NANOCO GROUP PLC

HALF YEAR RESULTS PRESENTATION

For the six months ended 31 January 2018

DISCLAIMER

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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 entire text of the interim results announcement for the half year ending 31 January 2018, can be found on the Investor Relations section of the Nanoco website (www.nanocogroup.com).

HIGHLIGHTS – ENCOURAGING PROGRESS IN COMMERCIALISATION

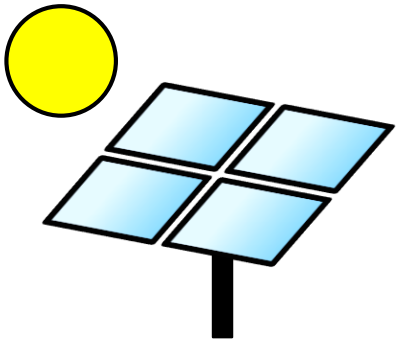
Momentum in current trading

- Game changing Material Development and Supply Agreement with a large US-listed Corporation for advanced electronic devices
- Increasing number of Nanoco equipped displays products moving through to commercial production with
  - First display products expected to be in the market during 2018
- Signed Commercial Supply and License Agreement for use of Company's products in US corporation, CareWear's® light therapy medical devices
- Made progress in Specialised Horticultural Lighting and Life Sciences
- Increased number of granted patents and patent applications to c.600

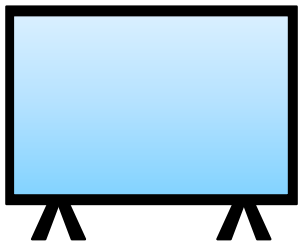
Strengthened financial position

- Strengthened balance sheet by £8 million with placing
- Revenue and other operating income for the six months was £0.3 million (2017: £0.8 million) and the loss after tax was reduced to £4.2 million (2017: £5.4 million)
- Cash and cash on deposit at 31 January 2018 was £8.7 million (31 July 2017: £5.7 million; 31 January 2017: £8.3 million)

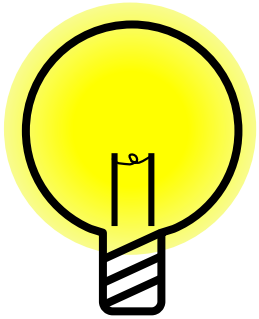
COMPANY OVERVIEW – PIONEER AND WORLD LEADER



Solar

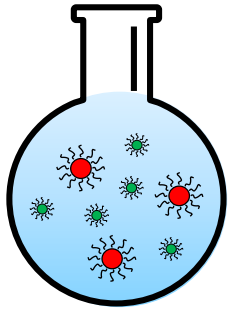


Display



Lighting

Life sciences



Nano-materials

- Pioneer and world leader in the development and production of cadmium-free quantum dots (CFQDs)
- Platform technology enables revenue from multiple, large addressable markets
- Extensive patent portfolio, c.600 patents granted/pending
- Large addressable markets
- R&D in Manchester
- Manufacturing in Runcorn
- c.80 staff

STRENGTHS

Leader in heavy-metal-free CFQD® quantum dot & Nano-material products

Leading R&D innovation

Intellectual property

+

Scalable production process

Molecular seeding process

Efficient scalable production

=

- Leading performance
- High quality
- Reliability
- Low risk
- High volume
- Cost competitive

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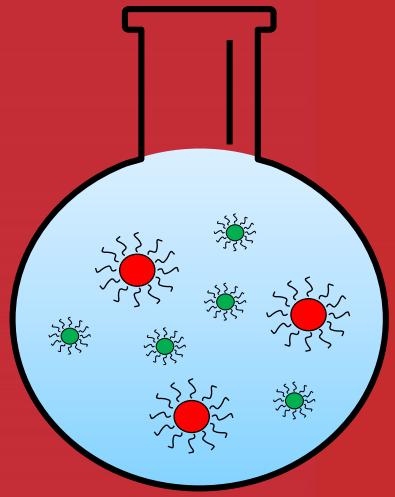
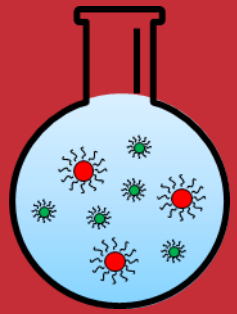


NANO-MATERIALS

NANO-MATERIALS – GAME CHANGING

- Move from traditional, costly semiconductor processing to increased functionality in nano-particles

- Nano particle development is a core competency of Nanoco
  - Complex particle design and development
  - Scale up
  - Mass production
- Focus on new generations of infrared quantum dots
- Technology developed for Nanoco's solar programme relevant
- Applications in advanced electronics, sensing and autonomous vehicles
- Focus on human – machine, machine – environment interfaces
- Delivering major contract with US corporation signed in February 2018



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DISPLAY

GROWING DISPLAY MARKET OPPORTUNITY

- Benefits of CFQDs
  - Enables Wide Color Gamut (WCG) displays for 4K, UHD, HDR, gaming, streaming, photos
  - Integrated into existing LCD technology
  - Consistent and accurate colours across product range
  - Improved peak brightness and contrast
  - Lightning fast response times and refresh rates
- Samsung leading the way with its QLED brand; other OEMs following
- Nanoco technology demonstrated at industry shows, Touch Taiwan and CES by top 5 LCD panel manufacturer
- Increasing number of Nanoco equipped display products moving through to commercial production with customers in Asia
- First products expected to be in the market in 2018
- Nanoco and its licensees, Dow and Merck, are the only commercial suppliers of CFQDs; competition chasing cadmium-free hard

AUO demonstrating 65”, 75” and 85” UHD HDR cadmium free QD TVs at Touch Taiwan in September 2017

MULTI-CHANNEL STRATEGY TO DISPLAY SUCCESS

Nanoco Non-exclusive Licensees

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TECHNOLOGY

TECHNOLOGY

Merck

- Revenue from licence fees and royalties
- Technology transfer completed
- Merck working on new display applications

Runcorn

- Revenue from Runcorn produced CFQD resin + royalty
- Focus on Taiwanese display OEMs
- First products expected in 2018

