

26 September 2023

**Quantum Blockchain Technologies plc**  
("Quantum Blockchain Technologies", "the Group" or "the Company")

**INTERIM RESULTS**  
**For the Six Months Ended 30 June 2023**

Quantum Blockchain Technologies plc (AIM: QBT) announces its unaudited Interim Results for the six months ended 30 June 2023.

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**About Quantum Blockchain Technologies Plc**

QBT (AIM: QBT) is an AIM listed investment company which has recently realigned its strategic focus to technology related investments, with special regard to Quantum computing, Blockchain, Cryptocurrencies and AI sectors. The Company has commenced an aggressive R&D and investment programme in the dynamic world of Blockchain Technology, which includes cryptocurrency mining and other advanced blockchain applications.

## **Chairman's Statement**

During the first half of 2023 ("Period"), Quantum Blockchain Technologies Plc maintained focus on its research and development ("R&D") strategy, but also started to set the basis for the commercialisation of the products under development.

In addition, the Company continues its endeavours to recover damages and legal expenses from its legacy legal actions taken in the Italian courts.

## **Bitcoin Mining R&D**

The bitcoin mining industry has, in the past, sought mainly to achieve improvements by regularly optimising hardware and its integrated firmware, which is a capital-intensive endeavour. The Company, with its R&D team of senior researchers from leading European universities, has instead taken a different approach. QBT is focusing its intensive R&D efforts on identifying and utilising certain key predictive properties in the operation of bitcoin's SHA-256 cryptographic hash functions an area that the Company believes is not currently being addressed on the same scale by any other market participant.

To enhance its research and development capabilities and eventually its commercial prospects, the Company announced in January 2023 that it had appointed Dr Lov Kumar Grover as a special consultant. He is now working with QBT's Quantum Computing Team. Specifically, Dr Grover and the team are focused on improving the already developed proprietary quantum version of SHA-256, also known as the "Quantum Mining Algorithm", being the translation of the bitcoin ("BTC") mining algorithm for quantum computers. As previously discussed in the Company's recent announcements, currently there are no quantum computers with sufficient qubits to run QBT's Quantum Mining Algorithm, but once these become available, the Company expects to be in a highly advantageous position to offer a BTC mining method that could offer significant improvements and efficiency to the industry.

During the first half of 2023, the Company also announced its Machine Learning teams had developed two unique methods (Method A and Method B) that could potentially lead to immediate performance improvements for existing BTC miners. A third improvement ("Method C") is currently being assessed by a different QBT R&D group.

With regard to Method B, during the Period, the Company completed a key testing phase that demonstrated Method B theoretically increases the rate of successful bitcoin mining by approximately 2.6 times compared to standard bitcoin mining industry practices widely used over the same time period. The Company's algorithm also theoretically reduced electricity consumption by 4.3%.

The Company's current main focus is to complete the development of software that will permit the use of Method A and Method B (and possibly Method C) for use by existing BTC miners. It is anticipated that this will enable the relevant QBT R&D groups to run real time tests (both, simulated experiments and pool based real time mining for testing and experimental purposes) at current mining degrees of difficulty and thereby allow QBT to commence the commercialisation phase of its discoveries. As announced in September 2023, QBT successfully redesigned part of Method B specifically for application on the Chinese market-leading mining rig, significantly expanding its addressable market.

Towards this commercialisation, in May 2023, QBT engaged Mr Vladimir Kuszniarczyk, as Marketing and Business Development Manager. Mr Kuszniarczyk was appointed to seek commercial opportunities with large US and Canadian bitcoin miners and manufacturers of mining rigs.. The Company is currently in discussions with a number of the largest North American cryptocurrency miners which provided the Company with a number of the most

commonly used mining rigs to analyse and implement the porting of Method A and Method B.

It is worth noting that, as announced in January 2023, although the main focus of the R&D programme is to develop the fastest and most energy efficient BTC mining products, the Company is confident it is possible to extend its improvements to miners of the two BTC 'hard forks', namely, Bitcoin Cash ("BCH") and Bitcoin SV ("BSV") without significant additional R&D effort. This would further enlarge the Company's target market.

### **Legacy Investment Assets**

During the first half of 2023, the Company continued to deal with its legacy assets. These assets consist of pending court actions in Italy in relation to Sipiem in Liquidazione S.p.A ("Sipiem") and Sosushi Srl ("Sosushi") and QBT's investments in PBV Monitor Srl ("PBV"), Forcrowd Srl ("Forcrowd") and Geosim Systems Ltd ("Geosim"). With regard to the court actions, despite ongoing efforts by the Company's lawyers, there has not been significant updates during the Period.

