Interim results presentation

For the six months ended 31 January 2024

27 March 2024

Disclaimer

The following presentation is being made only to, and is only directed at, persons to whom such presentation may lawfully be communicated ("relevant persons"). Any person who is not a relevant person should not act or rely on this presentation or any of its contents. This presentation does not constitute an offering of securities or otherwise constitute an invitation or inducement to any person to underwrite, subscribe for or otherwise acquire securities in Nanoco Group PLC or any of its subsidiaries ("Nanoco").

It should be noted that past performance cannot be relied on as a guide to future performance. This presentation contains forward-looking statements with respect to Nanoco's plans and objectives regarding its financial conditions, results of operations and businesses.

The financial information referenced in this presentation does not contain sufficient detail to allow a full understanding of Nanoco's results. For more detailed information, the Annual Report and Accounts for the full year ended 31 July 2023, can be found on the Investor Relations section of the Nanoco website (www.nanocotechnologies.com).

Nanoco Team

Brian Tenner, CEO

- Joined Nanoco August 2018 as COO / CFO, appointed CEO in 2020
- 15 years UK public company board experience
- Developed “dot only” strategy and Nanoco’s current commercial relationships

Liam Gray, CFO

- Joined Nanoco March 2019 as Group FC, appointed CFO November 2021
- Chartered accountant with KPMG, finance roles in various industries
- Leads Nanoco’s finance, human resources, IT, supply chain and ESG functions

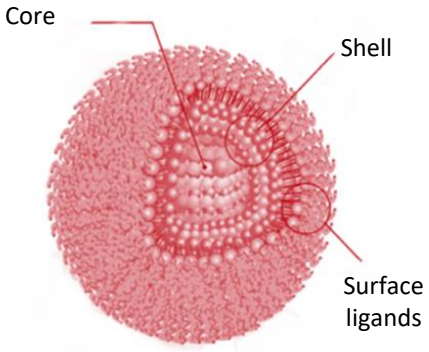
INTRODUCTION TO NANOCO

Nanoco – who we are and what we do

- Founded in 2001 by Dr Nigel Pickett (our CTO) and Professor Paul O'Brien – spin out from Manchester University
- We are a materials science company
- We are the leader in the R&D, scale up, manufacturing and licensing of high performing semiconductor nanoparticles
- Large IP portfolio, validated by the US Patent Trial and Appeal Board
- Headquarters and production facility in Runcorn, UK
- Around 50 staff, 30% of whom have PhDs, employing 8 different nationalities
- And we make Quantum Dots that are cadmium free and hence non-toxic

A selection of quantum dots for use in Display applications

Quantum Dots

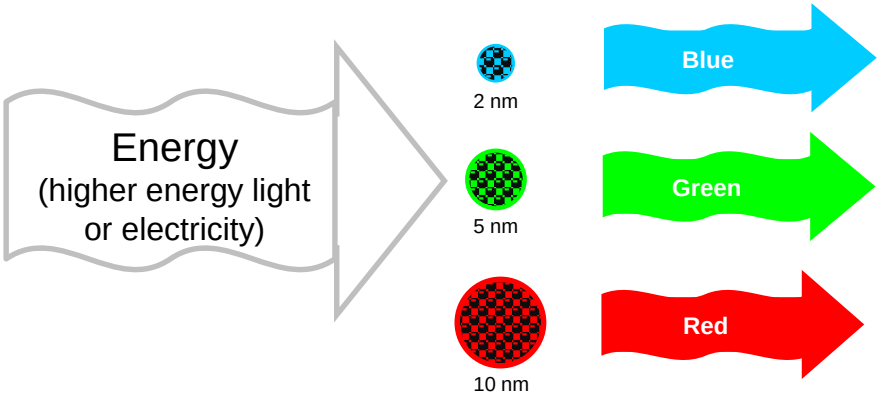


What are they?

- Fluorescent semiconductor nanoparticles, typically 1 – 10 nm in size
  - 100,000 times thinner than a human hair
  - At nano-scale – the whole world fits in the red QD image to the left
  - They are small!

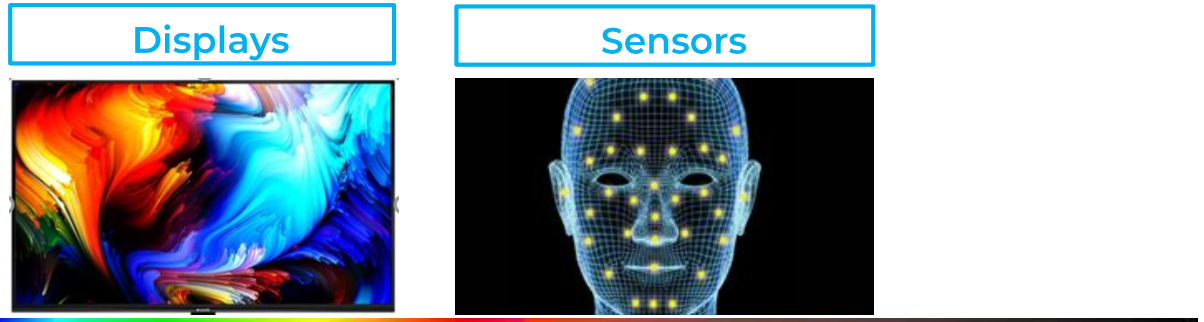
What do they do?

- QD size determines colour it emits
- Broadband absorbers
- Narrowband emitters



Where are they used?

