DCENT

Energy Use Audit

Findings

Anthesis

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Service Provider Name: DCENT

Location: Heerhugowaard, NL

Audit Date: November 2022

Summary

Thank you for completing the Filecoin Energy Use Survey. We recognize the dedication necessary to complete the survey, and we appreciate your commitment to providing this level of transparency into your energy use.

Your survey and attached documents have been reviewed and validated against our sustainability claim matrix.

2022 Sustainability Claim Tier

Your sustainability claim tier for reporting year 2022 is Gold. Please note that the criteria will change in 2023 and will include requirements on emissions profiling, green energy matching, and embodied emissions.

We look forward to active engagement and collaboration to increase our collective expertise on these important energy use topics.

Criteria and Findings

To meet the requirements set forth in the Filecoin Green Pledge, service providers make sustainability claims by providing information on location, water usage, energy consumption, and renewable energy purchases to Filecoin. Anthesis verifies submitted information using utility bills, metering logs, and calibration records. Additionally, Anthesis attests to validity of sealing, storing, and cumulative energy use data within estimated lower and upper bounds by minerID.

The results of the audit are overlayed the sustainability claim matrix to assign service providers a sustainability claim tier of Bronze, Silver, or Gold.

Data Requirements

	Location	Water Use	Energy Use	Renewables	Hardware	On-site Renewable Energy
Bronze	Approximate location is reported on Template for auditing	Water use is reported on Template for auditing	Energy use is reported on Template for auditing	Renewable energy purchases are reported on template for auditing	N/A	N/A
Silver		**Granular** water use is reported on Template for auditing	**Granular** energy use is reported on Template for auditing	**Granular** renewable energy purchases are reported on template for auditing	HW setup is provided for auditing	N/A
Gold						Renewable energy is generated on-site, and setup details are provided for auditing
Findings for: DCENT-Netherlands-Heerhugowaard-1 Tier: Gold	Address reported on Template	N/A - Water is not used to cool Filecoin IT infrastructure	Granular electricity consumption reported in kWh	Granular renewable energy purchases report in kWh on monthly power bills	Details of hardware setup including rack config, minerIDs, and IP address provided	Solar panels are installed on-site, and project workbook and inspection report were provided

Emissions Profile & Green Energy Matching

	Methodology	Matching	Frequency
Bronze	**Market-based** attributional carbon accounting approach	Energy consumption profile is matched to Energy Attribution Credits (EAC) **OR** provide evidence of green electricity products from their energy supplier	**Annual**
Silver	**Market-based** attributional carbon accounting approach	Energy consumption profile is matched to Energy Attribution Credits (EAC) **OR** provide evidence of green electricity products from their energy supplier	**Quarterly**
Gold	**Consequential** carbon accounting approach	Every kWh is matched by onsite renewable energy generation (see reporting methods) **OR** emissions due to grid draw must be matched to avoided emissions accounted for by GCs, with a temporal resolution of one hour, obtained either through: i. Power Purchase Agreements (PPAs) for new generation ii. GCs sold on the open market	**Quarterly**
Findings for: DCENT-Netherlands-Heerhugowaard-1 Tier: N/A in 2022	Carbon Accounting exercise will start in 2023	Renewable energy reported on monthly power bills, pending certificates from utility provider	Quarterly

Embodied Emissions

	Hardware specs required for LCA	Carbon Credits	
Bronze	N/A	N/A	

Silver	N/A	N/A
Gold	Hardware specs required for LCA are provided to Filecoin Green	Hardware embodied emissions are matched to carbon credits per Annex 3 in Green Guidance
Findings for: DCENT-Netherlands-Heerhugowaard-1 Tier: N/A in 2022	Embodied emissions work will start in 2023	

Reporting Methods

	Location	Water Use	Energy Use	Renewables	Hardware
Bronze	Location confirmed on monthly water or power bill, or documentation of contract	Water bill or documentation of contract with water provider	**Power bill or documentation of contract** with water provider	Reported on power bill **or** contract from utility provider on renewables	
Silver		Exact use reported on water bill, water meter data, and/or documention of contract with provider	Exact use reported on power bill, **some electric meter data**, and/or documention of contract with provider	Documentation of green electricity products from energy supplier, e.g., Green Tarriffs	Details including pics or videos of hardware set-up
Gold			**Comprehensive meter data** is provided showing every kWh used		

Findings for: DCENT-Netherlands-Heerhugowaard-1 Tier: Gold	Utility bill from Nievwestroom	N/A - Water is not used to cool Filecoin network	Metered solar and storage data is provided through API, pending sealing API data	* Renewable energy reported on power bills. Pending certificates from utility provider	Detailed solar project workbook, inspection report, rack config, minerIDs, and IP addresses provided

Auditing Process

	Audit Type	Frequency	Results
Bronze	Remote		Auditor confirms location, water usage, energy consumption data, and renewable energy purchases by cross referencing all available materials
Silver	On-site	Yearly	Auditor confirms location, water usage, energy consumption data, and renewable energy purchases by cross referencing all available materials
Gold	Same as above	Quarterly	Auditor confirms location, water usage, energy consumption data, and renewable energy purchases by cross referencing all available materials
DCENT-Netherlands-Heerhugowaard-1 Tier: Gold	Remote	Quarterly	Location, electricity use, and renewable energy purchases confirmed by cross referencing utility bills, grid API data, solar API data, and estimated cumulative energy use data