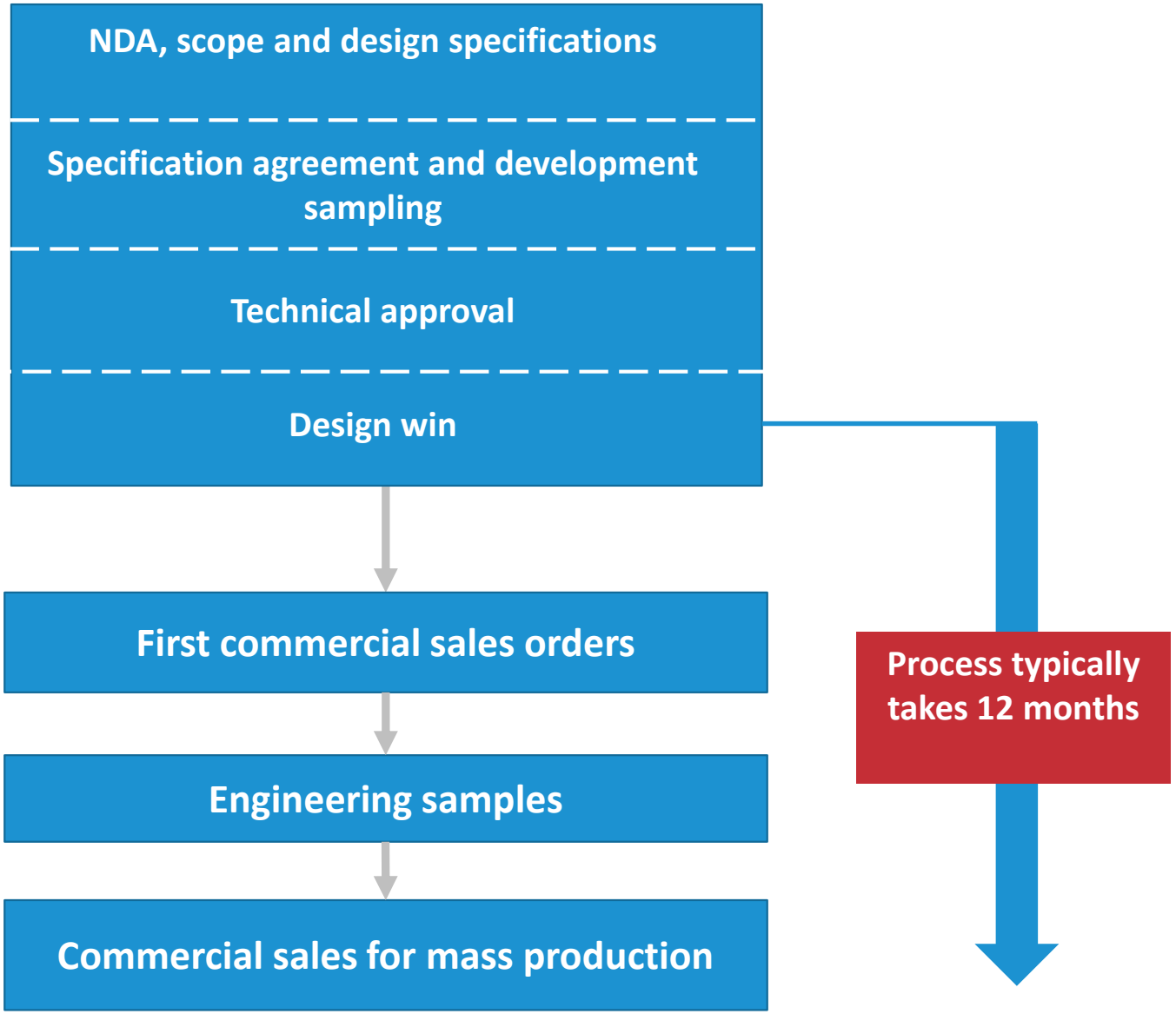
Dow

- Revenue from royalties
- Product sold under the TREVISTA™ brand manufactured in S Korea
- Progress being made in commercial engagements

Potential Display Customers

AUO, INNOLUX, SONY, VIZIO, DELL, hp, SAMSUNG, TCL, VESTEL, TPVISION, FOXCONN, COMPAL, Qisda, Hisense, BOE

FOCUSED SALES PIPELINE – PRODUCT EXPECTED IN MARKET IN 2018



- Focused on Taiwanese OEMs with near term potential
- Sales process has taken longer than anticipated
  - Customisation required for each OEM
  - Achieving required specification can be iterative
  - Goalposts frequently changed
  - Use of cadmium lingering
- Product expected in the market in 2018

CONTINUOUS INNOVATION CRITICAL TO SUCCESS

QD Film

- Continuous improvement in CFQD quality to meet display demands
- Aggressive reduction of COGS

QD Colour Filter

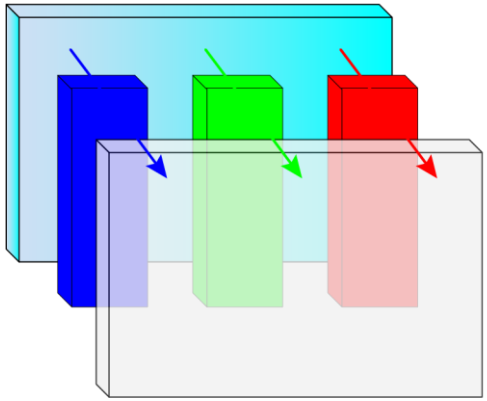
- QD enabled colour filters for LCD TVs
- Improved colour, brightness and viewing angle

QLED

- EL QD
- Nanoco / Kyulux agreement
- Direct competitor to OLED

Current technology

2 – 4 years away



4+ years away

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OTHER MARKETS

HORTICULTURE LIGHTING

- Our technology is being commercialised today
  - Commercial Supply and License Agreement with the Sports Turf Research Institute
  - Lights being trialled by leading UK grower for large vertical farm investment
- As the world's population continues to grow and is focused increasingly in urban environments, new farming models, such as vertical farming will be required
- Consumers are becoming more conscious about where and how their food is produced and transported
- The horticultural lighting market is forecast to grow from $3.8bn in 2017 to $17.0bn in 2027 (source Yole Développement)
- CFQD lights tuned to match the ideal growing conditions for plants
- Benefits include faster growth, energy efficient, changing wavelength without changing the LED

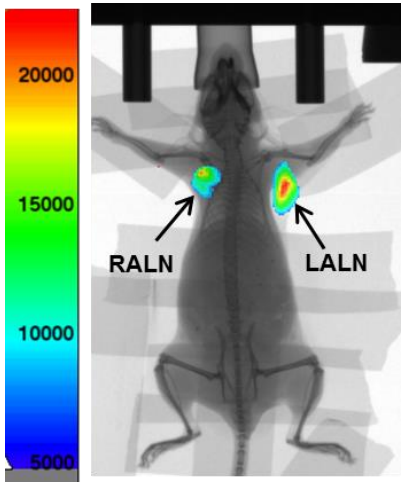
GE Mirai Lettuce Farm in Japan

Nanoco lights undergoing extensive trials at leading UK grower

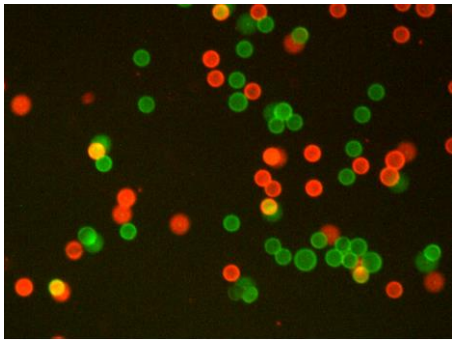
MEDICAL DEVICE / LIGHTING

NANOCO LIFE SCIENCES

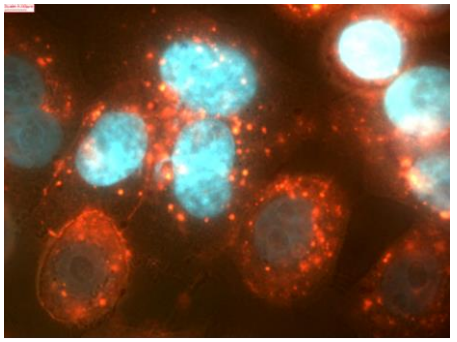
- Focus on cancer imaging and diagnostics
- Recent CRO test results show Nanoco CFQD image agent is non-mutagenic, using industry standard AMES testing, required by regulatory guidelines
- Partnership in place with Covance “CRO”, University College London, University of Manchester and University of Nottingham
- Positive results :
  - Vastly improved demarcation of lymph nodes in animal models compared to standard practice
  - No signs of toxicity were observed in rodents after high doses. Work is ongoing
  - Active conjugates against several tumour markers
  - Significant enhancement of cancer cell labelling with 5-ALA
- Supported by Innovate UK Grant
- Strong IP portfolio



