Moonwell (WELL)
White paper

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

N	Field	Content
0	Table of content	

01	Date of notification	2025-06-19
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.
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 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.
08	Characteristics of the crypto-asset	Moonwell (WELL) is the governance token of the Moonwell protocol, an open

<table>
<tr><td></td><td></td><td>decentralized lending and borrowing platform. WELL is an ERC-20 token on the Base network and is used to participate in Moonwell's community governance and safety modules. Holding WELL grants voting power over protocol proposals (via the Moonwell DAO), and holders may stake WELL in the protocol's Safety Module (yielding stkWELL) to support protocol security (acting as an insurance fund).

The maximum supply of WELL is 5 000 000 000 tokens distributed as follows:

<table>
<tr><th>Category</th><th>Allocation</th></tr>
<tr><td>Application Development</td><td>20,28%</td></tr>
<tr><td>Liquidity Incentives</td><td>19,35%</td></tr>
<tr><td>Long-Term Protocol & Ecosystem Development</td><td>10%</td></tr>
<tr><td>Bootstrap Sale</td><td>8%</td></tr>
<tr><td>Private Sale</td><td>11,49%</td></tr>
<tr><td>Strategic Sale</td><td>1,86%</td></tr>
<tr><td>Public Sale</td><td>9,02%</td></tr>
<tr><td>Key Partners</td><td>8%</td></tr>
<tr><td>Advisors</td><td>1,5%</td></tr>
<tr><td>Founding Contributors</td><td>8%</td></tr>
<tr><td>Future Contributors</td><td>2,5%</td></tr>
</table>

WELL 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>
<tr><td>09</td><td>Information about the quality and quantity of goods or services to which the utility tokens give access and restrictions on the transferability</td><td>N/A</td></tr>
<tr><td>10</td><td>Key information about the offer to the public or admission to trading</td><td>Kraken seeks admission to trading of the WELL 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.</td></tr>
</table>

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 WELL, is subject to general risks inherent to the broader cryptocurrency market. **Market Volatility** The value of WELL may experience substantial fluctuations driven by investor sentiment, macroeconomic developments, and market conditions. **Regulatory Risks** Any public offering of WELL could face evolving regulatory requirements. Changes in laws or regulatory actions (e.g. in the EU or other jurisdictions) might delay or restrict the offering or exchange listing of WELL. Investors also risk that the offering may not meet its funding goals or that the token's market may be illiquid, making it hard to buy or sell at stable prices. **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	**Issuer Viability and Legal Risks** The Moonwell Foundation is a newly established entity (formed in 2024) operating a DeFi project. There is a risk that the Foundation could face operational challenges, regulatory scrutiny, or funding shortfalls that impact its ability to support the project. As a Cayman Islands foundation company, changes in Cayman law or international regulations could affect the Foundation's activities or existence. **Key Person Risk** Moonwell's founder and key team members play a significant role; the departure or unavailability of crucial personnel (e.g., developers or advisors) could adversely affect project development and governance. **Governance and Internal Control** While the Moonwell protocol is decentralized, the Foundation's board oversees certain aspects, any failures in internal governance, decision-making, or fiduciary oversight by the Foundation could pose risks (e.g., misallocation of treasury funds or delays in protocol upgrades).

		Reputation Risk Negative publicity about the Foundation, the project's security, or regulatory compliance could harm the project's reputation and thus the value and adoption of WELL.
I.3	Crypto-Assets-related Risks	**Market Volatility** The crypto-asset market is subject to significant price volatility, which may affect the value of WELL. 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. WELL 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	**Development & Roadmap Execution Risk:** The Moonwell project's future enhancements (e.g., new features, multi-chain deployments) may be delayed or not realized. There is a risk that technical development objectives or community growth targets are not met as planned, which could adversely affect the token's usage and community sentiment. For example, if promised cross-chain functionality or improvements are significantly delayed, the utility and attractiveness of WELL could decrease. **Ecosystem Dependency:** Moonwell's success depends on the broader blockchain ecosystems (Base, Moonbeam, etc.) and integration partners (such

