerson's Quay, Dublin 2, Ireland</td><td>Board Member</td></tr>
<tr><td>Shane O'Brien</td><td>70 Sir John Rogerson's Quay, Dublin 2, Ireland</td><td>Board Member</td></tr>
<tr><td>Laura Walsh</td><td>70 Sir John Rogerson's Quay, Dublin 2, Ireland</td><td>Board Member</td></tr>
<tr><td>Michael Walsh</td><td>70 Sir John Rogerson's Quay, Dublin 2, Ireland</td><td>Board Member</td></tr>
</table>
</td></tr>
<tr><td>C.11</td><td>Operator Business Activity</td><td>PGSL is the operator of a Trading Platform for Crypto Assets, in accordance with Article 3(1)(18) of Regulation (EU) 2023/1114 (MiCA).</td></tr>
<tr><td>C.12</td><td>Parent Company Business Activity</td><td>Payward, Inc., a Delaware, USA corporation, is the parent company of a worldwide group of subsidiaries (the following paragraphs use the term "Payward” or “Payward Group” to refer to the group) collectively doing business as “Kraken.” Payward’s primary business is the operation of an online virtual asset platform that enables clients to buy and sell virtual assets on a spot basis, including the transfer of crypto-assets to and from external wallets.

Payward, through its various affiliates, offers a number of other services and products, including:
* A trading platform for futures contracts on virtual assets (“Kraken Derivatives”);
* A platform for buying and selling NFTs;
* An over-the-counter (“OTC”) desk;
* Extensions of margin to support spot trading of virtual assets;
* A benchmark administrator; and
* Staking services.</td></tr>
</table>

C.13	Other persons drawing up the crypto-asset white paper according to Article 6(1), second subparagraph, of Regulation (EU) 2023/1114	N/A
C.14	Reason for drawing the white paper by persons referred to in Article 6(1), second subparagraph, of Regulation (EU) 2023/1114	N/A
Part D- Information about the crypto-asset project		
D.1	Crypto-asset project name	KernelDAO
D.2	Crypto-assets name	KernelDAO
D.3	Abbreviation	KERNEL
D.4	Crypto-asset project description	KernelDAO provides restaking infrastructure across multiple blockchains which enable further yield on staked assets. The project encompasses three integrated protocols named Kernel, Kelp, and Gain. The KERNEL token enables community governance and support for middleware applications within the ecosystem. Providing KERNEL for liquidity may enable additional access and earn additional rewards.

D.5	Details of all natural or legal persons involved in the implementation of the crypto-asset project	**Core Contributors:** Amitej Gajjala – Co-Founder (Project Lead; responsible for protocol architecture and strategic direction). Dheeraj Borra – Co-Founder (Project Lead; responsible for engineering and product development). **Supporting Entities:** KernelDAO – Decentralized contributors participating in governance, testing, and ecosystem growth.
D.6	Utility Token Classification	false
D.7	Key Features of Goods/Services for Utility Token Projects	N/A
D.8	Plans for the token	No special token functionality upgrades are scheduled beyond the token's current uses.
D.9	Resource Allocation	KERNEL raised $10,4m USD over 2 rounds (~159 000 000 tokens). At TGE, an additional 50 000 000 KERNEL was set aside for Ecosystem and Strategic Partners.
D.10	Planned Use of Collected Funds or Crypto-Assets	Not available
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	ATTR
E.2	Reasons for Public Offer or Admission to trading	Making secondary trading available to the consumers on the Kraken Trading platform in compliance with the MiCA regulatory framework

E.3	Fundraising Target	N/A
E.4	Minimum Subscription Goals	N/A
E.5	Maximum Subscription Goal	N/A
E.6	Oversubscription Acceptance	N/A
E.7	Oversubscription Allocation	N/A
E.8	Issue Price	N/A
E.9	Official currency or other crypto-assets determining the issue price	N/A
E.10	Subscription fee	N/A
E.11	Offer Price Determination Method	N/A
E.12	Total Number of Offered/Traded crypto-assets	1 000 000 000 maximum supply
E.13	Targeted Holders	ALL

E.14	Holder restrictions	N/A
E.15	Reimbursement Notice	N/A
E.16	Refund Mechanism	N/A
E.17	Refund Timeline	N/A
E.18	Offer Phases	N/A
E.19	Early Purchase Discount	N/A
E.20	time-limited offer	N/A
E.21	Subscription period beginning	N/A
E.22	Subscription period end	N/A
E.23	Safeguarding Arrangements for Offered Funds/crypto-assets	N/A
E.24	Payment Methods for crypto-asset Purchase	N/A

E.25	Value Transfer Methods for Reimbursement	N/A
E.26	Right of Withdrawal	N/A
E.27	Transfer of Purchased crypto-assets	N/A
E.28	Transfer Time Schedule	N/A
E.29	Purchaser's Technical Requirements	N/A
E.30	crypto-asset service provider (CASP) name	N/A
E.31	CASP identifier	N/A
E.32	Placement form	NTAV
E.33	Trading Platforms name	N/A
E.34	Trading Platforms Market Identifier Code (MIC)	N/A

