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

N	Field	Content
General information		
S.1	Name	Hyphe Markets GmbH
S.2	Relevant legal entity identifier	3912000K5NAA00M4HH04
S.3	Name of the cryptoasset	Arbitrum
S.4	Consensus Mechanism	Proof of Stake (PoS)
S.5	Incentive Mechanisms and Applicable Fees	A Proof-of-Stake (PoS) consensus mechanism incentivizes validators to secure the network and validate transactions by staking their own crypto-assets as collateral. Validators are selected to create new blocks based on the amount of cryptocurrency they hold and are willing to 'stake', rather than through computational power. If validators act honestly, they earn rewards through transaction fees; however, malicious behavior or proposing invalid blocks can lead to a reduction of their staked assets, creating an economic penalty that discourages misconduct and ensures network integrity.
S.6	Beginning of the period to which the disclosure relates	2026-10-20
S.7	End of the period to which the disclosure relates	2026-11-02
Mandatory key indicator on energy consumption		
S.8	Energy consumption (per year) in kWh	1375133.91796
Sources and methodologies		
S.9	Energy consumption sources and methodologies	Data provided by CCRI; all indicators are based on a set of assumptions and thus represent estimates; methodology description and overview of input data, external datasets and underlying assumptions available at: carbon-ratings.com/dl/whitepaper-mica-methods-2024 and docs.mica.api.carbon-ratings.com. We do not account for any offsetting of energy consumption or other market-based mechanism as of today.
Supplementary key indicators on energy and GHG emissions		
S.10	Renewable energy consumption (share of energy from renewable generation resources) in %	29.07
S.11	Energy intensity (energy used per validated transaction) in kWh	0.00019
S.12	Scope 1 DLT GHG emissions – Controlled (per year) in t CO_2eq	0
S.13	Scope 2 DLT GHG emissions – Purchased (per year) in t CO_2eq	631.18009
S.14	GHG intensity (emissions per validated transaction) in kg CO_2eq	0.00009
Sources and methodologies		
S.15	Key energy sources and methodologies	Data provided by CCRI; all indicators are based on a set of assumptions and thus represent estimates; methodology description and overview of input data, external datasets and underlying assumptions available

N	Field	Content
		at: carbon-ratings.com/dl/whitepaper-mica-methods-2024 and docs.mica.api.carbon-ratings.com. We do not account for any offsetting of energy consumption or other market-based mechanism as of today.
S.16	Key GHG sources and methodologies	Data provided by CCRI; all indicators are based on a set of assumptions and thus represent estimates; methodology description and overview of input data, external datasets and underlying assumptions available at: carbon-ratings.com/dl/whitepaper-mica-methods-2024 and docs.mica.api.carbon-ratings.com. We do not account for any offsetting of energy consumption or other market-based mechanism as of today.