- Dot only strategy
- Focus on near term value opportunities



UV: Ultraviolet Radiation | VIS: Visible Radiation; Light | IR: Infrared Radiation

INTERIM RESULTS

Highlights H1 FY24

Two products in commercial production

New JDAs with global customers

Delivered all JDA milestones

Final litigation proceeds received

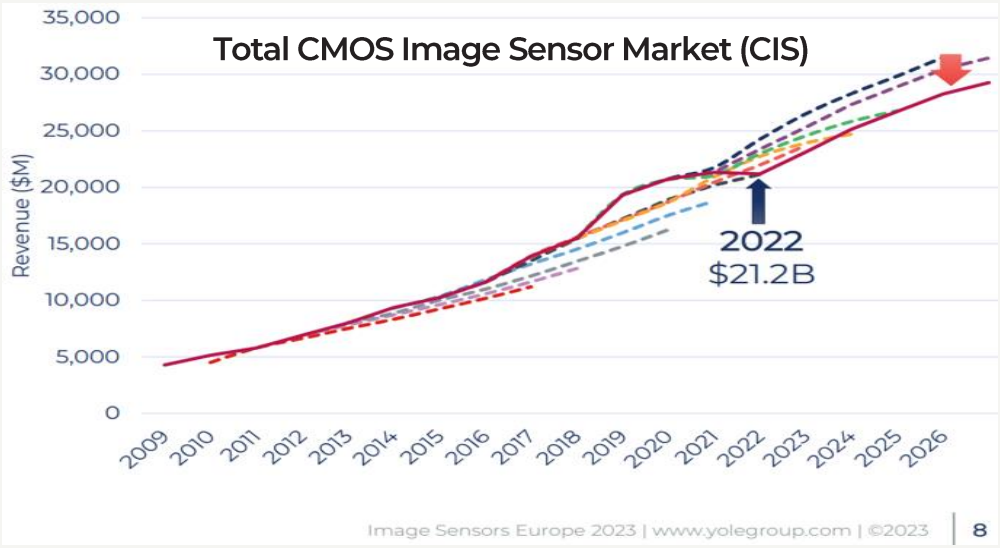
Investing for growth –new device fab

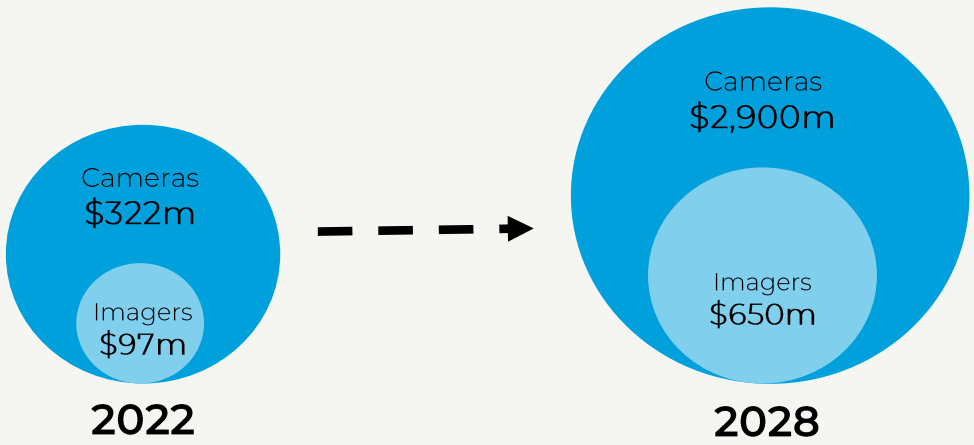
Return of Value underway

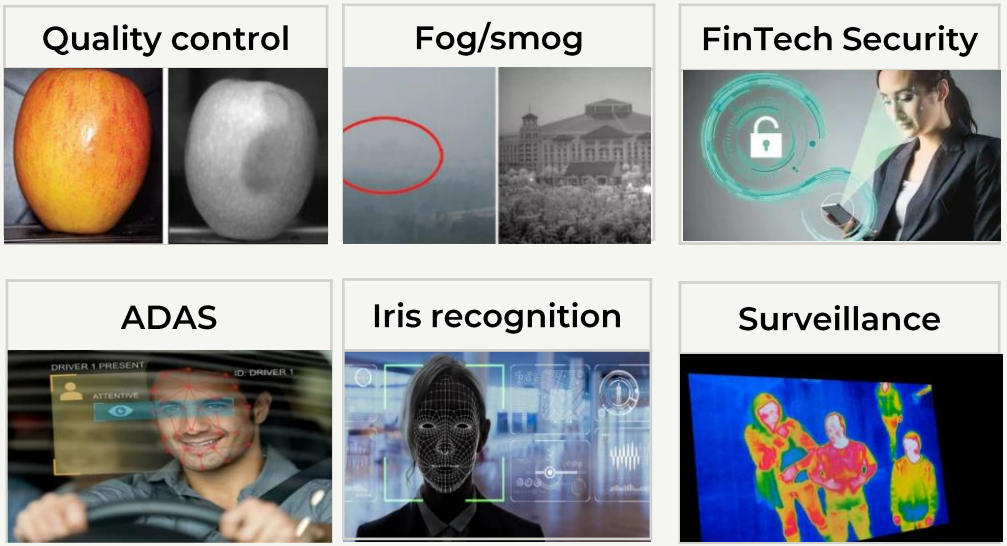
Fully funded with commercial traction

MARKETS AND OPPORTUNITIES REVIEW

Sensing – the market opportunities







- CIS market to reach $30bn by 2030
- Multiple end use sensor applications
- Needs break through adoption – QD CMOS sensors well positioned
- Forecast mobiles adopt SWIR in 2026
- Drives consumer devices to 70% of camera market in 2028

Source: Yole

Sensing – the case for quantum dots

Silicon's Problems	QD Solutions
Poor efficiency (~6-7%)	Increase efficiency to ~60+%
Very limited wavelength	Expand wavelength far into SWIR
Interference from sunlight	Tuned to sunlight "gaps"
Requires higher power laser	Needs less laser power
Alternate InGaAs VERY expensive	QD CMOS price point for consumer

Nanoco's Differentiation

- ✓ Validated materials
- ✓ Multiple tunable wavelengths
- ✓ Wide range of POC materials

- ✓ IP protected platform technology
- ✓ High volume capacity already in place
- ✓ QC to consumer electronics standards

Sensing – product pipeline

January 2024	NIR			SWIR								
Wavelength	(<1.0 µm)			(1.0 – 1.3 µm)			(1.3 -1.5 µm)			(>1.5 µm)		
Material	A	B	C	A	B	C	A	B	C	A	B	C
Development				1				1	1			1
Optimisation		2	↓		1	↓		1	↓			
Scale Up												
Validation												
Production	1	↓					1	↓				