E.35	Trading Platforms Access	N/A
E.36	Involved costs	N/A
E.37	Offer Expenses	N/A
E.38	Conflicts of Interest	All listings decisions made by Payward Global Solution Ltd are made independently by staff of the entity in line with internal policies. PGSL publishes a conflicts of interest disclosure on its website advising of potential conflicts that may arise.
E.39	Applicable law	Any dispute relating to this white paper shall be governed by and construed and enforced in accordance with the laws of Ireland without regard to conflict of law rules or principles (whether of Ireland or any other jurisdiction) that would cause the application of the laws of any other jurisdiction, irrespective of whether KERNEL tokens qualify as right or property under the applicable law.
E.40	Competent court	Any disputes or claims arising out of this white paper will be subject to the exclusive jurisdiction of the Irish courts.
Part F - Information about the crypto-assets		
F.1	Crypto-Asset Type	KERNEL is classified as a crypto-asset other than an asset referenced token or e-money token under MiCA, (EU) 2023/1114.
F.2	Crypto-Asset Functionality	Kernel is the governance and staking token of the KernelDAO ecosystem. Token holders may propose and vote on changes across Kernel, Kelp, and Gain protocols (such as parameter adjustments, new integrations, or fund allocations). KERNEL can be used to align incentives, such as boosting yields for liquidity providers. By staking the token, economic security is provided by backstopping validators or middleware against slashing risks.
F.3	Planned Application of Functionalities	Ongoing developments will be governed through standard procedures, such as those set forth by KernelDAO.

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 white paper	OTHR
F.5	The type of submission	NEWT
F.6	Crypto-Asset Characteristics	KERNEL is a fungible token with a fixed total supply of 1 000 000 000. It was issued as an ERC-20 token on the Ethereum blockchain.
F.7	Commercial name or trading name	KERNEL
F.8	Website of the issuer	https://kerneldao.com/
F.9	Starting date of offer to the public or admission to trading	2025-04-14
F.10	Publication date	2025-07-24
F.11	Any other services provided by the issuer	N/A
F.12	Identifier of operator of the trading platform	PGSL

F.13	Language or languages of the white paper	English
F.14	Digital Token Identifier	Not available
F.15	Functionally Fungible Group Digital Token Identifier	N/A
F.16	Voluntary data flag	Mandatory
F.17	Personal data flag	true
F.18	LEI eligibility	N/A
F.19	Home Member State	Ireland
F.20	Host Member States	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Iceland, Liechtenstein, Norway
Part G - Information on the rights and obligations attached to the crypto-assets		
G.1	Purchaser Rights and Obligations	**Right of Transfer:** The holder can transfer the KERNEL tokens to third parties. Upon transfer, all rights and obligations are transferred to the new holder. **Trading:** If the KERNEL token is listed on cryptocurrency exchanges, holders can trade their tokens there.

		Governance: Within the KernelDAO ecosystem, holders may vote on governance proposals affecting the protocols. **Staking:** To exercise the staking right, holders interact with KernelDAO smart contracts (for example, by utilizing a compatible wallet and via the project's dApp interface).
G.2	Exercise of Rights and obligations	**Transfer Procedure:** To exercise the right of transfer, a holder uses a digital wallet supporting ETH ERC-20 tokens. Transfers of KERNEL are executed by initiating a blockchain transaction. **Trading:** Trading the token on exchanges follows the procedures of the trading platforms (for example, complying with exchange KYC rules and placing orders on the market). **Governance Participation:** To vote or take part in KernelDAO governance, holders need to connect to an official governance portal and stake their KERNEL tokens in a voting contract. Importantly, participating in governance is voluntary; not exercising voting rights does not affect one's ability to hold or transfer tokens.
G.3	Conditions for modifications of rights and obligations	The rights and obligations attached to KERNEL as described in this white paper reflect information available at the time of issuance. This white paper is issued by Kraken and does not constitute a commitment or guarantee by KernelDAO or any other party regarding future modifications. No promises, warranties, or assurances are made herein regarding future token functionality, and this section is provided solely for informational purposes.
G.4	Future Public Offers	41 202 406 tokens have been set aside for future private sales. These tokens are held as part of the larger private sale safe:
G.5	Issuer Retained Crypto-Assets	200 000 000 tokens were allocated for the team.
G.6	Utility Token Classification	false

G.7	Key Features of Goods/Services of Utility Tokens	false
G.8	Utility Tokens Redemption	N/A
G.9	Non-Trading request	This white paper reflects a request to admit the token to trading.
G.10	Crypto-Assets purchase or sale modalities	N/A
G.11	Crypto-Assets Transfer Restrictions	Kraken may, in accordance with applicable laws and internal policies and terms, impose restrictions on buyers and sellers of these tokens.
G.12	Supply Adjustment Protocols	false
G.13	Supply Adjustment Mechanisms	N/A
G.14	Token Value Protection Schemes	false
G.15	Token Value Protection Schemes Description	N/A
G.16	Compensation Schemes	false