In relation to the Company's claim against the previous management and internal audit committee of Sipiem, held by its wholly owned subsidiary Clear Leisure 2017 ("CL17"), as previously reported the Venice Court ruled in favour of CL17 in November 2022 and ordered the defendants to pay CL17 an award payment amounting to €6,188,974 in damages (exclusive of interest and adjustments for inflation), and €85,499 in legal fees. CL17 has commenced the process to collect the award payment from the main defendant.

CL17 also maintains a circa €1 million claim against Sosushi's previous management in Italy, which is currently continuing via an arbitration process. As previously reported, the process has, unfortunately, been subject to severe procedural delays outside of CL17's control. The Company is not expecting the claim to be settled in the short term.

The Company's legacy investment portfolio comprises the following three companies: PBV, an Italian start-up which has developed an online international legal directory, Forcrowd, an Italian crowdfunding company, and Geosim, an Israeli company which has developed a proprietary high resolution 3D mapping technology used to develop realistic 3D models of cities and airports.

During the period under review, as announced on 1 June 2023, QBT completed a placing which raised a total of £1m (before expenses) pursuant to the issue of 71,428,571 new ordinary shares of 0.25 pence each in the Company ("Ordinary Shares").

Additionally, as disclosed on 31 May 2023, QBT granted seven million new options over new Ordinary Shares. As a result, the Company has outstanding options over 138,500,000 Ordinary Shares exercisable at 5 pence and options over 133,500,000 Ordinary Shares exercisable at 10 pence, set to expire between 2024 and 2026.

The Company believes it is in an excellent position to capture potential market opportunities in the bitcoin market in the near term, mostly due to the development of Methods A and B. In the longer term QBT aims to be able to build its own more efficient mining chip (embedding all the improvements developed so far) whilst waiting to exploit its potentially revolutionary Quantum Mining Algorithm. The Company will continue to pursue its legal claims in respect of legacy assets and the monetisation of its existing investments.

## Financial Review

The Group reported a total comprehensive loss for the period of €1.4 million (30 June 2022: loss €2.8m). The operating loss for the period was €1.2 million (30 June 2022: operating loss €2.1m).

Included within administrative expenses are charges relating to the recognition of share options totalling €370,000 (2022: €1.3m) and within finance costs are charges for the revaluation of derivatives totalling €142,000 (2022: €700K). The difference of these items is strictly dependent on the volatility of the Company's share price during the first half of 2023, used for the calculation according to the relevant accounting standards.

At 30 June 2023, the Group's net liabilities had improved to €3.1 million, compared to net liabilities of €3.2 million at 31 December 2022. Net current assets of the Group also improved during the period under review, to €4.8 million compared to net current assets of €4.4 million at 31 December 2022.

## Post 30 June 2023 Events

On 7 July 2023, the Company announced that, with regards to its Zero-Coupon Bond ("Bond") originally announced on 9 November 2020, the Company had received a conversion notice from MC Strategies AG to convert €1 million of the Bond into new Ordinary Shares at a conversion price of 1 pence per share (EUR: GBP exchange rate of 0.89 – fixed per terms and conditions of the Bond). As a result, the Company issued 89,000,000 new Ordinary Shares on 14 July 2023.

On 24 July 2023, QBT announced it had filed a patent application in relation to ASIC EnhancedBoost developed by the Company's cryptography expert and Cryptographic Optimisation team. This novel approach, called Message Scheduling For Cryptographic Hashing addresses one of the most challenging problems in BTC mining: partial pre-computing of future blockchains' blocks. The Company believes the process has the potential to achieve a potential area savings of approximately 8%.

On 20 September 2023, QBT announced it was focusing its current R&D efforts on the most commonly used mining rigs available in the market for the Company to study and implement the porting of its Method A and Method B chip enhancements to these machines. The Company is targeting not only Intel's Blocksacle based miners, but also the most popular mining rigs produced in China, which are used by more than 75% of the global Bitcoin market<sup>1</sup>. The Company also announced it is currently in discussions with a number of the largest North American cryptocurrency miners which provided the Company with a number of the most commonly used mining rigs to analyse and implement the porting of Method A and Method B.