In vivo photoluminescence images of lymph nodes in mice



spheres labelled with streptavidin-Vivodot™ green and red conjugates

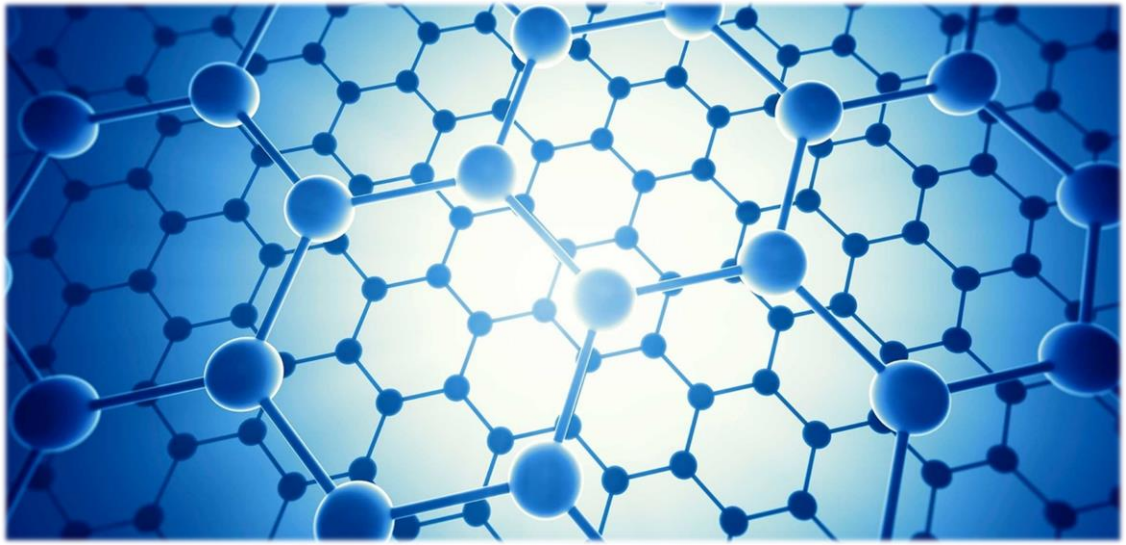


Breast cancer cells labelled with Herceptin-Vivodots™ red conjugate

NEXT GENERATION 2D AND OTHER NEW MATERIALS

- 2D material development programme
  - Partnership between Nanoco and University of Manchester, National Graphene Institute
  - Collaboration between Nobel Laureate Prof. Kostya Novoselov and Nanoco
  - Develop and commercialise future generations of materials
  - Funded through collaboration agreement
  - Applications for new catalysts, photo-detector, photovoltaics, light-emitting devices, inverters and logic gates

- Electroluminescent and other materials
  - New generation of electroluminescent QDs which compete directly with OLED materials for new generations of display
  - Complex combination of materials in partnership with world leading technology companies



Next-generation hetero structure devices: photodetectors, photovoltaics, light-emitting devices, field-effect transistors, inverters and logic gates

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OPERATIONS

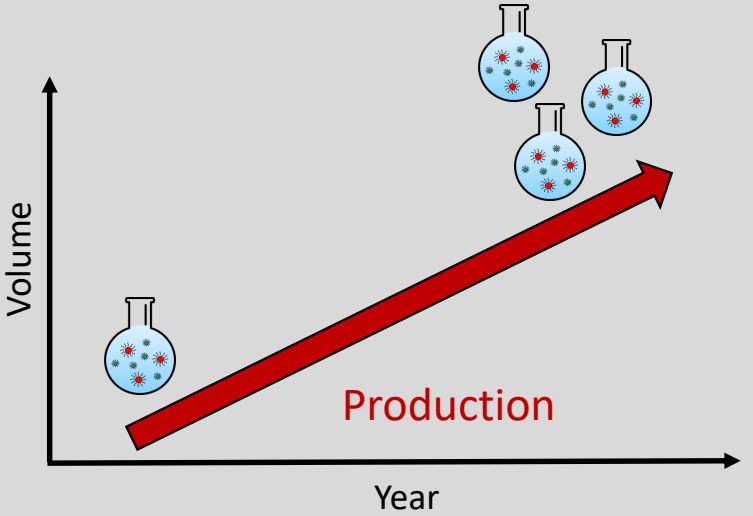
EXPANDING MANUFACTURING TO FULFIL COMMERCIAL SALES

- Expanding Runcorn production to service new and growing nano-materials business
- Expansion fully funded by customer
- Runcorn currently fulfilling commercial display orders
- Displays capacity of 1 million TV/year (55inch) with 24/7 operation
- ISO 9001 certified
- Aggressively reducing product cost

Runcorn Production Facilities

Display Fab

Nano-material Fab



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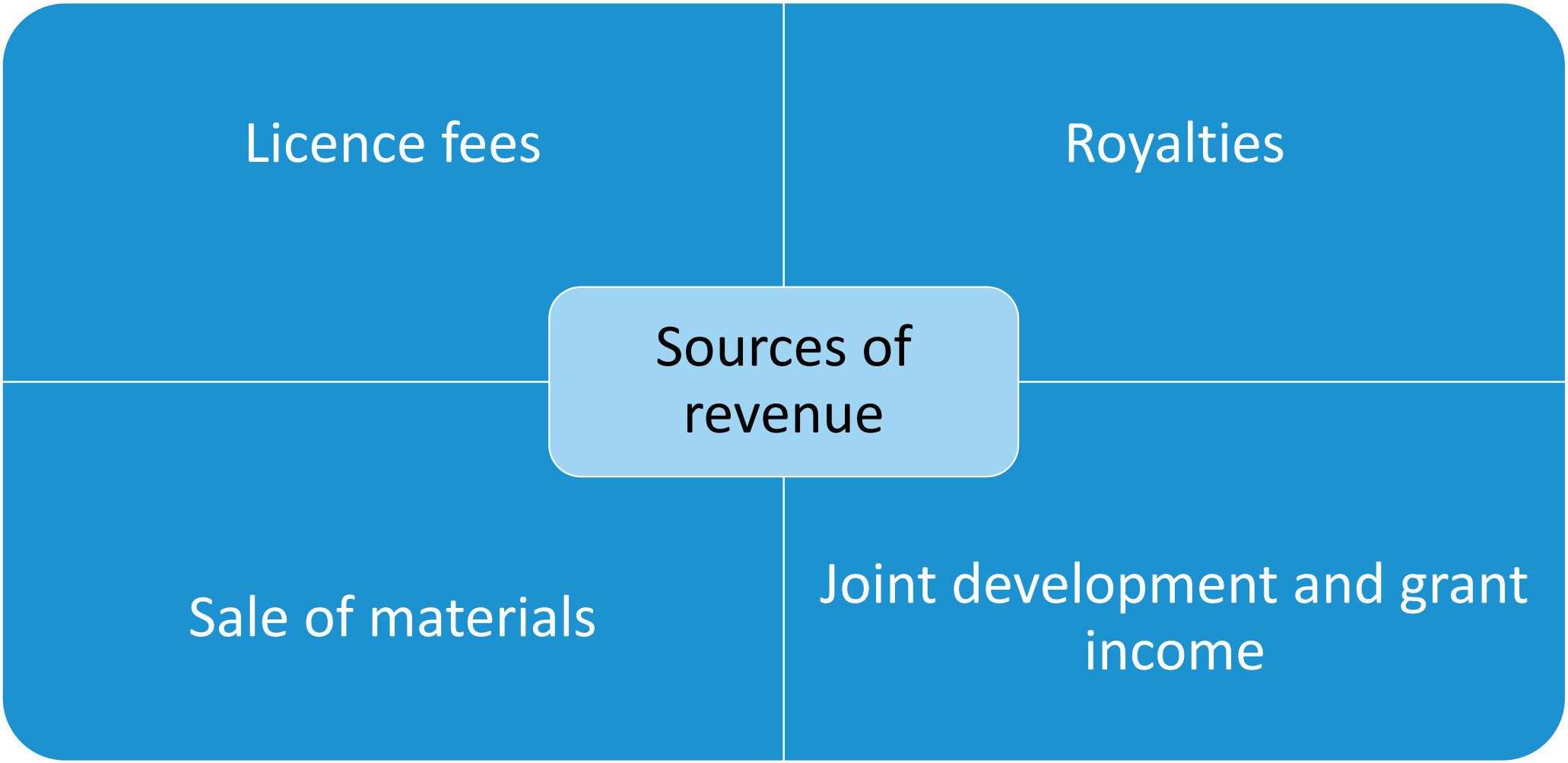
FINANCIAL REVIEW

