

VIGO Photonics Group

CONSOLIDATED SEMI-ANNUAL REPORT

for the period from 1 January 2023 to 30 June 2023

containing the interim condensed consolidated financial statements of the VIGO Photonics Group prepared in accordance with IFRS

Ożarów Mazowiecki, 19 September 2023.

T	able of	f contents	
T/	ABLE O	F CONTENTS	2
1	SEL	ECTED CONSOLIDATED FIGURES	4
2	INT	RODUCTION TO THE CONSOLIDATED FINANCIAL STATEMENTS	5
_	2.1	DESCRIPTION OF THE ACTIVITIES OF THE VIGO PHOTONICS GROUP AND INFORMATION ABOUT THE PARENT COMPANY VIGO	
		DESCRIPTION OF THE ACTIVITIES OF THE VIGO PHOTONICS GROUP AND INFORMATION ABOUT THE PARENT COMPANY VIGO	5
	2.2	ACTIVITIES IN THE SPECIAL ECONOMIC ZONE (HEREINAFTER REFERRED TO AS "SEZ") – TAX EXEMPTION	
	2.3	CONTACT DETAILS	6
	2.4	DESCRIPTION OF VIGO PHOTONICS GROUP	6
	2.5	EFFECTS OF CHANGES IN THE STRUCTURE OF THE ECONOMIC ENTITY	6
	2.6	OPINION OF THE MANAGEMENT BOARD ON THE POSSIBILITY OF ACHIEVING THE PREVIOUSLY PUBLISHED EARNINGS FORECASTS	7
	2.7	THE OWNERSHIP STRUCTURE OF VIGO PHOTONICS S.A.	7
	2.8	GOVERNING BODIES OF VIGO PHOTONICS	
	2.9	SHAREHOLDINGS BY EXECUTIVE AND NON-EXECUTIVE DIRECTORS OF VIGO PHOTONICS	
	2.10	REPORTED PERIODS	-
	2.11	AUDITOR	
	2.12	COMPLIANCE WITH INTERNATIONAL FINANCIAL REPORTING STANDARDS	
	2.13	THE BASIS FOR THE PREPARATION OF THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS	
	2.14 2.15	SIGNIFICANT ACCOUNTING POLICIES DATE OF APPROVAL OF THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS	
	2.15	GOING CONCERN ASSUMPTION	
	2.10	GOING CONCERN ASSUMPTION	
	2.17	PORCHONAL AND PRESENTATION CORRENCY	-
	2.10	ESTIMATION UNCERTAINTY	-
	2.20	UNUSUAL ITEMS	
	2.21	Significant changes in estimates	
	2.22	PLN EXCHANGE RATES	19
3	INT	ERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS	20
4		TES TO THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS	
4			
	4.1	Assets	
	4.2	EQUITY AND LIABILITIES	
	4.3	INTERIM CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME	
	4.4 4.5	IMPAIRMENT ALLOWANCES	
	4.5	CORRECTION OF ERRORS FROM PREVIOUS PERIODS	
	4.7	CONSOLIDATION ADJUSTMENTS	
	4.8	CHANGES IN THE ECONOMIC SITUATION AND BUSINESS ENVIRONMENT	
	4.9	SEASONALITY AND CYCLICALITY OF BUSINESS.	
	4.10	ISSUE, REDEMPTION OR REPAYMENT OF NON-EQUITY AND EQUITY INSTRUMENTS	
	4.11	RELATED PARTY TRANSACTIONS	
	4.12	CHANGES IN THE CLASSIFICATION OF FINANCIAL ASSETS	47
	4.13	DIVIDEND PAID OR DECLARED	47
	4.14	CHANGE IN ACCOUNTING POLICIES	47
	4.15	CONTINGENT LIABILITIES AND CONTINGENT ASSETS	
	4.16	SUBSEQUENT EVENTS	47
5	MA	NAGEMENT BOARD'S REPORT ON THE COMPANY'S ACTIVITIES	49
	5.1	SUMMARY OF ACTIVITIES OF VIGO PHOTONICS IN THE FIRST HALF OF 2023	49
	5.2	EVENTS RELATED TO THE COMPANY	
	5.3	IMPLEMENTATION OF R&D PROJECTS	54
	5.4	FACTORS AFFECTING THE GROUP'S PERFORMANCE IN H1 2023 AND IN SUBSEQUENT PERIODS	
	5.5	DESCRIPTION OF KEY THREATS AND RISKS FOR THE COMPANY	61