## Outlook

The Board remains committed to return value to its shareholders by:

- i. continuing to focus on its R&D programme, which is providing promising and consistent results;
- ii. investing in the technology sector (both in a direct and an indirect manner);
- iii. managing the Legacy Assets portfolio, where positive outcomes are expected from the Company's claims; and

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<sup>1</sup> <https://www.coindesk.com/tech/2023/06/13/bitmains-s19-bitcoin-miners-account-for-bulk-of-network-hashrate-says-new-research/>

- iv. further reduction of the debt position (if and when the conditions are deemed appropriate)

The Board remains positive as the technology investments are deemed sound and promising in fast growth markets, while the legal claims have strong merit against defendants that are expected to remain solvent, thereby enhancing the prospect of collection of the judgment debts.

**GROUP STATEMENT OF COMPREHENSIVE INCOME  
FOR THE PERIOD ENDED 30 JUNE 2023**

	Note	Six months to 30 June 2023	Six months to 30 June 2022	Year ended 31 December 2022
		(Unaudited) €'000	(Unaudited) €'000	(Audited) €'000
<b>Continuing operations</b>				
<b>Revenue</b>		-	-	-
		-	-	-
Administrative expenses		(1,190)	(2,067)	(4,547)
Other operating income		1	-	-
<b>Operating loss</b>		(1,189)	(2,067)	(4,547)
Share of loss from equity-accounted associates		-	-	(69)
Finance charges		(292)	(797)	(636)
<b>Loss before tax</b>		(1,481)	(2,864)	(5,252)
Taxation		42	74	226
<b>Loss for the period attributable to owners of the parent</b>		(1,439)	(2,790)	(5,026)
Other comprehensive income/(loss)		-	-	-
<b>TOTAL COMPREHENSIVE LOSS FOR THE PERIOD ATTRIBUTABLE TO OWNERS OF THE PARENT</b>		(1,439)	(2,790)	(5,026)
<b>Earnings per share:</b>				
Basic loss per share (cents)	3	(€0.143)	(€0.281)	(€0.508)
Diluted loss per share (cents)	3	(€0.090)	(€0.213)	(€0.312)

**GROUP STATEMENTS OF FINANCIAL POSITION  
AT 30 JUNE 2023**

	Note	As at 30 June 2023 €'000 (Unaudited)	As at 30 June 2022 €'000 (Unaudited)	As at 31 December 2022 €'000 (Audited)
<b>Non-current assets</b>				
Property, plant and equipment		198	234	226
Investments		689	714	677
Investments in equity-accounted associates		66	211	60
<b>Total non-current assets</b>		953	1,159	963
<b>Current assets</b>				
Trade and other receivables		4,643	5,029	4,626
Cash and cash equivalents		752	1,307	463
<b>Total current assets</b>		5,395	6,336	5,089
<b>Current liabilities</b>				
Trade and other payables		(369)	(311)	(465)
Provisions		(210)	-	(210)
<b>Total current liabilities</b>		(579)	(311)	(675)
<b>Net current assets/(liabilities)</b>		4,816	6,025	4,414
<b>Total assets less current liabilities</b>		5,769	7,184	5,377
<b>Non-current liabilities</b>				
Borrowings		(8,286)	(8,439)	(8,131)
Derivative financial instruments		(610)	(870)	(468)
<b>Total non-current liabilities</b>		(8,896)	(9,309)	(8,599)
<b>Total liabilities</b>		(9,475)	(9,620)	(9,274)
<b>Net liabilities</b>		(3,127)	(2,125)	(3,222)
<b>Equity</b>				
Share capital		8,586	8,378	8,378
Share premium account		51,497	50,541	50,541
Other reserves		14,182	12,673	13,812
Retained losses		(77,392)	(73,717)	(75,953)
Equity attributable to owners of the Company		(3,127)	(2,125)	(3,222)
<b>Total equity</b>		(3,127)	(2,125)	(3,222)

**GROUP AUDITED STATEMENT OF CHANGES IN EQUITY  
FOR THE YEAR ENDED 31 DECEMBER 2022**

<b>Group</b>	<b>Share capital</b>	<b>Share premium account</b>	<b>Other reserves</b>	<b>Retained losses</b>	<b>Total equity</b>
	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>
At 1 January 2022	<b>8,221</b>	<b>49,442</b>	<b>11,409</b>	<b>(71,896)</b>	<b>(2,824)</b>
Total comprehensive loss for the year	-	-	-	(5,026)	(5,026)
Grant of warrants					
Exercise of warrants	157	1,099	-	969	2,225
Grant of share options	-	-	1,854	-	1,854
Modification of bond	-	-	549	-	549
At 31 December 2022	<b>8,378</b>	<b>50,541</b>	<b>13,812</b>	<b>(75,953)</b>	<b>(3,222)</b>