Legend (# = number of customers)

- # Development – material at R&D scale
- # Optimisation – application optimising
- # Scale Up – scaling up at Runcorn
- # Validation – ready for validation
- # Production – ready for production: **GOAL**
- Progress in Period
- ↓ Material entering new phase

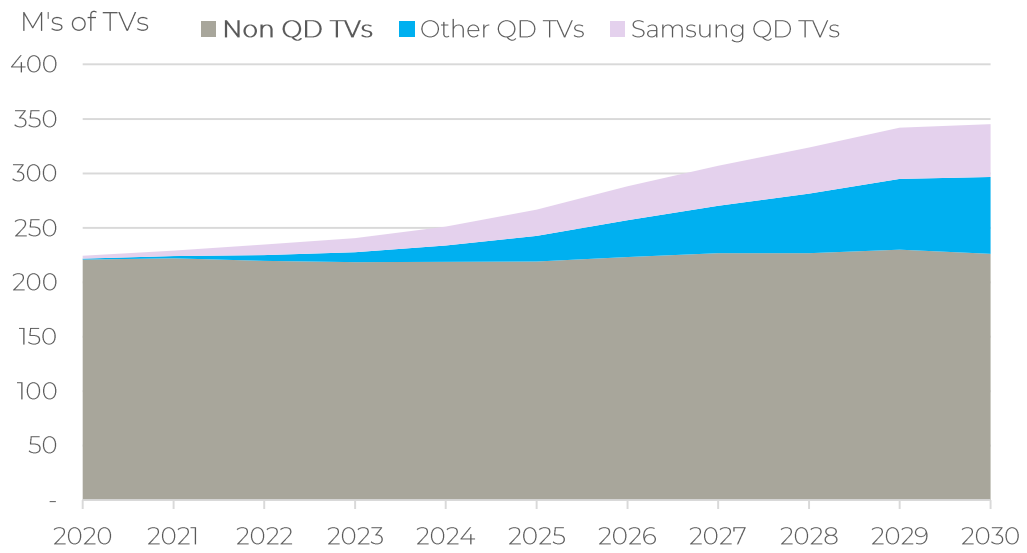
(A) PbS – two materials in commercial production H1 FY24 for one customer for low volume application

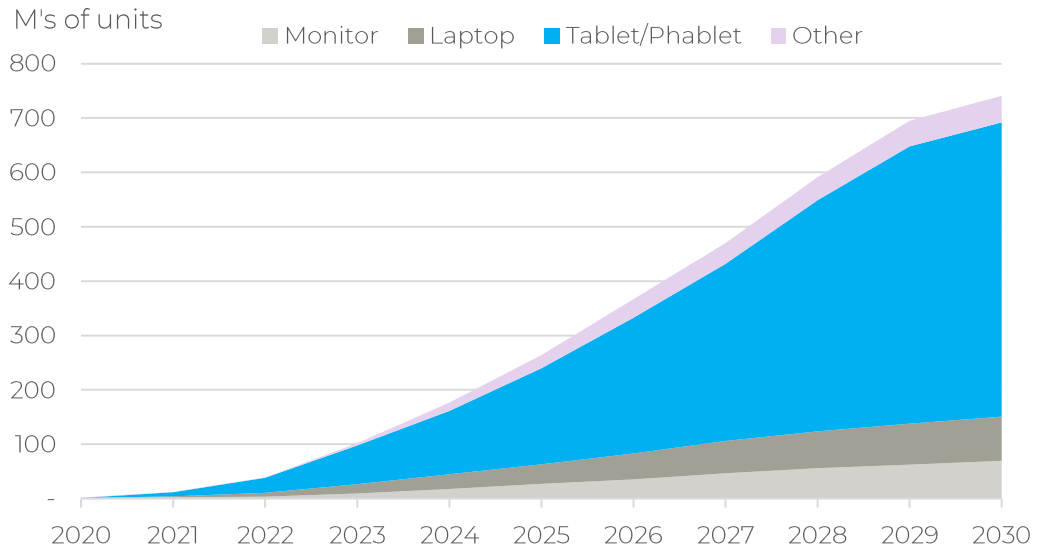
(B) InAs – three materials being optimised over two years for two customers – target production H1 FY28

(C) InSb – two materials being developed by Nanoco – target production H1 FY29

Potential mass market mobile phone adoption of SWIR in 2026

Display – the market opportunities





- QD TV market share to grow to ~34%
- Challengers continuing to erode Samsung TV market share
- Growing interest and investment in µLED (small screens)
- Other QD devices expected to add c.30% total QD screen area by 2030
- Growing international awareness of toxicity issues with cadmium

Source: TDR

Display – the case for quantum dots

Gamut	• Gamut is the range of colours in a spectrum • QD's excellent access to those spectra (95-100% of DCI-P3)
Clarity	• QDs maintain colour clarity at high intensity / peak brightness • Other technologies lead to colour wash out
Supply chain	• Film QDs integrate with existing supply chain • Ability to print QDs to access µLED
Efficiency	• QDs are an efficient energy down converter • Helps offset other power hungry features
Form factor	• QDs suited to almost all form factors for displays • New form factors emerging, curved screens, car dashboards

Nanoco's Differentiation

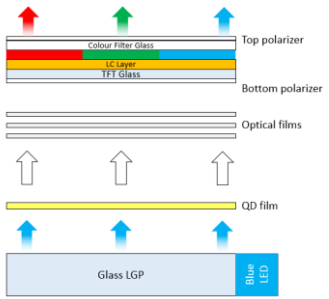
- ✓ Cadmium free – usable in vivo
- ✓ Production ready red and green dots
- ✓ Applicable across multiple technologies

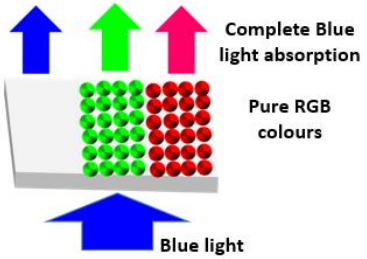
- ✓ IP protected platform technology
- ✓ High volume capacity already in place
- ✓ QC to consumer electronics standards