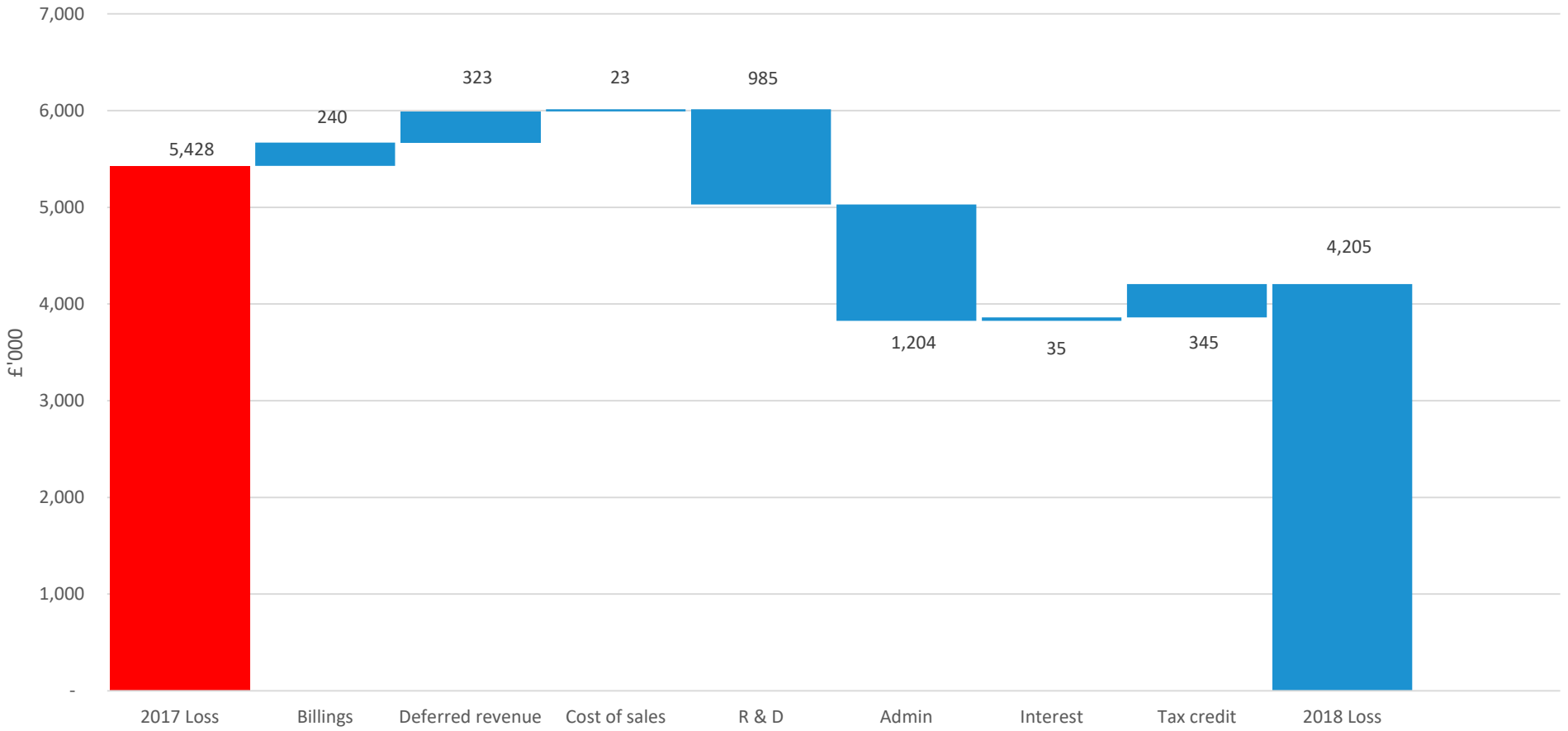

Licence fees
Royalties
Sources of revenue
Sale of materials
Joint development and grant income

FINANCIAL HIGHLIGHTS

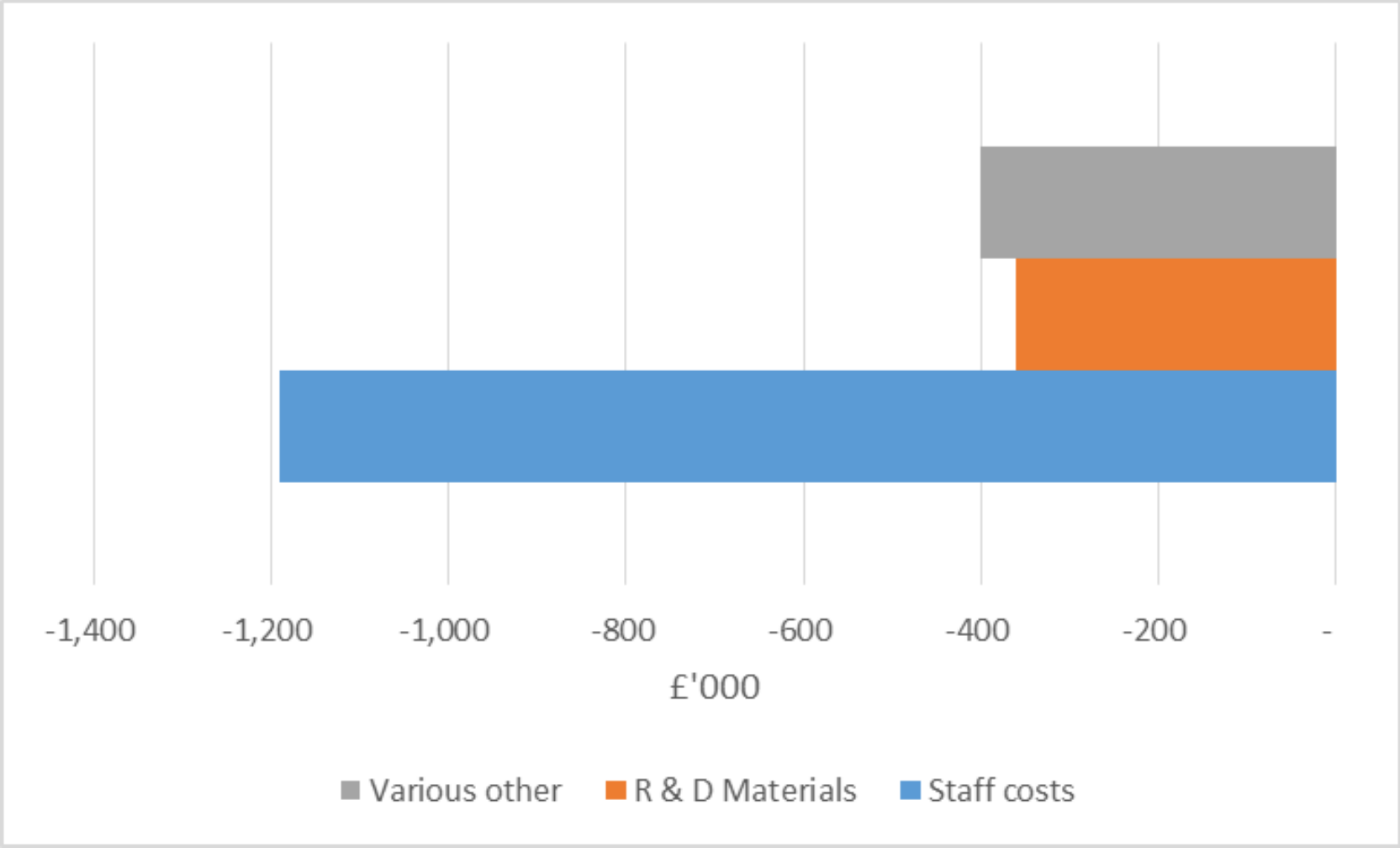
	H1 2018 £m	H1 2017 £m	Movement £m
Revenue and other income	**0.3**	0.8	(0.5)
R & D investment	**1.9**	2.9	(1.0)
LBITDA	**(4.3)**	(5.9)	1.6
Loss after tax	**(4.2)**	(5.4)	(1.2)
Cash and short term deposits	**8.7**	8.3	0.4
Deferred revenue	**0.6**	0.8	(0.2)
Net assets	**14.3**	14.1	0.2
	No	No	No
Patents granted/pending at year end	**600**	550	50
Employees	**80**	93	(13)

- Not included in the £8.74m cash are accrued R&D tax credits, the upfront milestone payment and capex funding from our new US partner