**GROUP UNAUDITED STATEMENT OF CHANGES IN EQUITY  
FOR THE SIX MONTHS TO 30 JUNE 2022**

<b>Group</b>	<b>Share capital</b>	<b>Share premium account</b>	<b>Other reserves</b>	<b>Retained losses</b>	<b>Total equity</b>
	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>
At 1 January 2022	<b>8,221</b>	<b>49,442</b>	<b>11,409</b>	<b>(71,896)</b>	<b>(2,824)</b>
Total comprehensive loss for the period	-	-	-	(2,790)	(2,790)
Exercise of warrants	157	1,099	-	969	2,225
Grant of share options	-	-	1,264	-	1,264
At 30 June 2022	<b>8,378</b>	<b>50,541</b>	<b>12,673</b>	<b>(73,717)</b>	<b>(2,125)</b>



**GROUP UNAUDITED STATEMENT OF CHANGES IN EQUITY  
FOR THE SIX MONTHS TO 30 JUNE 2023**

<b>Group</b>	<b>Share capital</b>	<b>Share premium account</b>	<b>Other reserves</b>	<b>Retained losses</b>	<b>Total equity</b>
	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>	<b>€'000</b>
At 1 January 2023	<b>8,378</b>	<b>50,541</b>	<b>13,812</b>	<b>(75,953)</b>	<b>(3,222)</b>
Total comprehensive loss for the period	-	-	-	(1,439)	(1,439)
Issue of shares	208	956	-	-	1,164
Share based payment expense	-	-	370	-	370
At 30 June 2023	<b>8,586</b>	<b>51,497</b>	<b>14,182</b>	<b>(77,392)</b>	<b>(3,127)</b>

**GROUP UNAUDITED STATEMENT OF CASH FLOWS  
FOR THE SIX MONTHS ENDED 30 JUNE 2022**

	Six months to 30 June 2023	Six months to 30 June 2022	Year ended 31 December 2022
	(Unaudited) €'000	(Unaudited) €'000	(Audited) €'000
<b>Cash used in operations</b>			
Loss before tax	(1,189)	(2,864)	(5,252)
Impairment of investments	-	-	154
Share of post-tax losses of equity accounted associates	-	-	69
Non cash foreign exchange movements	10	(50)	(35)
Finance charges	(142)	800	637
Decrease/(increase) in receivables	(25)	(49)	474
(Decrease)/increase in payables	95	(18)	346
Impairment of intercompany receivables	-	-	33
Share based payments	370	1,264	1,854
Depreciation	28	20	49
<b>Net cash (outflow)/inflow from operating activities</b>	<b>(853)</b>	<b>(897)</b>	<b>(1,671)</b>
<b>Cash flows from investing activities</b>			
Purchase of investments	(28)	-	(50)
Purchase of property, plant and equipment	-	(90)	(111)
Interest received	6	-	-
<b>Net cash inflow from investing activities</b>	<b>(22)</b>	<b>(90)</b>	<b>(161)</b>
<b>Cash flows from financing activities</b>			
Proceeds from capital issue	1,164	1,255	1,256
<b>Net cash inflow/(outflow) from financing activities</b>	<b>1,164</b>	<b>1,255</b>	<b>1,256</b>
Net increase in cash for the period	289	268	(576)
Cash and cash equivalents at beginning of year	463	1,039	1,039
<b>Cash and cash equivalents at end of period</b>	<b>752</b>	<b>1,307</b>	<b>463</b>

## **NOTES TO THE FINANCIAL STATEMENTS**

### **1. General Information**

Quantum Blockchain Technologies plc is a company incorporated and domiciled in England and Wales. The Company's ordinary shares are traded on the AIM market of the London Stock Exchange. The address of the registered office is 22 Great James Street, London, WC1N 3ES.

### **2. Accounting policies**

The principal accounting policies are summarised below. They have all been applied consistently throughout the period covered by these consolidated financial statements.

#### **Basis of preparation**

The interim financial statements of Quantum Blockchain Technologies Plc are unaudited consolidated financial statements for the six months ended 30 June 2023 which have been prepared in accordance with UK adopted international accounting standards. They include unaudited comparatives for the six months ended 30 June 2022 together with audited comparatives for the year ended 31 December 2022.