5	I	MA	NAGEMENT BOARD'S STATEMENTS	. 67
J	5.7			.05
5	57	7		65
5	5.6	5	THE OWNERSHIP STRUCTURE OF VIGO PHOTONICS S.A.	64
_		_		

1 Selected consolidated figures

	PLN	`000	EUR `000	
Selected consolidated figures	from 01.01.2023 to 30.06.2023	from 01.01.2022 to 30.06.2022	from 01.01.2023 to 30.06.2023	from 01.01.2022 to 30.06.2022
Interim con	densed consolidate	ed statement of com	prehensive income	
Net revenue from the sale of products, services, goods and materials	37,005	30,723	8,022	6,618
Cost of sales	19,254	12,111	4,174	2,609
Operating profit (loss)	6,660	3,291	1,444	709
Profit (loss) before tax	7,670	2,671	1,663	575
Profit (loss) after tax	6,849	6,131	1,485	1,321
Number of shares	729,000	729,000	729,000	729,000
Net profit (loss) per ordinary share (PLN/EUR)	9.40	8.41	2.04	1.81
Inter	im condensed cons	olidated statement o	of cash flows	
Net cash flows from operating activities	10,408	7,256	2,256	1,563
Net cash flows from investing activities	-7,068	-16,905	-1,532	-3,641
Net cash flows from financing activities	-1,535	7,290	-333	1,570

Selected consolidated		PLN '000			EUR '000	
figures	30.06.2023	31.12.2022	30.06.2022	30.06.2023	31.12.2022	30.06.2022
Non-current assets	228,939	218,908	203,795	51,443	46,677	43,540
Current assets	34,133	35,106	31,404	7,670	7,486	6,709
Equity	145,599	138,524	137,461	32,717	29,537	29,368
Long-term liabilities	85,390	81,896	61,027	19,187	17,462	13,038
Short-term liabilities	32,082	33,596	36,711	7,209	7,163	7,843
Book value per share (equity/ number of shares)	199.72	190.02	188.56	44.88	40.52	40.61

2 Introduction to the consolidated financial statements

2.1 Description of the activities of the VIGO Photonics Group and information about the parent company VIGO Photonics S.A.

VIGO Photonics is a technology-based manufacturing group specialising in semiconductor materials and devices for photonic and microelectronic applications. VIGO Photonics is a leader in the global market of mid-infrared photon detectors. All products are based on its proprietary, unique technology. The Group provides ready-made and customised solutions for developing products dedicated to a given customer's application.

The Group has a complete production line for high-throughput semiconductor devices – from epitaxy of materials from complex semiconductors of groups II-VI (tellurium, cadmium, mercury) and groups III-V of the periodic table of elements (indium, arsenic, gallium, antimony), to the production of detector chips and lasers, to their microassembly and integration into electronics. The Group also has its own modern measurement laboratories, which enable fast and accurate measurements of products and semi-finished products at every stage of production.

Detectors currently manufactured by the Group are used in the world's largest research centres and in the development of advanced technical equipment, in applications such as:

- Railway traffic safety (failure detection systems in the running gear of high-speed rail systems and fire detection systems)
- Environmental protection (measurement of the threat to the environment posed by harmful chemical substances, monitoring of emissions of hazardous substances into the air, air quality surveillance)
- Industrial applications (industrial scanners for temperature distribution, industrial automation equipment)
- Military applications (missile guidance systems, laser-beam vehicle-tracking alert systems)
- Security (detection of explosive and hazardous substances, prevention systems against terrorist activities, systems for checking the contents of passengers' luggage)
- Research and science (measurement of high-temperature plasma parameters for thermonuclear fusion research, measurement of ultra-short pulses of infrared radiation emitted by lasers and synchrotrons, spectrometers for measuring extremely low concentrations of substances)
- Space industry (laser communications in open Space, measurement equipment for space applications).