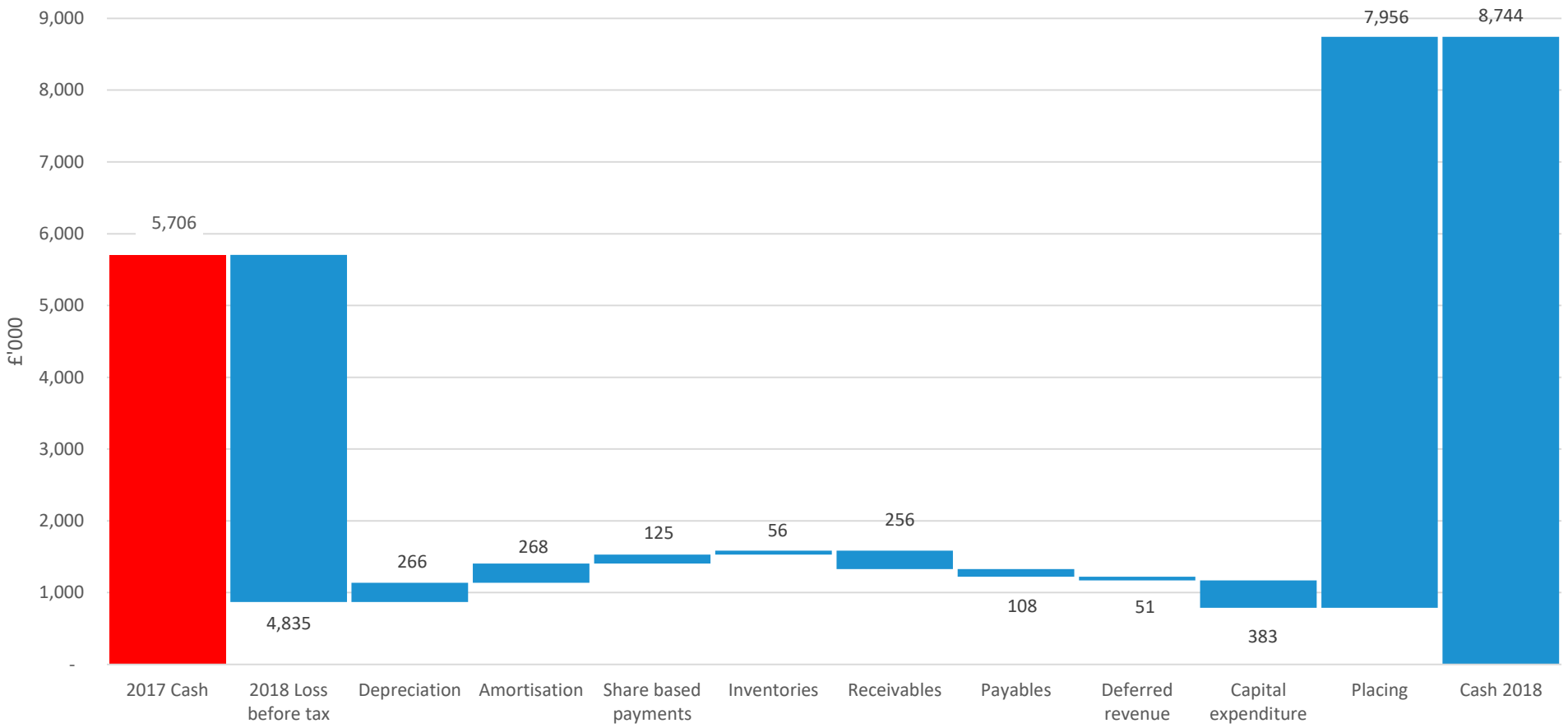
MOVEMENT IN NET LOSS DURING H1 2018



MOVEMENT IN OPERATING COSTS COMPARED TO H1 2017



MOVEMENT IN CASH H1 2018



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SUMMARY

SUMMARY – MOMENTUM IN CURRENT TRADING

- Platform technology enables revenue from multiple, large addressable markets
- Game changing Material Development and Supply Agreement with a large US-listed Corporation for advanced electronic devices
- Runcorn manufacturing expansion underway to support new commercial contracts
- Display
  - Increasing number of Nanoco equipped products moving through to commercial production
  - First display products expected to be in the market during 2018
  - Next gen products in development
- Other markets
  - Opportunities emerging in Horticultural Lighting, Medical Devices and Life Sciences
  - Commercial agreement signed with a US medical device company under the brand name, CareWear®
  - 2D and other new materials being developed
- Large and growing patent portfolio
- Cost base significantly reduced and balance sheet strengthened
- Sufficient cash to support growth

Q&A

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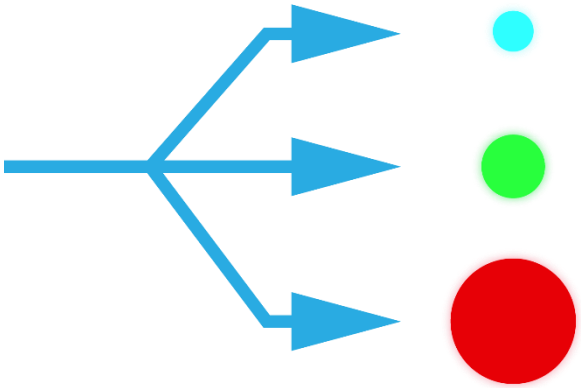
APPENDICES

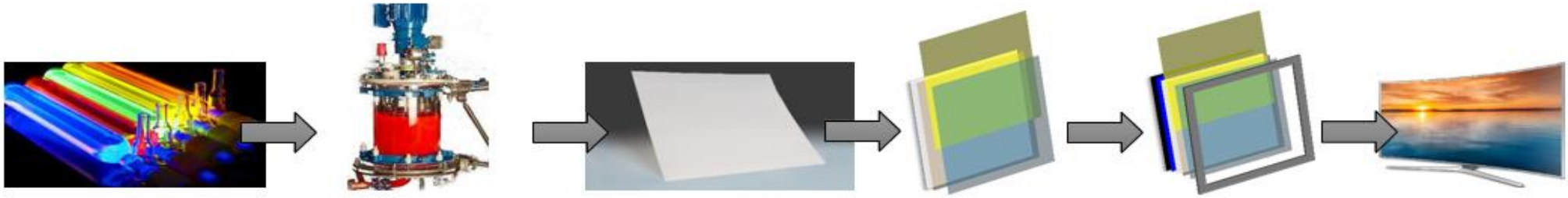
WHAT IS A QUANTUM DOT?

- Tiny particles of a fluorescent semiconductor material
- 1 to 10 nanometers in diameter
- Size of the quantum dot determines the spectrum of light emitted
- Smaller = blue; larger = red
- Can be tuned to light beyond visible light into the Infra-red or ultra-violet parts of the spectrum



Established technology with a wide range of commercial applications

BENEFITS OF CFQD® QUANTUM DOT FILM



QD manufacture | Resin | Film | Film stack | Panel | Display

Better Colour Gamut

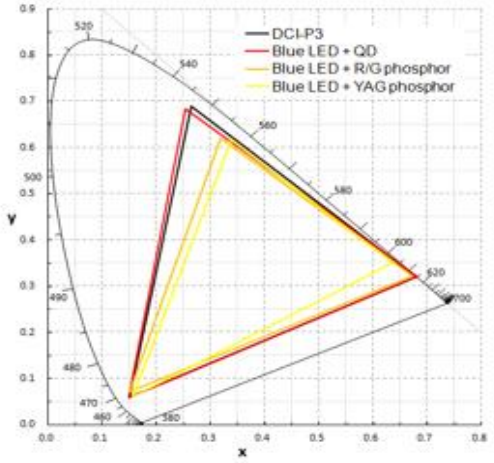
- Much improved colour saturation
- Improved colour enhancement over LCD → similar to OLED

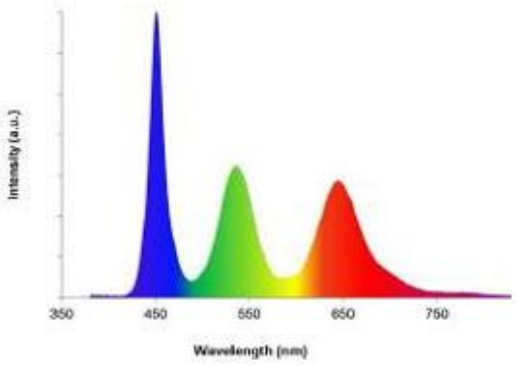
Energy Efficient

- Narrow bandwidth = more light extraction through colour filters
- Enables use of blue LED instead of less efficient white LED