The interim financial statements do not constitute statutory accounts within the meaning of section 434 of the Companies Act 2006. The statutory accounts for the year ended 31 December 2022 have been reported on by the company's auditors and have been filed with the Registrar of Companies. The report of the auditors was qualified in respect of the valuation of the investment in Geosim Systems Ltd. The report of the auditor also contained an emphasis of matter paragraph in respect of a material uncertainty regarding going concern. Aside from the limitation of scope relating to Geosim Systems Ltd, the auditor's report did not contain any statement under section 498 of the Companies Act 2006.

The interim consolidated financial statements for the six months ended 30 June 2023 have been prepared on the basis of accounting policies expected to be adopted for the year ended 31 December 2023, which are consistent with the year ended 31 December 2022.

#### **Going concern**

The Group's activities generated a loss of €1,439,000 (June 2022: €2,790,000) and had net current assets of €4,816,000 as at 30 June 2023 (June 2022: €6,025,000). The Group's operational existence is still dependent on the ability to raise further funding either through an equity placing on AIM, or through other external sources, to support the on-going working capital requirements.

After making due enquiries, the Directors have formed a judgement that there is a reasonable expectation that the Group can secure further adequate resources to continue in operational existence for the foreseeable future and that adequate arrangements will be in place to enable the settlement of their financial commitments, as and when they fall due.

For this reason, the Directors continue to adopt the going concern basis in preparing the interim accounts. Whilst there are inherent uncertainties in relation to future events, and therefore no certainty over the outcome of the matters described, the Directors consider that, based upon financial projections and dependant on the success of their efforts to complete these activities, the Group will be a going concern for the next twelve months. If it is not possible for the Directors to realise their plans, over which there is significant uncertainty, the carrying value of the assets of the Group is likely to be impaired.

Notwithstanding the above, the Directors note the material uncertainty in relation to the Group being unable to realise its assets and discharge its liabilities in the normal course of business.

### Risks and uncertainties

The Board continuously assesses and monitors the key risks of the business. The key risks that could affect the Company's medium-term performance and the factors that mitigate those risks have not substantially changed from those set out in the Company's 2022 Annual Report and Financial Statements, a copy of which is available on the Company's website: [www.quantumblockchaintechnologies.com](http://www.quantumblockchaintechnologies.com). The key financial risks are liquidity and credit risk.

### Critical accounting estimates

The preparation of interim financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the end of the reporting period. Significant items subject to such estimates are set out in note 3 of the Company's 2022 Annual Report and Financial Statements. The nature and amounts of such estimates have not changed significantly during the interim period.

### 3. Loss per share

The basic earnings per share is calculated by dividing the loss attributable to ordinary shareholders by the weighted average number of ordinary shares outstanding during the period. Diluted earnings per share is computed using the same weighted average number of shares during the period adjusted for the dilutive effect of share options and convertible loans outstanding during the period.

The loss and weighted average number of shares used in the calculation are set out below:

	<b>Six months to 30 June 2023 (Unaudited) €'000</b>	<b>Six months to 30 June 2022 (Unaudited) €'000</b>	<b>Year to 31 December 2022 (Audited) €'000</b>
<b>(Loss)/profit attributable to owners of the parent company:</b>			
Basic earnings	(1,439)	(2,790)	(5,026)
Diluted earnings	(1,492)	(2,762)	(5,091)
<hr/>			
Basic weighted average number of ordinary shares (000's)	1,009,060	994,291	989,497
Diluted weighted average number of ordinary shares (000's)	1,664,647	1,295,619	1,632,694
<hr/>			
<b>Basic and fully diluted earnings per share:</b>			
Basic earnings per share	(€0.143)	(€0.281)	(€0.508)
Diluted earnings per share	(€0.090)	(€0.213)	(€0.312)

IAS 33 requires presentation of diluted earnings per share when a company could be called upon to issue shares that would decrease earnings per share or increase net loss per share.

No adjustment has been made to diluted earnings per share for out-of-the money options and warrants.

#### **4. Principal Activity**

The principal activities of the Company are focused on the R&D programme relating to bitcoin and as an investing company with a portfolio in technology sectors. The main focus of management is to successfully run the R&D programme and release new products to the market. The management is also pursuing the monetisation of all of the Company's Legacy Assets, through selected realisations, court-led recoveries of misappropriated assets and substantial debt recovery processes.

#### **5. Copies of Interim Accounts**

Copies of the interim results are available at the Group's website at [www.quantumblockchaintechnologies.co.uk](http://www.quantumblockchaintechnologies.co.uk).

Copies may also be obtained from the Group's registered office: Quantum Blockchain Technologies PLC, 22 Great James Street, London, WC1N 3ES.