In order to meet the dynamic development of photonics market, VIGO Photonics has added epitaxial semiconductor layers to its offer. Developed by VIGO Photonics, the epitaxial layers, based on indium phosphide and gallium arsenide, are the basis for the production of cascade edge lasers, vertical cavity resonance lasers (VCSEL), other sources of infrared radiation and microelectronic components (transistors, diodes).

The Group puts great emphasis on research and development of new products, thus continuously maintaining high competitiveness and quality of offered products since the 1990s. The technological advancement of VIGO Photonics and the quality of its products as well as its position in the global market have been confirmed by the use of infrared detectors produced by VIGO in the Mars rover Curiosity, which landed on the Red Planet on 6 August 2012 as part of the NASA program and the subsequent detection of traces of methane on Mars in December 2014 with the use of these detectors. The Group's detectors were also used by the European Space Agency as part of the Exomars mission. In October 2016, Schiaparelli landing module, equipped with VIGO Photonics detectors, attempted a landing on Mars.

VIGO System S.A. based in Ożarów Mazowiecki was created on 20 February 2002 as a result of transformation of VIGO Photonics Spółka z ograniczoną odpowiedzialnością with its registered office in Warsaw entered in the National Court Register in the District Court for the capital city of Warsaw in Warsaw under KRS 0000110129.

VIGO Photonics S.A. was incorporated by way of Notarial Deed No. 1459/2002 dated 20 February 2002 in the Notary's Office of Krzysztof Łaski – Notary in Warsaw and was entered in the National Court Register – Register of Entrepreneurs on 21 May 2002 under KRS number 0000113394. Its duration is indefinite (it is a going concern).

The Company's core business is the manufacture of electronic components (PKD 2611Z).

2.2 Activities in the Special Economic Zone (hereinafter referred to as "SEZ") – tax exemption

On the basis of permit No. 116/ARP S.A./2005 issued on 9 November 2005, since 1 March 2008 the Company has conducted its business activity in the Tarnobrzeg Special Economic Zone ("TSEZ") EUROPARK WISŁOSAN in Ożarów Mazowiecki and on this grounds it is entitled to exemption from Corporate Income Tax due to capital expenditures incurred in the Zone. The company fulfilled all the conditions specified in the permit in order to be able to benefit from the tax exemption. Income generated from business activities covered by the permit within the special economic zone is exempt under Article 17, Section 1, Point 34 of the Corporate Income Tax Act. The amount of aid obtained for the Issuer is 65% of discounted

investment expenditures on fixed assets and purchased intangible assets incurred during the term of the permit. This aid is reduced by any discounted subsidies from public funds obtained for the purchase of fixed assets.

In the Tarnobrzeg SEZ, as indicated in the permit, the Company conducts the following production, trade and service activities with respect to products and services manufactured in the zone, defined under the following headings in the thencurrent Polish Classification of Products and Services of the Central Statistical Office:

a. Section D, subsection DL, Division 32

Class 32.10 - Electronic tubes and other electronic components

b. Section D, subsection DL, Division 33

Class 33.20 - Instruments and appliances for measuring, checking, navigating and similar instruments and appliances

Class 33.30 - Optical instruments and photographic equipment,

c. Section K, Division 73

Class 73.10 - Research and development services for natural sciences and engineering.

2.3 Contact details

Name:	VIGO Photonics Spółka Akcyjna
Registered office:	Ożarów Mazowiecki
Adress:	ul. Poznańska 129/133, 05-850 Ożarów Mazowiecki
NIP:	527-020-73-40
REGON:	010265179
Telecommunications numbers:	Phone (+48 22) 733 54 00
	Fax (+48 22) 733 54 26
Email address:	info@vigo.com.pl
Website:	www.vigo.com.pl

2.4 Description of VIGO Photonics Group

The Company's Group includes the following entities:

- VIGO Photonics Taiwan a company established in 2020 as a sales office in the East Asia region. The Group has a 100% stake VIGO Photonics Taiwan worth PLN 64 thousand. Currently, the latter company is being liquidated.
- VIGO Photonics Inc a company established in 2021 as a sales office in the North American region. VIGO Photonics S.A. has a 100% stake in VIGO Photonics Inc. worth PLN 484 thousand.
- VIGO Ventures ASI Sp. z o. o. a company established in 2021 to take over the activities of VIGO WE Innovation Sp. z o. o. As at 30 June 2023, VIGO Photonics S.A. held 44.2% of shares in VIGO Ventures ASI Sp. z o. o. with a value of PLN 9,765 thousand.

Decisions on material activities of VIGO Ventures ASI Sp. z o.o. require the unanimous consent of the parties sharing control. All investors jointly exercise control over the investees. They act collectively to manage significant activities. Therefore, no single investor controls the investee. In the opinion of the Company's Management Board, as at 19 September 2023, there was no change in one or more elements of the joint control over VIGO Ventures ASI Sp. z o.o.

Data from the statement of turnover and balances of VIGO Ventures ASI Sp. z o. o. as at 30 June 2023 are as follows (in PLN thousand):

Equity	Share capital	Other capitals	Profit/ loss after tax	Value of assets	Non- current assets	Current assets	Value of liabilities	Value of revenues
29,441	6,207	23,975	-741	29,661	24,261	5,400	221	189

2.5 Effects of changes in the structure of the economic entity

There were no changes in the Group's structure during the reporting period.

2.6 Opinion of the Management Board on the possibility of achieving the previously published earnings forecasts

The Group did not publish any earnings forecasts.

2.7 The ownership structure of VIGO Photonics S.A.

According to the knowledge of the Management Board, as at the date of submitting the interim condensed financial statements the first six months of 2023 (19 September 2023), the following shareholders held at least 5% of the total number of votes at the General Meeting:

Shareholder	Number of shares	% of the registered capital	Number of votes	% of votes at the General Meeting
Warsaw Equity Management S.A.	104,000	14.27	104,000	14.27
Józef Piotrowski	86,650	11.89	86,650	11.89
Investors TFI	47,038	6.45	47,038	6.45
PTE Allianz Polska S.A.	39,071	5.36	39,071	5.36
Janusz Kubrak	48,100	6.60	48,100	6.60
Mirosław Grudzień	37,200	5.10	37,200	5.10
Others	366,941	50.33	366,941	50.33
	729,000	100.00	729,000	100.00

2.8 Governing bodies of VIGO Photonics

As at the date of publication of the H1 2023 report, the Company's Management Board consisted of:

- Adam Piotrowski President of the Management Board
- Łukasz Piekarski Member of the Management Board
- Marcin Szrom Member of the Management Board.

As at the date of publication of the H1 2023 report, the Company's Supervisory Board consisted of:

- Marek Wiechno Chairman of the Supervisory Board (Supervisory Board resolution of 12 May 2023)
- Zbigniew Więcław Member of the Supervisory Board
- Piotr Nadolski Member of the Supervisory Board
- Krzysztof Kaczmarczyk Member of the Supervisory Board
- Mirosław Grudzień Member of the Supervisory Board.
- Krzysztof Dziewicki Member of the Supervisory Board (appointed on 29 June 2023)

Composition of the Audit Committee of the Supervisory Board:

- Zbigniew Więcław Chairman of the Audit Committee (resolution of the Supervisory Board of 19 May 2023)
- Marek Wiechno Member of the Audit Committee
- Krzysztof Kaczmarczyk Member of the Audit Committee.

2.9 Shareholdings by executive and non-executive directors of VIGO Photonics.

As at 19 September 2023, members of the Management Board held the following shares in the Company:

- Adam Piotrowski held 660 shares (nominal value of shares: PLN 660)
- Łukasz Piekarski held 485 shares (nominal value of shares: PLN 485).