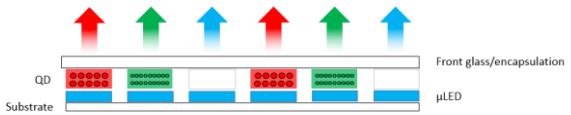
QD Display Technology Roadmap

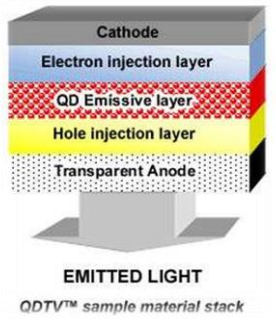
Existing QD materials

QD development required









2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028+

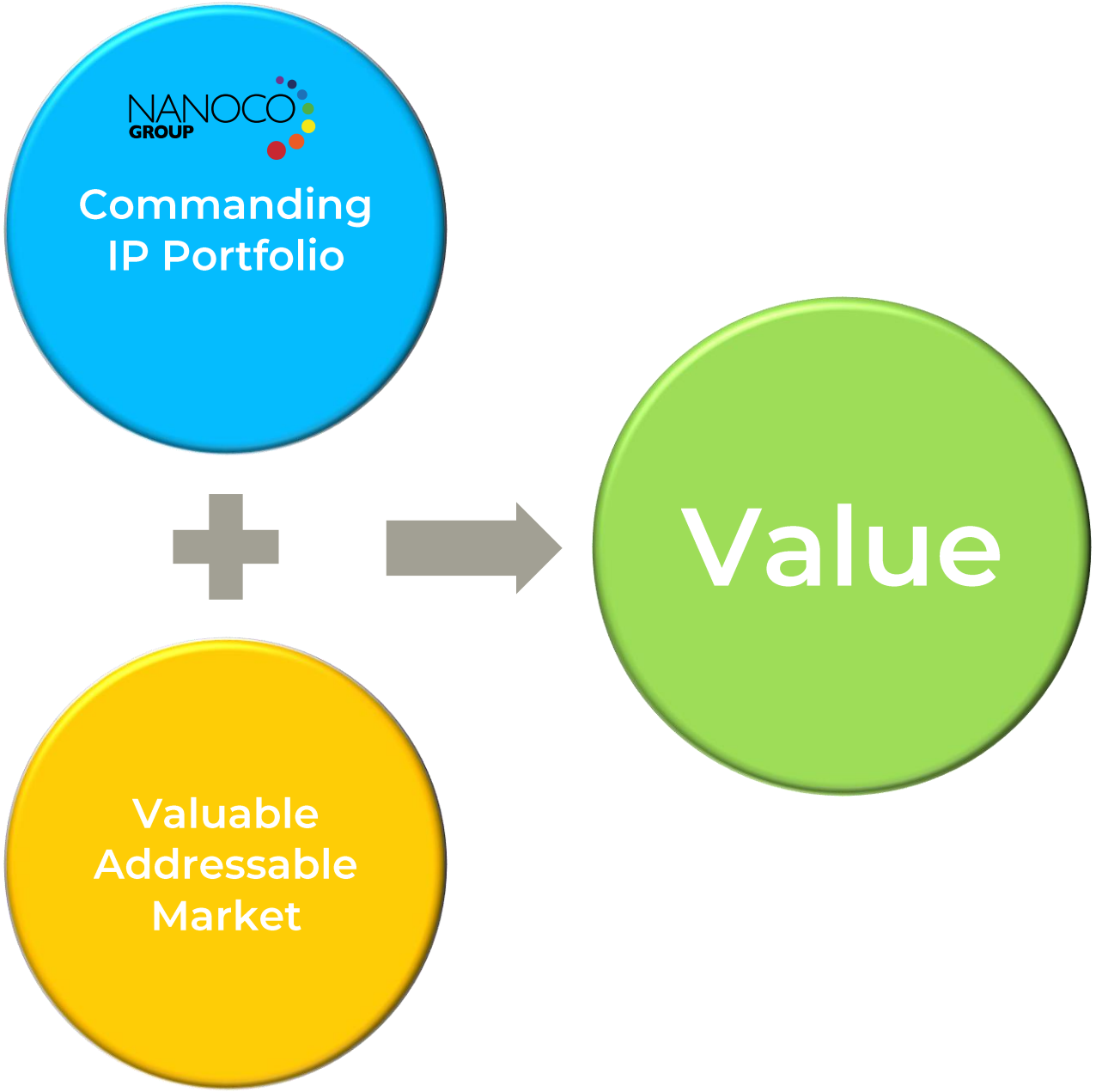
Conventional Film	QD-OLED	QD-µLED	QD-EL
Nanoco tech being used in Samsung TVs	Nanoco tech being used in Samsung TVs	Development work required. Challenges remain for TVs	Always 5 years away. Very challenging
Nanoco materials available for mass production Cadmium competition	Nanoco materials available for mass production Cadmium competition	Nanoco R&D focused on µLED Currently self-funded Working with a number of potential customers	Nanoco focus on near term value – IP still relevant for QDs in EL application