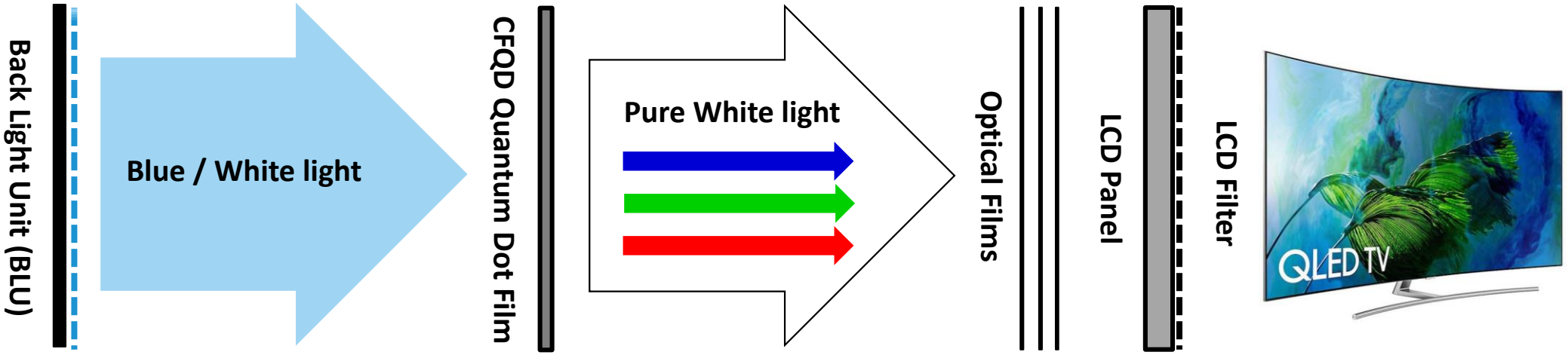
Minimal Process Change

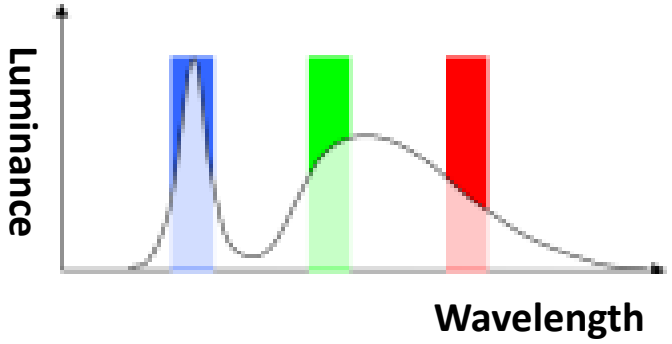
- Uses existing LCD manufacturing infrastructure
- Uses existing LCD supply chain

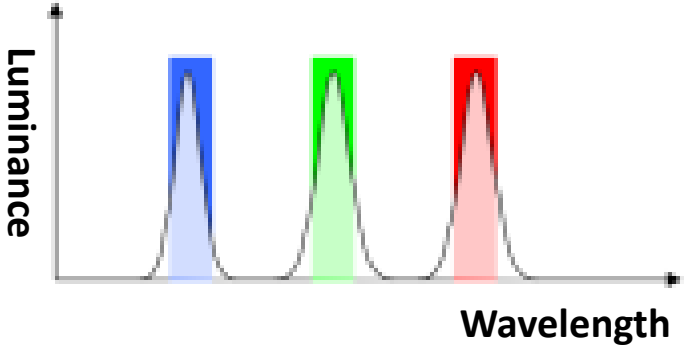




BREAKDOWN OF A QD LCD DISPLAY







Emits light – much more blue than green and red

Light energises the quantum dots in the film

Quantum dots emit precise green and red colours

LCD panel creates the image through polarised shuttering of pixels

Each pixel / shutter is paired with a coloured filter to remove all but the red, green or blue light. Filters may be replaced by QDs in the future.

Source: Edison Investment Research

WHAT PEOPLE ARE SAYING ABOUT QD DISPLAYS

“A TV screen that is jaw-droppingly good”
- The Independent

“TVs are entering a new era in 2017”
- Trusted Reviews

“May be the holy grail of gaming displays”
- Forbes

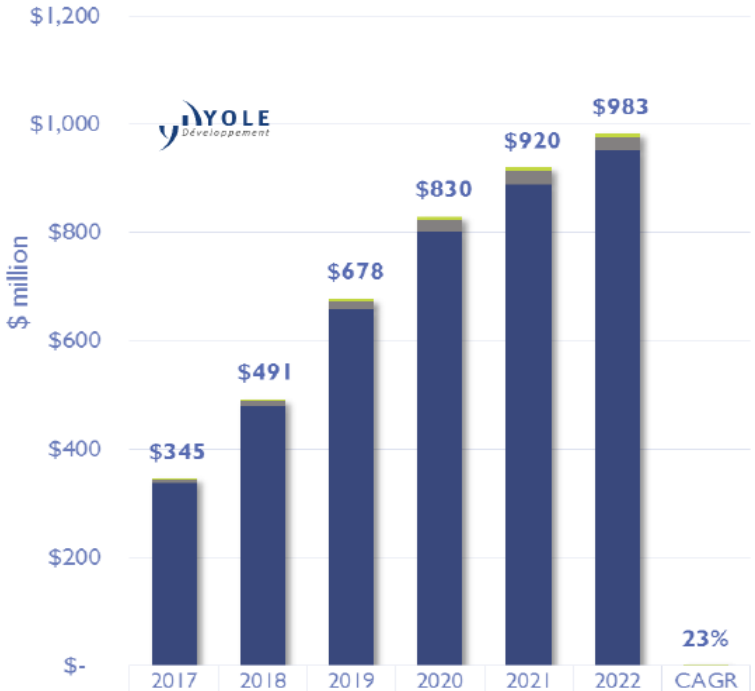
acer
PREDATOR

“CF791’s pitch-perfect colors change the game for ultrawides”
- Monitornerds.com

Digital Trend
4.9 out of 5

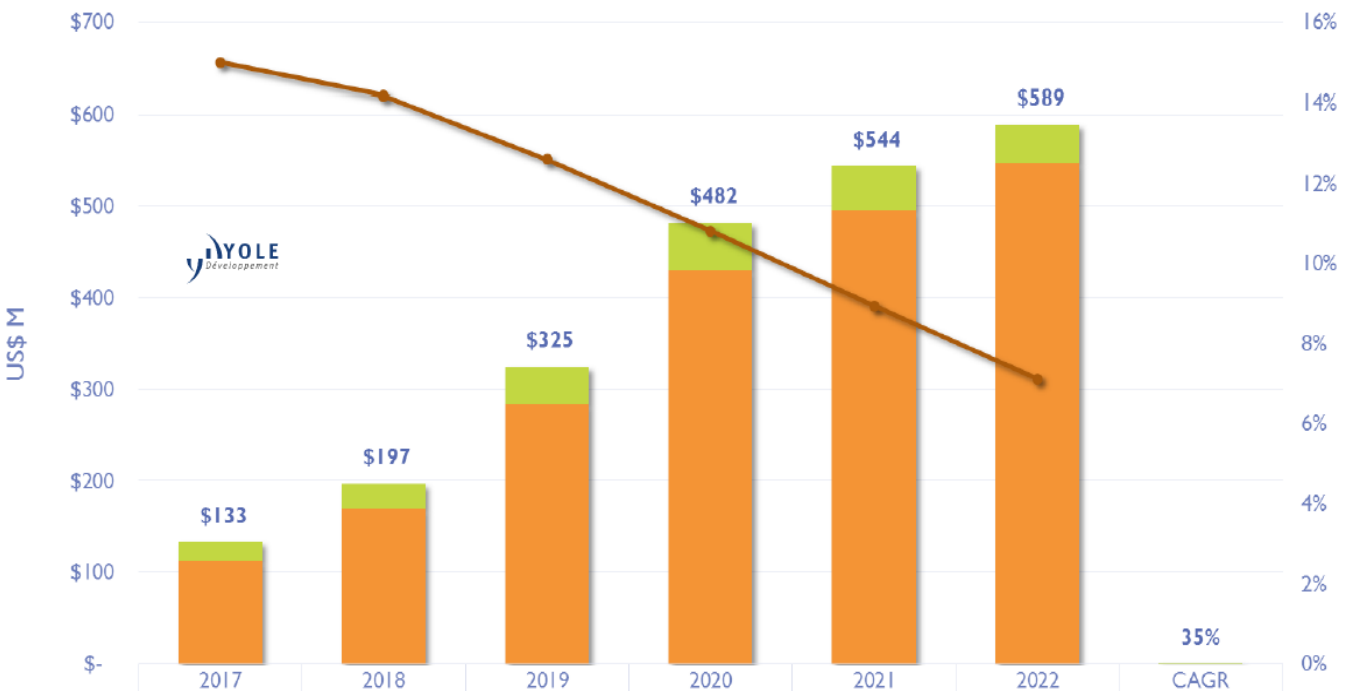
CADMIUM-FREE TO DOMINATE RAPIDLY GROWING MARKET