As at 19 September 2023, members of the Company's Supervisory Board held the following shares in the Company:

- Mirosław Grudzień held 37,200 shares (nominal value of shares: PLN 37,200).
- Zbigniew Więcław held 12,000 shares (nominal value of shares: PLN 12,000)

• Krzysztof Dziewicki held 1,274 shares (nominal value of shares: PLN 1,274).

2.10 Reported periods

The interim condensed consolidated statement of financial position includes data for the period from 1 January 2023 to 30 June 2023. Comparative data are presented as at 31 December 2022 for the interim condensed consolidated statement of financial position and for the period from 1 January 2022 to 30 June 2022 for the interim condensed consolidated statement of comprehensive income, interim condensed consolidated statement of cash flows and condensed statement of changes in equity.

2.11 Auditor

On 17 September 2020, the Company's Supervisory Board selected the firm authorised to audit and perform an interim review of the financial statements for the years 2021, 2022 and 2023. The firm selected to perform this function was Mazars Audyt Spółka z ograniczoną odpowiedzialnością with its registered office in Warsaw, address: 00-549 Warszawa, ul. Piękna 18, entered in the list of audit firms under number 186. The Supervisory Board made this choice having regard to guaranteeing full independence and objectivity of the selection itself as well as fulfilment of tasks by the statutory auditor. On 15 March 2021, the Company entered into an agreement with Mazars Audyt Spółka z ograniczoną odpowiedzialnością for the audit and review of the separate financial statements. The agreement was signed for three years. It was amended by Annex 1 of 28 February 2022 by expanding its subject to include the audit and interim review of consolidated financial statements.

The remuneration of Mazars Audyt sp. z o.o. will be paid separately for:

- Audit of the standalone annual financial statements for 2021 PLN 37,000.00, for 2022 PLN 28,000.00 and for 2023 PLN 28,000.00
- Audit of the consolidated annual financial statements for 2022 PLN 10,000.00 and for 2023 PLN 10,000.00.
- Interim review of the consolidated financial statements as at 30.06.2021 PLN 15,000.00, as at 30.06.2022 PLN 16,000.00 and as at 30.06.2023 PLN 16,000.00
- Interim review of the consolidated financial statements as at 30.06.2022 PLN 6,000.00, as at 30.06.2023 PLN 8,000.00

2.12 Compliance with International Financial Reporting Standards

The interim condensed consolidated financial statements have been prepared in accordance with International Accounting Standard 34 – "Interim Reporting".

As at the date of approval of these financial statements for publication, taking into account the ongoing IFRS implementation process in the EU, as regards the Group's operations there is no difference between the already implemented IFRSs and the IFRSs endorsed by the EU. IFRSs include the standards and interpretations approved by the International Accounting Standards Board and the International Financial Reporting Interpretations Committee.

STANDARDS AND INTERPRETATIONS ADOPTED IN 2023 AND NOT APPLICABLE AS AT THE BALANCE SHEET DATE

1. Standards and interpretations and amendments to standards and interpretations that were applied in the financial year of 2023

The following amendments to existing standards issued by the International Accounting Standards Board (IASB) and endorsed for use in the European Union (EU) were applied for the first time in the Group's financial statements for 2023:

IFRS 17 "Insurance Contracts" with subsequent amendments to IFRS 17 – published by the IASB on 25 June 2020 – endorsed by the EU on 19 November 2021 (effective for annual periods beginning on or after 1 January 2023).

Amendments to IFRS 17 "Insurance Contracts" – initial application of IFRS 17 and IFRS 9 – comparative information, endorsed in the EU on 8 September 2022 (effective for annual periods beginning on or after 1 January 2023).

Amendments to IAS 1 "Presentation of Financial Statements" – Disclosure of Accounting Policies, endorsed by the EU on 2 March 2022 (effective for annual periods beginning on or after 1 January 2023).

Amendments to IAS 8 "Accounting Policies, Changes in Accounting Estimates and Errors" – Definition of Accounting Estimates endorsed by the EU on 2 March 2022 (effective for annual periods beginning on or after 1 January 2023).

Amendments to IAS 12 "Income Taxes" – deferred tax related to assets and liabilities arising from a single transaction, endorsed by the EU on 11 August 2022 (effective for annual periods beginning on or after 1 January 2023).