Nanoco technology and IP relevant for all stages of the roadmap

IP LICENSING

Driving value from IP requires two fundamentals*

*Ron Epstein, Epicentre Law

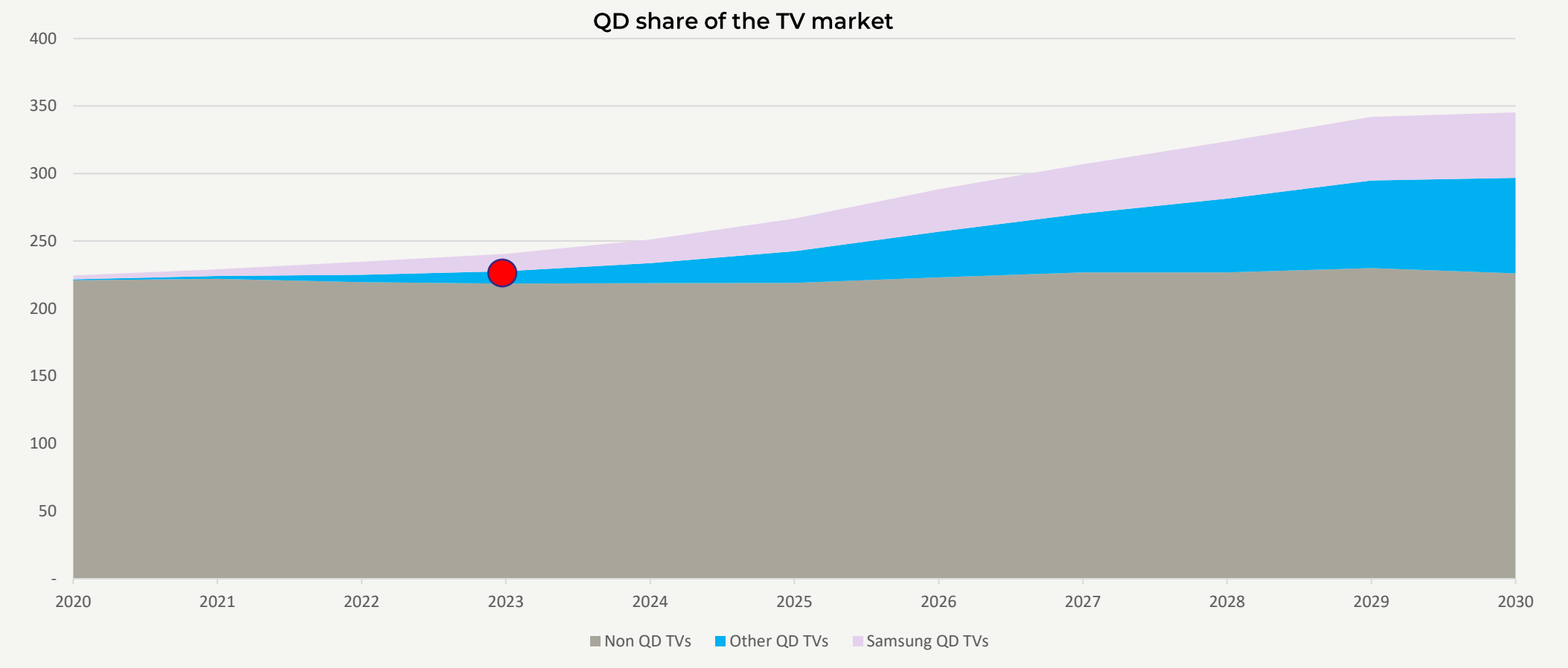


1st Fundamental – Commanding Patent Portfolio

Validated Patents	• PTAB validated all five patents in the litigation • Patents survived multiple different challenges
Retained Patents	• Nanoco retain four of the five validated patents • Nanoco retain 46 of the 47 claims
Other Patents	• Additional Nanoco patents relevant to display • Many were not deployed in the litigation
Patent Lives	• Retained trial patents lives extend to 2028 • Other relevant patent lives extend to 2033
Samsung Licence	• Fact of the settlement is a clear market sign • Size of the Settlement is also a clear market sign

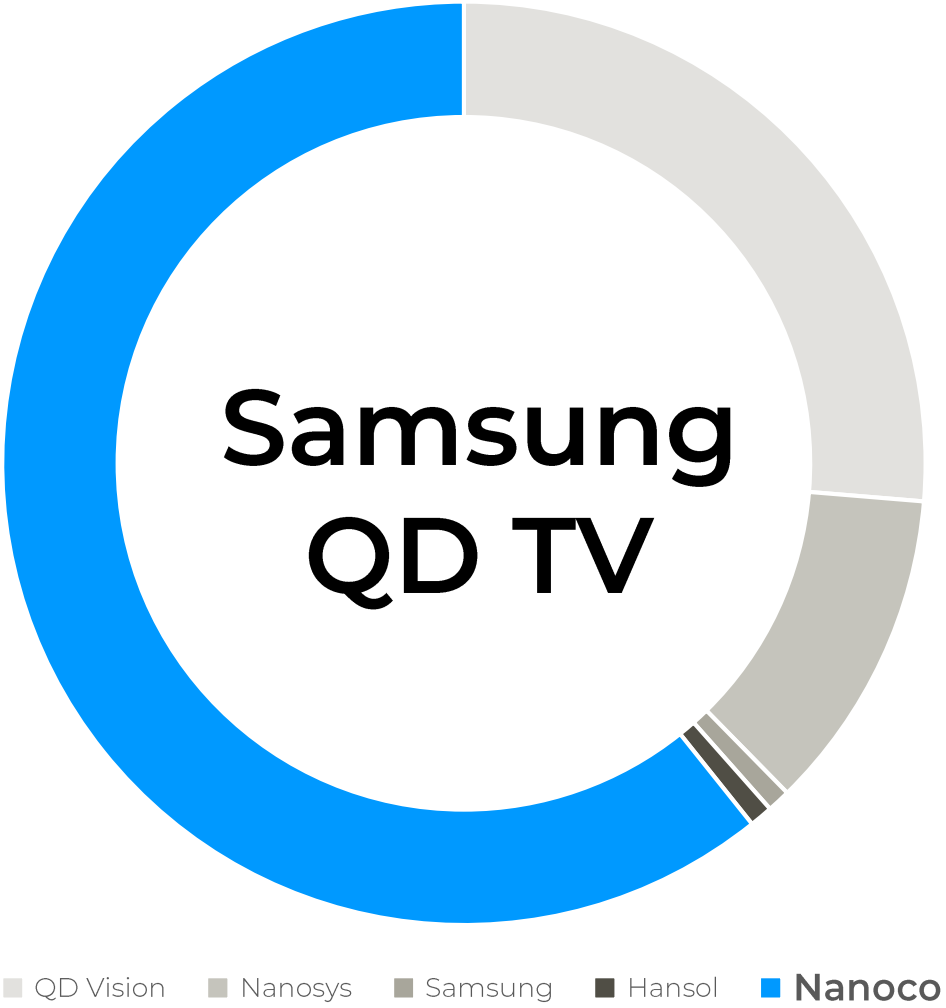
Nanoco has a commanding patent portfolio, meaningful remaining lives