QD Film revenue by Application



	2017	2018	2019	2020	2021	2022	CAGR
Laptops & Tablets	$0.5	$1.9	$4.5	$7.0	$7.0	$6.8	71%
Monitors	$7	$10	$16	$22	$24	$24	29%
TVs	$338	$479	$657	$800	$890	$952	23%
Total	$345	$491	$678	$830	$920	$983	23%

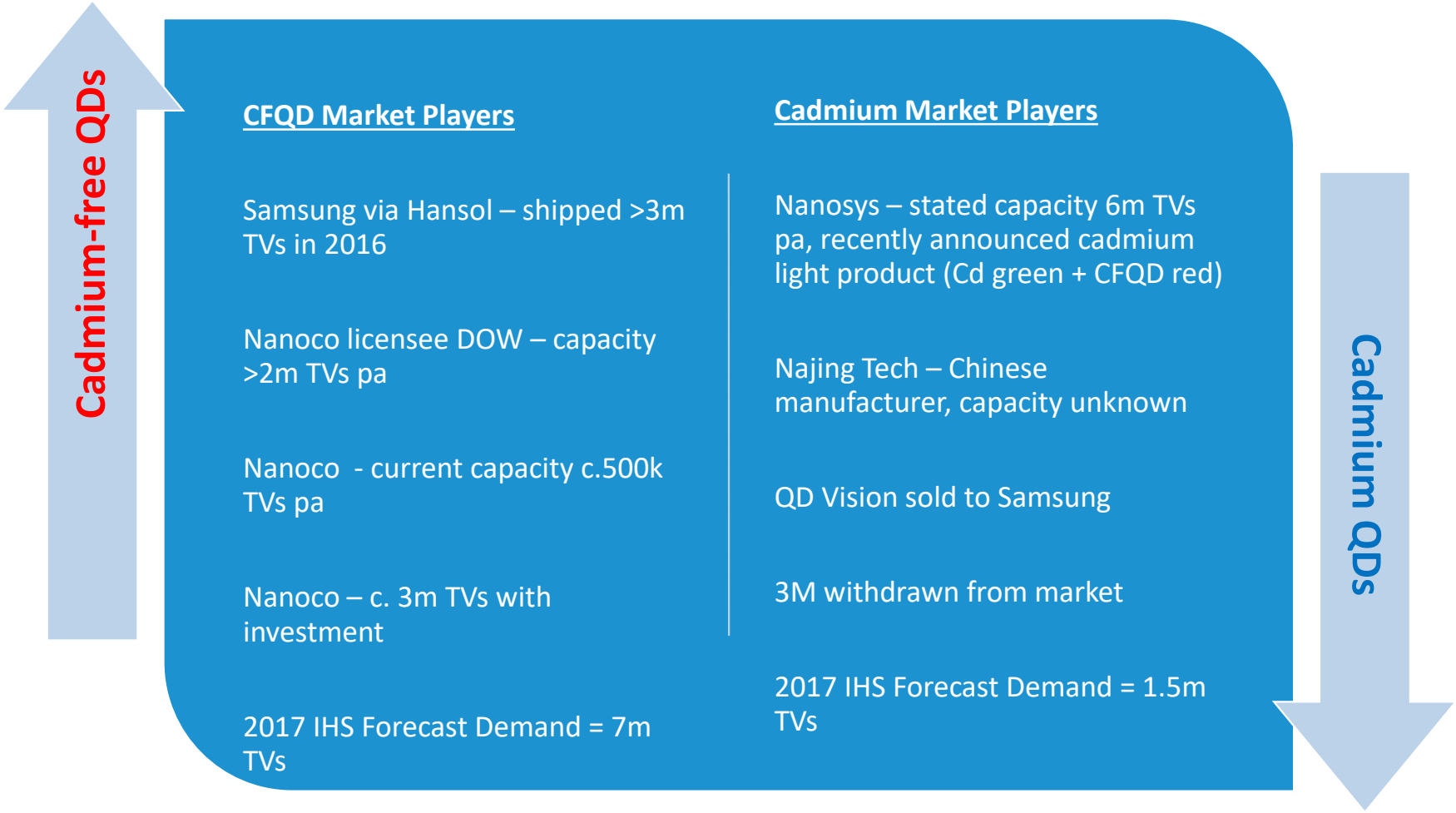
QD Material Revenue Breakdown



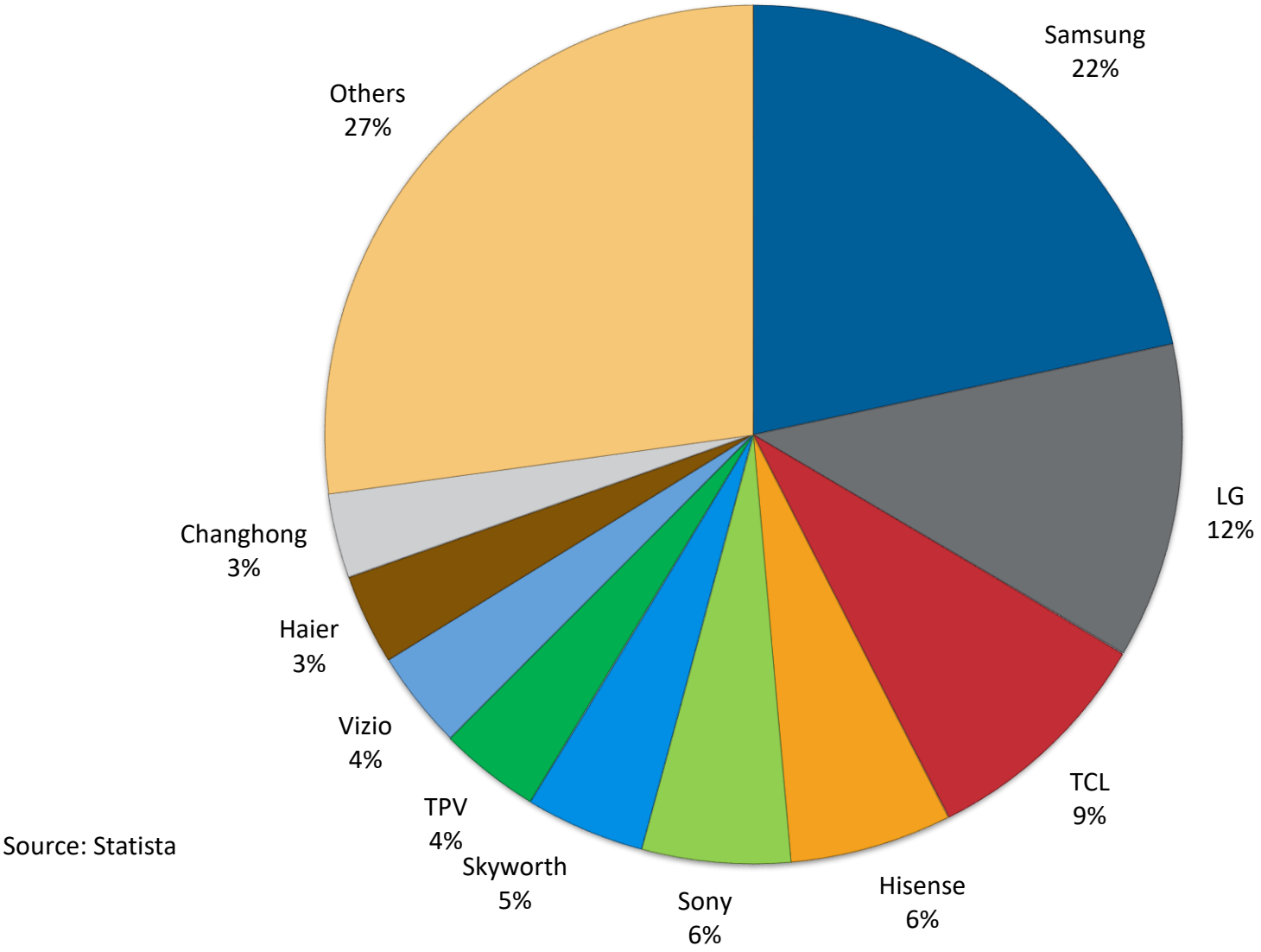
	2017	2018	2019	2020	2021	2022	CAGR
Cd-based	$20	$28	$41	$52	$49	$42	16%
Cd Free	$113	$169	$284	$430	$496	$547	37%
Total	$133	$197	$325	$482	$544	$589	35%
% Cd	15%	14%	13%	11%	9%	7%	