		as oracle providers and liquidity providers). If any supporting ecosystem fails to grow or encounters problems, the implementation of the Moonwell protocol could suffer (e.g., fewer users or assets available to lend/borrow), indirectly affecting WELL's value and utility. **Operational Risk:** As a DeFi protocol, Moonwell relies on complex smart contracts and on-chain governance. Operational mistakes, such as improper parameter updates via governance or errors in deploying upgrades, could impair the protocol. While procedures are in place, the decentralized nature means execution of changes may be slower or subject to community coordination challenges.
I.5	Technology-Related Risks	**Smart contract risks** WELL 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** WELL 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 WELL. **Risk of Cryptographic Vulnerabilities** Technological advancements, such as quantum computing, could pose potential risks to cryptocurrencies. **Privacy** Transactions involving WELL 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. 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** The Moonwell smart contracts (including WELL token contracts and related infrastructure) have undergone multiple independent audits prior to deployment. These audits identified and helped remediate vulnerabilities, reducing technical risk. **Bug Bounty** Moonwell maintains a bug bounty program (e.g., via Immunefi) to incentivize external security researchers to report any vulnerabilities in exchange for rewards. This encourages continuous scrutiny of the protocol's code. **Safety Module** The project's Safety Module, where WELL can be staked, serves as an insurance fund to cover certain shortfalls (e.g., from unexpected insolvencies or hacks in the lending protocol). This mechanism can mitigate losses for users by pooling staked WELL as a backstop, although it exposes stakers to risk of token slashing if the fund is used. **Gradual Decentralization & Governance Controls** Changes to the protocol are governed by community vote using WELL, which provides a check against unilateral or hasty changes. The governance process and the Moonwell Foundation's oversight aim to ensure that any significant protocol upgrades or fund allocations are reviewed by stakeholders, reducing the chance of reckless decisions. **Transparency** The Moonwell Foundation has published transparency reports for the WELL token distribution and periodically discloses information about the protocol's status (e.g., audits results, risk parameters). This transparency allows the community and token holders to stay informed and react to potential issues.
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	Moonwell Foundation
B.3	Legal form	Cayman Islands foundation company
B.4	Registered address	Not available
B.5	Head office	N/A
B.6	Registration Date	2024-05-02
B.7	Legal entity identifier	N/A
B.8	Another identifier required pursuant to applicable national law	Not available
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	N/A

<table>
<tr><td colspan="3">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</td></tr>
<tr><td>C.1</td><td>Name</td><td>Payward Global Solutions LTD</td></tr>
<tr><td>C.2</td><td>Legal form</td><td>N/A</td></tr>
<tr><td>C.3</td><td>Registered address</td><td>N/A</td></tr>
<tr><td>C.4</td><td>Head office</td><td>N/A</td></tr>
<tr><td>C.5</td><td>Registration Date</td><td>2023-07-11</td></tr>
<tr><td>C.6</td><td>Legal entity identifier of the operator of the trading platform</td><td>9845003D98SCC2851458</td></tr>
<tr><td>C.7</td><td>Another identifier required pursuant to applicable national law</td><td>N/A</td></tr>
<tr><td>C.8</td><td>Parent Company</td><td>N/A</td></tr>
<tr><td>C.9</td><td>Reason for Crypto-Asset White Paper Preparation</td><td>Kraken seeks admission to trading of the WELL 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.</td></tr>
<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</td></tr>
</table>

		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.
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	Moonwell
D.2	Crypto-assets name	Moonwell
D.3	Abbreviation	WELL
D.4	Crypto-asset project description	Moonwell is an open-source, non-custodial lending protocol deployed on several EVM chains (Base, Moonbeam, Moonriver, and Optimism) that lets users supply crypto-assets to earn interest or borrow against over-collateralised positions, with price feeds and liquidations enforced entirely by audited smart contracts and Chainlink oracles. The WELL governance token moves between chains via the xERC-20 standard and grants voting power over protocol upgrades while optionally backing a safety module that insures the system. No custody of user funds or off-chain intermediaries is required.

D.5	Details of all natural or legal persons involved in the implementation of the crypto-asset project	**Issuer / Developer** Moonwell Foundation, a Cayman Islands foundation company (registered office in Grand Cayman), steers the development and growth of the Moonwell lending protocol and its WELL governance token. Moonwell was founded by Luke Youngblood (Founder & Lead Architect) and is engineered by Lunar Labs contributors such as x0s0l (full-stack) and Akira (frontend), together with other community developers.
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	All core functionalities of the token are live.
D.9	Resource Allocation	**Financial Resources:** Moonwell's early development was financed by an 8 % "Bootstrap" slice of the WELL supply (400 M WELL) plus proceeds from private, strategic and public token sales, all of which provided the initial capital for engineering, audits and the Moonbeam launch. **Token Allocation as Resource:** To sustain growth, 49,63 % of the 5 B WELL supply (≈ 2,48 B WELL) sits in an Ecosystem Development treasury that vests over four years and can be deployed for liquidity incentives, protocol upgrades, community grants and other ongoing initiatives.
D.10	Planned Use of Collected Funds or Crypto-Assets	N/A
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	5 000 000 000 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 WELL 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	WELL 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	**Core Functionality:** WELL lets holders (1) govern the Moonwell protocol by submitting and voting on Moonwell Improvement Proposals, and (2) stake in the Safety Module to earn incentives while backstopping the lending pools—so