2nd Fundamental – Valuable Addressable Market



- Impacted market <u>currently</u> shallow – majority still cadmium
- QD share of display market set to rise from ~6% to ~34% of the total TV market
- Non-Samsung and non-cadmium QD TVs rise from c.2m units to c.70m units
- Potential acceleration in market growth if µLED programmes succeed

Competitive IP moat



- Chart shows $ paid by Samsung for IP for cadmium free QDs in their TVs*
- Almost two thirds of external payments were to Nanoco
- Opportunity for Nanoco to leverage validated IP for commercial advantage
- Work continues on IP licensing in support of commercial activities
- Retained funds from litigation to support these efforts
- Meaningful results will take time

*Source: published court papers show that Samsung paid $65m to acquire QD Vision IP portfolio and $28m to licence Nanosys IP. Hansol as a toll manufacturer assumed not to have much IP. Samsung's own IP not known.

FINANCIAL REVIEW

Financial highlights

Revenue up 150% - £3.0m IP license

Adj EBITDA £0.7m vs PY loss £1.1m

Cash cost base increased to £0.6m p.m.

FX hedge gain £2.5m – cash in Feb 24

Period end cash £59.3m (PY £8.2m)

Cash supports investing for growth and IP

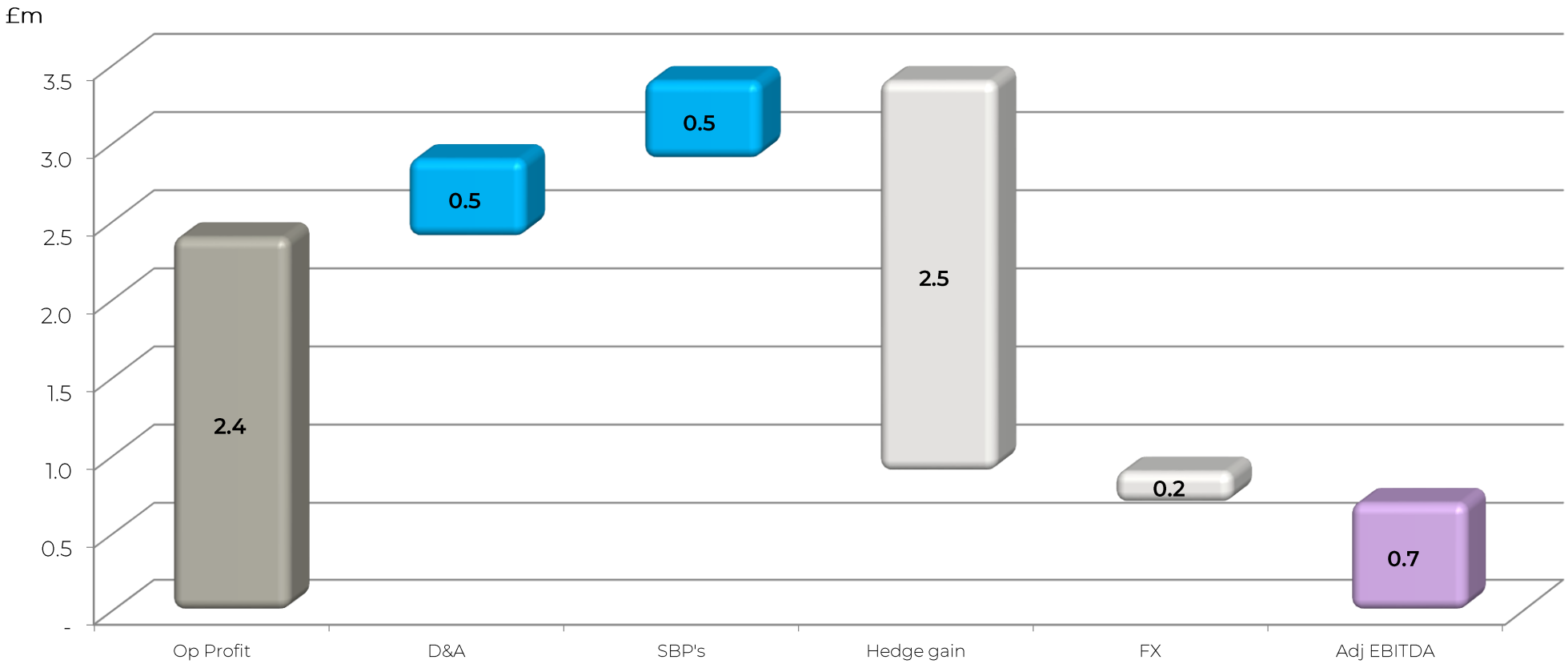
Strong balance sheet essential for customers' supply chain viability

Income statement

	H1 FY24 £m	H1 FY23 £m	Change £m
Revenue	4.0	1.6	+2.4
Cost of sales	(0.5)	(0.5)	-
Gross profit	3.5	1.1	+2.4
Other operating income	0.1	0.1	-
R&D investment	(0.8)	(0.5)	(0.3)
Other administrative expenses	(2.1)	(1.8)	(0.3)
Adjusted EBITDA / (LBITDA)	**0.7**	**(1.1)**	**+1.8**
Adjusting items	1.7	(1.0)	+2.7
Operating profit / (loss)	**2.4**	**(2.1)**	**+4.5**
Financing costs (net)	(0.3)	(0.2)	(0.1)
Tax	(0.3)	0.3	(0.6)
Profit / (loss) after tax	1.8	(2.0)	+3.8