G.17	Compensation Schemes Description	N/A
G.18	Applicable law	Any dispute relating to this white paper shall be governed by and construed and enforced in accordance with the laws of Ireland without regard to conflict of law rules or principles (whether of Ireland or any other jurisdiction) that would cause the application of the laws of any other jurisdiction, irrespective of whether KERNEL tokens qualify as right or property under the applicable law.
G.19	Competent court	Any disputes or claims arising out of this white paper will be subject to the exclusive jurisdiction of the Irish courts.
Part H – information on the underlying technology		
H.1	Distributed ledger technology	The Ethereum blockchain underlies the KERNEL token. Ethereum is a public permissionless DLT and widely adopted, providing transparency and security. Ethereum utilises a Proof of Stake (PoS) consensus mechanism. Transactions require ETH for fees. Data is public on-chain.
H.2	Protocols and technical standards	Ethereum Blockchain Protocol: The KERNEL token is based on the Ethereum protocol, which utilizes decentralized Distributed-Ledger Technology. This protocol provides the foundation for secure transactions and smart contracts. ERC-20 Token Standard: The ERC-20 standard is a technical protocol for issuing and managing tokens, ensuring that the KERNEL token is compatible with most wallets, exchanges, and decentralized applications (dApps).
H.3	Technology Used	The KERNEL token uses the existing ERC-20 fungible token standard on Ethereum.
H.4	Consensus Mechanism	KERNEL operates on Ethereum, which uses a Proof-of-Stake (PoS) consensus mechanism. Ethereum's PoS consensus is maintained by a decentralized network of validators who stake ETH to secure the network and produce new blocks. This consensus mechanism finalizes transactions (including KERNEL token transfers) roughly every 12 seconds.

H.5	Incentive Mechanisms and Applicable Fees	KERNEL relies on the existing incentive mechanisms and fee structures of the Ethereum network.
H.6	Use of Distributed Ledger Technology	false
H.7	DLT Functionality Description	N/A
H.8	Audit	true
H.9	Audit outcome	Bailsec, October 2024 1 High severity issue, fixed 2 Medium severity issues, 1 fixed, 1 acknowledged 2 Low severity issues, 1 fixed, 1 unknown 10 Informational severity issues, 7 fixed, 3 acknowledged 1 Governance, acknowledged ChainSecurity, December 2024 0 Critical severity issues 1 High severity issue, fixed 0 Medium severity issues 4 Low severity issues, all fixed
Part J - Information on the suitability indicators in relation to adverse impact on the climate and other environment-related adverse impacts		
S.1	Name	Payward Global Solutions Limited
S.2	Relevant legal entity identifier	9845003D98SCC2851458
S.3	Name of the crypto-asset	KERNEL
S.4	Consensus Mechanism	The crypto-asset's Proof-of-Stake (PoS) consensus mechanism, introduced with The Merge in 2022, replaces mining with validator staking. Validators must stake at least 32 ETH every block a validator is randomly chosen to propose the next block. Once proposed the other validators verify the blocks integrity.

		The network operates on a slot and epoch system, where a new block is proposed every 12 seconds, and finalization occurs after two epochs (~12.8 minutes) using Casper-FFG. The Beacon Chain coordinates validators, while the fork-choice rule (LMD-GHOST) ensures the chain follows the heaviest accumulated validator votes. Validators earn rewards for proposing and verifying blocks, but face slashing for malicious behavior or inactivity. PoS aims to improve energy efficiency, security, and scalability, with future upgrades like Proto-Danksharding enhancing transaction efficiency.
S.5	Incentive Mechanisms and Applicable Fees	The crypto-asset's PoS system secures transactions through validator incentives and economic penalties. Validators stake at least 32 ETH and earn rewards for proposing blocks, attesting to valid ones, and participating in sync committees. Rewards are paid in newly issued ETH and transaction fees. Under EIP-1559, transaction fees consist of a base fee, which is burned to reduce supply, and an optional priority fee (tip) paid to validators. Validators face slashing if they act maliciously and incur penalties for inactivity. This system aims to increase security by aligning incentives while making the crypto-asset's fee structure more predictable and deflationary during high network activity.
S.6	Beginning of the period to which the disclosure relates	2024-06-20
S.7	End of the period to which the disclosure relates	2025-06-20
S.8	Energy consumption	283.92770 kWh/a
S.9	Energy consumption sources and methodologies	The energy consumption of this asset is aggregated across multiple components: To determine the energy consumption of a token, the energy consumption of the network(s) ethereum is calculated first. For the energy consumption of the token, a fraction of the energy consumption of the network is attributed to the token, which is determined based on the activity of the crypto-asset within the network. When calculating the energy consumption, the Functionally Fungible

		Group Digital Token Identifier (FFG DTI) is used - if available - to determine all implementations of the asset in scope. The mappings are updated regularly, based on data of the Digital Token Identifier Foundation. 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.