		WELL acts as both a governance and risk-insurance token within the Moonwell ecosystem. **Staking (Safety Module):** WELL can be staked in the Moonwell Safety Module, where stakers receive stkWELL tokens. Staked WELL serves as an insurance buffer for the protocol (to cover shortfalls in case of certain adverse events). In return for taking on this risk, stkWELL holders may earn rewards (e.g., a share of protocol fees or incentive tokens).
F.3	Planned Application of Functionalities	All core functionalities of WELL are live.
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	WELL gives holders on-chain voting power over Moonwell protocol decisions (and, when staked, access to Safety-Module rewards) while remaining freely transferable across supported EVM chains.
F.7	Commercial name or trading name	Moonwell Foundation
F.8	Website of the issuer	https://moonwell.fi
F.9	Starting date of offer to the public or admission to trading	2022-06-23
F.10	Publication date	2025-07-17
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	H1SR3Q3CQ
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	**Rights:** A purchaser of WELL obtains the ability to participate in Moonwell's governance and certain community-driven activities. Specifically, WELL holders have the right to vote on proposals affecting the protocol (such as risk parameter adjustments or new feature deployments) by delegating their voting power or voting directly with their tokens. Holders may also stake WELL to receive stkWELL, which grants them a share in Safety Module rewards and the corresponding role in safeguarding the protocol's solvency. All rights of a WELL holder are transferable with the token; if a holder sells or transfers their WELL, the governance and staking rights move to the new owner. **Obligations:** Holding WELL does not impose any mandatory obligations on purchasers. There are no requirements to use the token in any particular way (e.g., no lock-up unless the holder chooses to stake). Token holders are simply subject to the general terms and conditions of the Moonwell protocol and are expected to abide by its governance rules and smart contract procedures. There are no additional duties (such as capital calls or performance obligations) for WELL holders beyond optional participation in voting or staking.
G.2	Exercise of Rights and obligations	**Governance Voting Procedure:** To exercise voting rights, a WELL holder must hold their tokens in a compatible wallet and may need to delegate those tokens to an address (which can be their own address or a delegate) in order to vote on on-chain proposals. Moonwell uses both off-chain "Snapshot" voting for temperature checks and on-chain governance for binding decisions; in both cases, voting power is determined by the amount of WELL a user has delegated. The process typically involves connecting one's wallet to the official governance interface and casting a vote during the proposal's voting period. **Staking Procedure:** To stake WELL in the Safety Module, the holder interacts with the Moonwell staking contract via the official app (or directly on-chain), depositing the desired amount of WELL. Upon staking, the holder receives stkWELL tokens representing their stake. These stkWELL tokens entitle the holder to earn rewards and serve as evidence of their share in the safety pool. To exercise the right of exiting the Safety Module, a staker must initiate an

		unstaking cooldown (if applicable) and then withdraw their WELL after the cooldown period. **Transfer of Tokens:** No special procedure is required to transfer WELL; holders may send their tokens to any Ethereum/Base-compatible address. Upon transfer, all associated governance and staking rights (if not actively delegated or staked) pass to the new holder automatically.
G.3	Conditions for modifications of rights and obligations	The rights and obligations attached to WELL 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 Moonwell Finance 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	The Moonwell Finance team has not announced any future planned public offers.
G.5	Issuer Retained Crypto-Assets	1 014 000 000 or 20,28% is allocated to Application Development, 500 000 000 or 10% to Long-Term Protocol & Ecosystem Development 400 000 000 WELL (8 %) is reserved for Founding Contributors plus 125 000 000 WELL (2,5 %) is reserved for Future Contributors.
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 WELL 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	WELL is implemented on Base. Base is a public, EVM-compatible Layer 2 blockchain built on the Optimism stack and secured by Ethereum, using optimistic rollups for scalability.
H.2	Protocols and technical standards	The WELL token is based on the Base protocol, which utilizes Distributed-Ledger Technology. This protocol provides the foundation for secure transactions and smart contracts. The ERC-20 standard is a technical protocol for issuing and managing tokens, ensuring that the WELL token is compatible with most wallets, exchanges, and decentralized applications (DApps).
H.3	Technology Used	The WELL token uses the existing ERC-20 token standard on Base.
H.4	Consensus Mechanism	Base leverages optimistic rollups to scale Ethereum. WELL transactions are executed off-chain and submitted to Ethereum in batches, with finality usually taking 20-30 minutes. Transactions on Base typically confirm in about 2 seconds.
H.5	Incentive Mechanisms and Applicable Fees	WELL relies on the existing incentive mechanisms and fee structures of the Base blockchain.
H.6	Use of Distributed Ledger Technology	false
H.7	DLT Functionality Description	N/A
H.8	Audit	True
H.9	Audit outcome	The audit outcomes for WELL's technology were positive, with no critical issues remaining unresolved post-audit. Identified vulnerabilities and recommendations