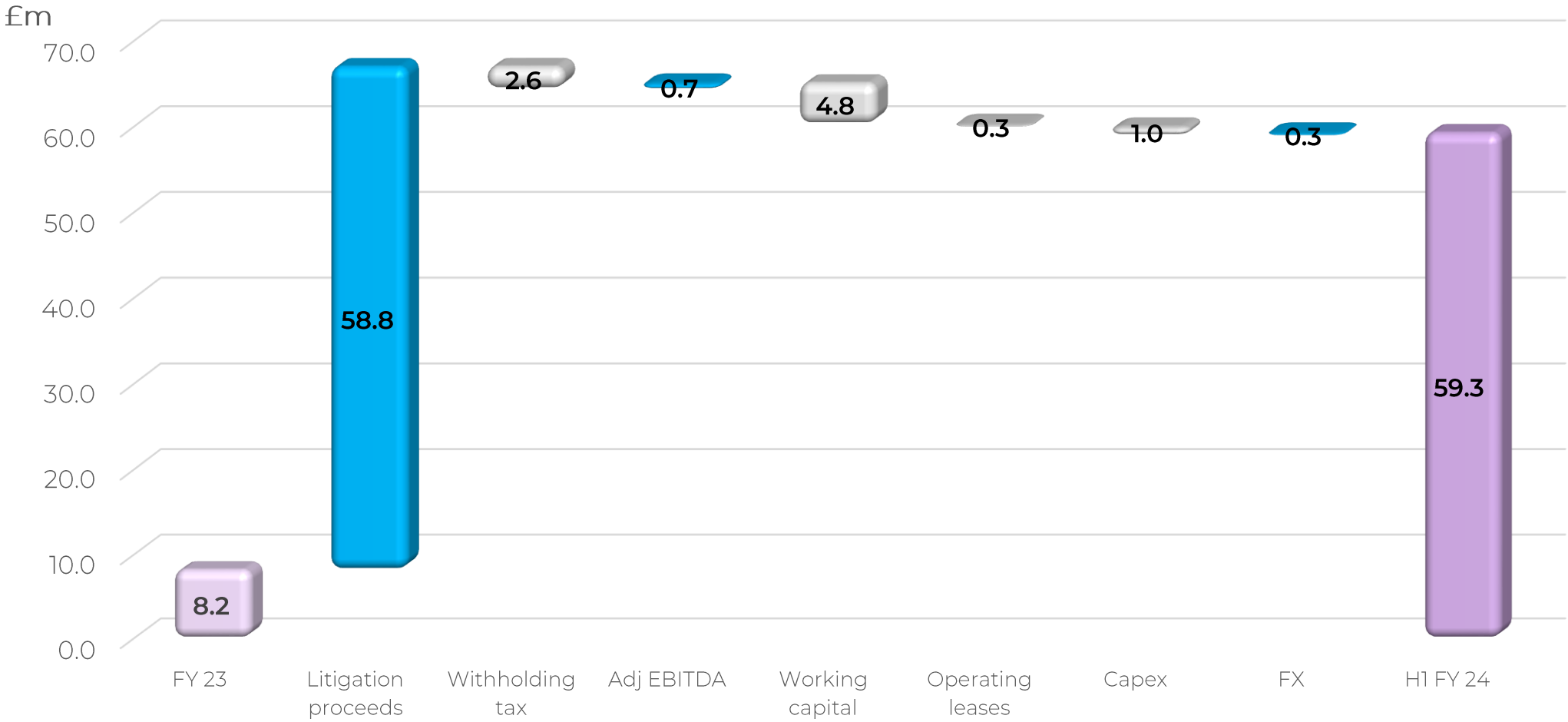
- Revenue growth driven by £3.0m IP licence income pre-paid by Samsung
- Other revenue fell due to timing difference in commencing new JDA
- Adjusting items set out overleaf - £2.5m hedging gain on FX derivative MTM

Adjusted EBITDA



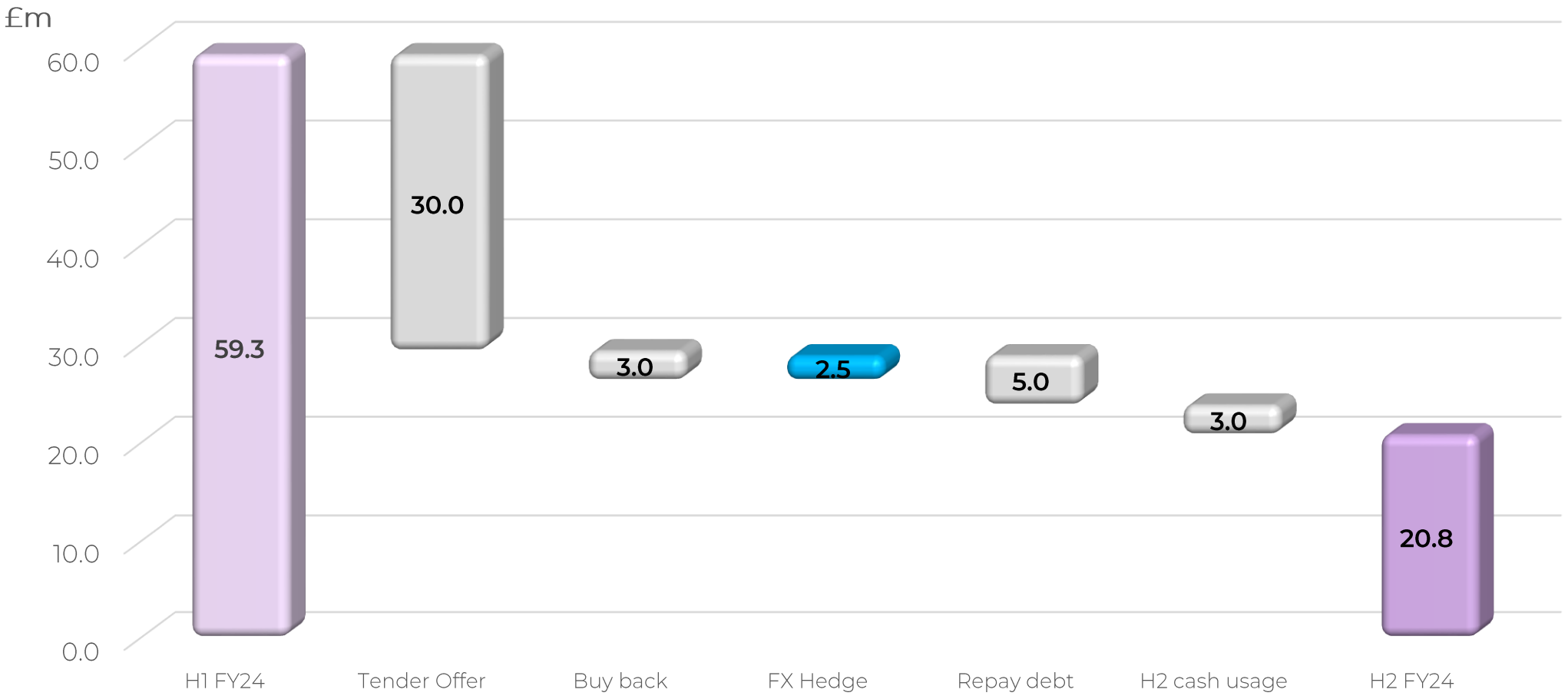
- D&A and SBP in line with prior year
- One off gain on hedge of litigation proceeds realised in February 2024
- Other FX gains relate to other trading balances at period end