COMPETITION AND SUPPLY

- **Nanoco and its licensees, Dow and Merck, are the only commercial suppliers of CFQDs**
- **Competition chasing cadmium free hard**



LCD TV MARKET SHARE 2016



Source: Statista

RoHS UPDATE

- Cadmium-based quantum dots are currently banned in lighting and will be effectively banned in displays from 31st October 2019, since the normal RoHS limit of 100ppm will apply once the exemption ends
- Nanoco expects that regulations in other key markets, including China, will fall in line with RoHS
- Meanwhile, our contacts with display companies indicate that most already accept the need for new display products to be cadmium-free - especially the world leading brands in both television, computer monitor and laptop displays
- The EU Commission has started an 18 month project to review the list of toxic substances that are restricted under RoHS regulations and to review how to evaluate Exemption requests.
- Indium Phosphide (InP) is included in the list of materials to be considered for future inclusion in the RoHS restricted materials list because it is rated as a probable carcinogen. It is much less harmful than Cadmium and does not persist in the environment
- Nanoco does not use InP in its CFQD® quantum dots, which have been tested and shown to be non-toxic for potential medical use in cancer treatments
- The EU Commission has also included in this package of work one new request for Cadmium based QDs to be used in 'on-chip' LED lighting applications
- Nanoco will actively participate in the review process for the proposed RoHS changes and continue to champion the use of safer alternatives to Cadmium

Market leader Samsung promotes their cadmium-free quantum dots QLED TV range at CES 2017

LEADERSHIP

Dr Christopher Richards Non-Executive Chairman	• CEO, Non-Executive chairman, Arysta LifeSciences • 20 years of increasing management roles at Syngenta • Executive chairman of Plant Health Care • NED of Origin Enterprises plc
Dr Michael Edelman CEO	• Led spin-out of Nanoco from University of Manchester • GE/Bayer JV, founded www.yet2.com Europe, commercial director Colloids Ltd, Brunner Mond, ICI
Dr Nigel Picket 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
David Blain CFO	• Experienced Quoted Company CFO, Renovo, Drew Scientific, Price Waterhouse
Keith Wiggins COO	• Increasing business & corporate leadership roles over years at Dow and ICI • Business builder; former CEO of Haltermann, MD Dow Norther Europe, director roles speciality businesses located in USA, Germany, Switzerland, Hong Kong and United Kingdom
Brendan Cummins Senior Non-Executive	• 40 years of industry experience mostly with Ciba Geigy, last role was CEO of Ciba and led the sale of Ciba to BASF • Board of US Headquartered, Ashland Inc., Chair of Governance and Nominations Committees and member of Audit Committee • Board of Perstorp AB, Sweden
Dr Alison Fielding Non-Executive	• Director of Strategy and IP Impact at IP Group • NED of Getech Group plc • Astra Zeneca, followed 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 and advisor of several early stage and quoted IP Group backed technology companies

STATEMENT OF COMPREHENSIVE INCOME

	2018 £'000	2017 £'000
Revenue	**196**	676
Cost of sales	**(59)**	(36)
Gross profit	**137**	640
Other operating income	**59**	142
Operating expenses		
Research and development expenses	**(1,888)**	(2,873)
Administrative expenses	**(3,143)**	(4,347)
Operating loss	**(4,835)**	(6,438)
- before share-based payments and the costs of the move to the Main Market	**(4,710)**	(6,198)
- share-based payments	**(125)**	(240)
Finance income	**-**	35
Loss on ordinary activities before taxation	**(4,835)**	(6,403)
Taxation	**630**	975
Loss on ordinary activities after taxation for the year and total comprehensive loss for the year	**(4,205)**	(5,428)
Loss per share		
Basic and diluted loss for the year	**(1.63)p**	(2.28)p

STATEMENT OF FINANCIAL POSITION

	31 January 2018 Group £'000	31 January 2017 Group £'000
Assets		
Non-current assets		
Tangible fixed assets	**634**	1,106
Intangible assets	**3,234**	2,820
	3,868	3,926
Current assets		
Inventories	**132**	238
Trade and other receivables	**925**	1,013
Income tax asset	**2,467**	2,945
Short-term investments and cash on deposit	**-**	5,000
Cash and cash equivalents	**8,744**	3,328
	12,268	12,524
Total assets	**16,136**	16,450
Liabilities		
Current liabilities		
Trade and other payables	**1,210**	1,526
Deferred revenue	**102**	207
	1,312	1,733

STATEMENT OF FINANCIAL POSITION

	31 January 2018 Group £'000	31 January 2017 Group £'000
Non-current liabilities		
Deferred revenue	**501**	597
	501	597
Total liabilities	**1,813**	2,329
Net assets	**14,323**	14,120
Capital and reserves		
Issued equity capital	**66,565**	58,602
Share-based payment reserve	**3,082**	2,955
Merger reserve	**(1,242)**	(1,242)
Retained earnings	**(54,082)**	(46,195)
Total equity	**14,323**	14,120

STATEMENT OF CASH FLOW

	31 January 2018 Group £'000	31 January 2017 Group £'000
(Loss)/profit before tax	**(4,835)**	(6,403)
Adjustments for:		
Net finance income	**-**	(35)
Depreciation of tangible fixed assets	**266**	393
Amortisation of intangible assets	**268**	186
Share-based payments	**125**	240
Changes in working capital:		
Decrease in inventories	**(56)**	(30)
Decrease/(increase) in trade and other receivables	**(256)**	1,054
(Decrease)/increase in trade and other payables	**(108)**	(917)
(Decrease)/increase in deferred revenue	**(51)**	(375)
Cash outflow from operating activities	**(4,535)**	(5,887)
Research and development tax credit received	**-**	-
Overseas corporation tax paid	**-**	-
Net cash outflow from operating activities	**(4,535)**	(5,887)

STATEMENT OF CASH FLOW

	31 January 2018 Group £'000	31 January 2017 Group £'000
Cash flow from investing activities		
Purchases of tangible fixed assets	**(7)**	(239)
Purchases of intangible fixed assets	**(376)**	(583)
Decrease in cash placed on deposit	**-**	-
Interest received	**-**	13
Net cash inflow from investing activities	**(383)**	(809)
Cash flow from financing activities		
Proceeds from issues of ordinary share capital	**7,956**	545
Interest paid	**-**	-
Loan repayment	**-**	(32)
Net cash inflow/(outflow) from financing activities	**7,956**	513
(Decrease)/increase in cash and cash equivalents	**3,038**	(6,183)
Cash and cash equivalents at the start of the year	**5,706**	9,511
Cash and cash equivalents at the end of the year	**8,744**	3,328
Monies placed on deposit at the end of the year	**-**	5,000
Cash, cash equivalents and deposits at the end of the year	**8,744**	8,328

SHAREHOLDER ANALYSIS (AS AT 31 JANUARY 2018)

Name	Shareholding	Percentage
Lombard Odier	59,024,089	20.64
Hargreaves Lansdown Asset Management	24,846,180	8.69
Cogefi Gestion	18,862,117	6.60
Baillie Gifford & Co	15,976,767	5.59
Miton Asset Management	15,403,765	5.39
Dr Nigel Pickett (CTO)	11,112,347	3.89
Interactive Investor	10,487,584	3.67
Dr Michael Edelman (CEO)	4,974,350	1.74

Notes: The total number of voting rights in the Company is 285,934,927

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