		from auditors were addressed by the development team prior to mainnet release of the token. For example, the **"xERC20 WELL and Rate Limiting Library Audit Report" (2023)** did not report any critical exploitable issue in the final token implementation (any minor issues found were fixed). In general, the auditors concluded that the WELL token contracts and associated modules are secure as deployed..
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	moonwell
S.4	Consensus Mechanism	Moonwell is present on the following networks: Base, Moonbeam, Optimism. Base is a Layer-2 (L2) solution on Ethereum that was introduced by Coinbase and developed using Optimism's OP Stack. L2 transactions do not have their own consensus mechanism and are only validated by the execution clients. The so-called sequencer regularly bundles stacks of L2 transactions and publishes them on the L1 network, i.e. Ethereum. Ethereum's consensus mechanism (Proof-of-stake) thus indirectly secures all L2 transactions as soon as they are written to L1. Moonbeam employs a Delegated Proof of Stake (DPoS) consensus mechanism combined with the Polkadot relay chain for enhanced scalability, finality, and security. It utilizes collators and validators, with finality provided by the GRANDPA finality gadget, ensuring deterministic block finality. Key Features of Moonbeam's Consensus Mechanism: 1. Delegated Proof of Stake (DPoS): - Collators and Validators: In Moonbeam's DPoS system, collators maintain the parachain by collecting transactions from users and producing state transition proofs. The collator set is chosen based on the stake they have, including delegated stake. Delegation: Token holders can delegate their stake to collator candidates. The top collator candidates, including those with delegated stake, join the active set. Collators in the active set are randomly selected to produce blocks. - Stakes and Block Production: Once a collator is in the active set, their total stake does not impact their chance of being selected to produce blocks. 2. Polkadot Relay Chain Integration:

		Moonbeam is built as a parachain on Polkadot, which provides shared security, scalability, and consensus. The relay chain validators ensure that Moonbeam's blocks are validated and secured. 3. GRANDPA Finality: - Deterministic Finality: Moonbeam relies on Polkadot's GRANDPA finality gadget, which provides fast and deterministic finality for transactions. When a block is finalized, it cannot be reverted except through on-chain governance or forking. - Parallel Finality: The finality process in Moonbeam occurs simultaneously with block production, unlike Ethereum, which has slower finality. GRANDPA allows for the quick confirmation of blocks, often within a single block on Moonbeam. 4. Block Production: Blocks are produced by collators who are selected based on their stake and delegated stake, contributing to the network's decentralized nature. Optimism is a Layer 2 scaling solution for Ethereum that uses Optimistic Rollups to increase transaction throughput and reduce costs while inheriting the security of the Ethereum main chain. Core Components: 1. Optimistic Rollups: - Rollup Blocks: Transactions are batched into rollup blocks and processed off-chain. - State Commitments: The state of these transactions is periodically committed to the Ethereum main chain. 2. Sequencers: - Transaction Ordering: Sequencers are responsible for ordering transactions and creating batches. - State Updates: Sequencers update the state of the rollup and submit these updates to the Ethereum main chain. - Block Production: They construct and execute Layer 2 blocks, which are then posted to Ethereum. 3. Fraud Proofs: - Assumption of Validity: Transactions are assumed to be valid by default. - Challenge Period: A specific time window during which anyone can challenge a transaction by submitting a fraud proof. - Dispute Resolution: If a transaction is challenged, an interactive verification game is played to determine its validity. If fraud is detected, the invalid state is rolled back, and the dishonest participant is penalized. Consensus Process:

		1. Transaction Submission: Users submit transactions to the sequencer, which orders them into batches. 2. Batch Processing: The sequencer processes these transactions off-chain, updating the Layer 2 state. 3. State Commitment: The updated state and the batch of transactions are periodically committed to the Ethereum main chain. This is done by posting the state root (a cryptographic hash representing the state) and transaction data as call data on Ethereum. 4. Fraud Proofs and Challenges: Once a batch is posted, there is a challenge period during which anyone can submit a fraud proof if they believe a transaction is invalid. - Interactive Verification: The dispute is resolved through an interactive verification game, which involves breaking down the transaction into smaller steps to identify the exact point of fraud. - Rollbacks and Penalties: If fraud is proven, the batch is rolled back, and the dishonest actor loses their staked collateral as a penalty. 5. Finality: After the challenge period, if no fraud proof is submitted, the batch is considered final. This means the transactions are accepted as valid, and the state updates are permanent.
S.5	Incentive Mechanisms and Applicable Fees	Moonwell is present on the following networks: Base, Moonbeam, Optimism. Base is a Layer-2 (L2) solution on Ethereum that uses optimistic rollups provided by the OP Stack on which it was developed. Transactions on base are bundled by a, so called, sequencer and the result is regularly submitted as a Layer-1 (L1) transaction. This way many L2 transactions get combined into a single L1 transaction. This lowers the average transaction cost per transaction, because many L2 transactions together fund the transaction cost for the single L1 transaction. This creates incentives to use base rather than the L1, i.e. Ethereum, itself. To get crypto-assets in and out of base, a special smart contract on Ethereum is used. Since there is no consensus mechanism on L2 an additional mechanism ensures that only existing funds can be withdrawn from L2. When a user wants to withdraw funds, that user needs to submit a withdrawal request on L1. If this request remains unchallenged for a period of time the funds can be withdrawn. During this time period any other user can submit a fault proof, which will start a dispute resolution process. This process is designed with economic incentives for correct behaviour. Moonbeam incentivizes participation through staking rewards for collators and token holders, alongside transaction fees. Incentive Mechanism:

		1. Collator Rewards: - Block Rewards: Collators are rewarded with newly minted tokens for successfully producing and validating blocks. These rewards are distributed proportionally to the collators in the active set. - Transaction Fees: Collators also earn transaction fees from the transactions included in the blocks they produce. These fees are paid by users to prioritize their transactions. 2. Delegation Rewards: - Delegated Stake: Token holders can delegate their stake to collator candidates. By doing so, they share in the rewards earned by the collators to whom they delegate their tokens. This incentivizes the broader community to participate in governance and block production. - Voting Power: Token holders who delegate their stake to collators help secure the network and participate in the selection of active collators. 3. Governance Participation: Voting on Network Proposals: Moonbeam uses its native tokens to allow participants to vote on governance proposals, helping to influence the future direction of the network and incentivizing active involvement in network management. Applicable Fees: 1. Transaction Fees: - Fee Calculation: Transaction fees on Moonbeam are determined based on the complexity and size of the transaction. Users pay these fees in the native token (GLMR), which are distributed to the collators. - Fee Distribution: The fees are split between collators, incentivizing them to process transactions efficiently. The amount of transaction fees can vary depending on network congestion and the size of the transaction. 2. Staking Fees: Collator Staking: Collators must stake a certain amount of tokens to be eligible for block production. They are incentivized with staking rewards and transaction fees for ensuring the network's security and functionality. 3. Governance Fees: Voting Fees: Users may need to pay small fees to participate in governance, such as proposing changes or voting on proposals. These fees ensure governance is utilized effectively and prevents spam on the network. Optimism, an Ethereum Layer 2 scaling solution, uses Optimistic Rollups to increase transaction throughput and reduce costs while maintaining security and decentralization. Incentive Mechanisms:

		1. Sequencers: - Transaction Ordering: Sequencers are responsible for ordering and batching transactions off-chain. They play a critical role in maintaining the efficiency and speed of the network. - Economic Incentives: Sequencers earn transaction fees from users. These fees incentivize sequencers to process transactions quickly and accurately. 2. Validators and Fraud Proofs: - Assumption of Validity: In Optimistic Rollups, transactions are assumed to be valid by default. This allows for quick transaction finality. - Challenge Mechanism: Validators (or anyone) can challenge the validity of a transaction by submitting a fraud proof during a specified challenge period. This mechanism ensures that invalid transactions are detected and reverted. - Challenge Rewards: Successful challengers are rewarded for identifying and proving fraudulent transactions. This incentivizes participants to actively monitor the network for invalid transactions, thereby enhancing security. 3. Economic Penalties: - Fraud Proof Penalties: If a sequencer includes an invalid transaction and it is successfully challenged, they face economic penalties, such as losing a portion of their staked collateral. This discourages dishonest behavior. - Inactivity and Misbehavior: Validators and sequencers are also incentivized to remain active and behave correctly, as inactivity or misbehavior can lead to penalties and loss of rewards.
S.6	Beginning of the period to which the disclosure relates	2024-05-28
S.7	End of the period to which the disclosure relates	2025-05-28
S.8	Energy consumption	1645.83114 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) base, moonbeam, optimism 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.