Movement in cash



- Litigation proceeds (before hedge) £58.8m less Korean withholding tax (£2.6m)
- Working capital reflects prepayment by Samsung
- Benefit of hedge now realised and will be reflected in H2

Anticipated use of cash H2 FY24



- Tender offer assumed to be fully subscribed
- Assume buy back completes by July 2024 (authority to December 2024)
- Repayment of all debt in H2 FY24, FX gain crystalised February 2024
- H2 cash usage includes £1.0m one off costs (mainly return of capital)

Financial summary

Guidance

- Services and material revenue expected in line with FY23
- Samsung IP licence income £6m p.a. for 8 years (prepaid)
- Cash costs increasing to c. £7.2m p.a. reflecting investments

Investing

- Increased Runcorn footprint to create wafer device fab
- New equipment allows more tailored customer solutions
- New investments will also accelerate product development

Cash

- Underlying net monthly cash burn increasing to c. £0.3 - £0.4m
- Also investing c. £2.0m in capital projects in FY24
- Commitment to return £33m – process underway

OUTLOOK

Priorities for CY24 – steady growth on a firm foundation

More low volume production orders CY24

New materials development contracts

Commission wafer device fab

Complete Return of Value

Chair succession process CY24

Increasing profile in high growth markets

Fully funded with commercial traction

QUESTIONS

APPENDICES

GLOSSARY

CMOS	CMOS stands for Complementary Metal-Oxide-Semiconductor: technology used in the manufacturing of computer processors, memory chips, and other digital devices such as sensors.
CIS	CMOS Image Sensor: a semiconductor device that serves as an 'electronic eye', faster in data rate than other devices, cheaper, energy-efficient, and can be integrated on-chip.
Spectrum	The electro-magnetic spectrum: the visible spectrum ranges from a wavelength of 380 nm to 700 nm (visible to the human eye). The infra-red spectrum ranges from 700 nm to 1 mm.
NIR	Near Infra-Red ranges from 700 nm to 1,000 nm
SWIR	Short Wave Infra-Red ranges from 1,000 nm to 3,000 nm
POC	Proof of Concept – lab scale working material or device, required to demonstrate basic target functionality before optimising and scaling up for production for a specific application
PbS	Lead Sulphide
InAs	Indium Arsenide
InSb	Indium Antimonide
InGaAs	Indium Galium Arsenide
DCI-P3	Digital Cinema Initiative defining Red Green Blue colour space (2005), to be used for digital theatrical motion picture distribution.
nm	Nano-meter: 1 billionth of a meter or 1 x 10^{-9}. A sheet of paper or human hair is 100,000 nm thick

BOARD MEMBERS

Dr Christopher Richards Non-Executive Chairman	• CEO, Non-Executive chairman, Arysta Life Sciences • 20 years of increasing management roles at Syngenta • Chairman of Plant Health Care plc (AIM: PHC) and NED of Origin Enterprises plc (AIM: OGN)
Brian Tenner CEO	• Experienced Quoted Company Director with strong operational and transformation experience • Previously Board Member and CEO / CFO of NCC Group plc, Renold Plc, Scapa Group plc, and British Nuclear Group Ltd
Dr Nigel Pickett Co-founder & CTO	• Inventor of Nanoco's key patented scale-up technology • Leading expert on semi-conducting nano-crystals • Japanese Government, St. Andrews University, Georgia Tech
Liam Gray CFO and Company Secretary	• Chartered accountant, having qualified with KPMG • Previously worked for a variety of listed and private entities in a range of positions
Dr Alison Fielding Senior Independent Non-Executive (Remuneration chair)	• Astra Zeneca, followed by McKinsey & Co, then co-founded Techtran Group Limited which was acquired by IP Group in 2005 and subsequently held the role of director and COO at IP Group • Board member / advisor of several early stage and quoted IP Group backed tech companies • Maven Income and Growth VCT plc and Thomas Swan and Co Ltd
Chris Batterham Non-Executive (Audit chair)	• 20 years of Non-Executive experience in high growth technology companies including: • NED of NCC Group plc • Previously CFO of Unipalm, first Internet IPO
Dieter May Non-Executive	• Extensive senior executive career in high-tech industries and premium brands. CEO Osram Opto Semiconductors GmbH, SVP positions Infineon, Nokia and BMW • NED of Nordic Semiconductor ASA

SHAREHOLDER ANALYSIS (AS AT 28 FEB 2024)

Name	Shareholding	Percentage
Hargreaves Lansdown Asset Management	56,054,440	17.28
Lombard Odier Investment Managers	53,933,433	16.62
Interactive Investor	29,089,418	8.97
Tariq Hamoodi	13,084,542	4.05
HSDL, Stockbrokers	12,009,964	3.70
Dr Nigel Pickett	11,770,911	3.63
Barclays Smart Investor	11,690,069	3.60
AJ Bell	11,041,033	3.40
Total of shareholdings above	**198,673,810**	**61.25**

The total number of voting rights in the Company is 324,418,728 (excludes 12,222 Treasury shares)