The above amendments to the standards did not have a significant impact on the Group's financial statements for 2023.

2. Standards and interpretations and amendments to standards and interpretations that issued by the IASB but not yet endorsed by the EU

IFRSs as endorsed by the EU currently do not differ significantly from the regulations issued by the International Accounting Standards Board (IASB), with the exception of the following new standards and amendments to standards that have not yet been endorsed for use by the EU:

Amendments to IAS 1 "Presentation of Financial Statements" – Classification of Liabilities as Current or Noncurrent (effective for annual periods beginning on or after 1 January 2024).

Amendments to IAS 1 "Presentation of Financial Statements" – Non-current Liabilities with Covenants (effective for annual periods beginning on or after 1 January 2024).

Amendments to IAS 21 "The Effects of Changes in Foreign Exchange Rates" (effective for annual periods beginning on or after 1 January 2025).

Amendments to IAS 7 "Statement of Cash Flows" and IFRS 7 "Financial Instruments: Disclosures": Supplier finance arrangements (effective for annual periods beginning on or after 1 January 2024).

Amendments to IAS 12 Income Tax: International Tax Reform – Pillar Two Model Rules (effective for annual periods beginning on or after 1 January 2023).

Amendments to IFRS 16 "Leases" – lease liability in a sale and leaseback (effective for annual periods beginning on or after 1 January 2024).

According to the estimates of the Group, the foregoing new standards, interpretations and amendments to the existing standards would not have any material impact on the financial statements if they had been applied by the Group.

The data included in the report have been prepared with the observance of the principles of valuation of assets and liabilities and measurement of net profit or loss determined as at the balance sheet date.

The solutions adopted with regard to accounting records and the way information is grouped have been subordinated to the needs of management and internal control. They also take into account the requirements set by the provisions of the act and the needs of state statistics.

The interim condensed consolidated financial statements do not contain all the information and disclosures required of annual financial statements and should be read jointly with the financial statements for the year ended 31 December 2022, approved for publication on 17 April 2023.

These interim condensed consolidated and standalone financial statements for the six-month period of 2023 ended 30 June 2023 were approved for publication by the Management Board on 19 September 2023.

The interim consolidated financial result may not fully reflect the achievable financial result for the financial year.

2.13 The basis for the preparation of the interim condensed consolidated financial statements

These interim condensed financial statements have been prepared in accordance with International Accounting Standard 34 "Interim Financial Reporting" as endorsed by the EU ("IAS 34").

These interim condensed consolidated financial statements have been subject to an interim review by the auditor. The review report is published together with this report.

2.14 Significant accounting policies

Intangible assets and development expenditure

Intangible assets and development expenditure are recognised at cost. After initial recognition, intangible assets are measured at cost less accumulated amortisation and impairment losses. The Group does not measure development work at

fair value due to the lack of an active market for unique completed development work. Intangible assets include assets with an expected economic useful life in excess of 12 months.

The Group divides intangible assets into the following groups:

- Capitalised development work
- Other intangible assets

Development work is capitalised only when it jointly meets all of the following criteria:

- The ability to complete the intangible asset from a technical point of view so that it is suitable for use or sale
- The Group has the intention to complete the intangible asset and use or sell it
- The ability to use or sell the intangible asset
- The Group is able to determine how the intangible asset will generate probable future economic benefits
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset
- The ability to measure reliably the expenditure attributable to the intangible asset during its development.

Where it is not possible to separate the value of research expenditure from development expenditure, development work is expensed in full.

Intangible assets with an indefinite useful life are tested for impairment annually.

For the purpose of impairment testing, assets are grouped at the lowest level at which they generate cash flows independently of other assets or groups of assets (so-called cash-generating units). Assets that generate cash flows independently are tested individually.

If the carrying amount exceeds the estimated recoverable amount of the assets or cash-generating units to which the assets belong, the carrying amount is reduced to the recoverable amount. The recoverable amount is the higher of the two values: fair value less costs to sell or value in use. In determining value in use, estimated future cash flows are discounted to present value using a discount rate that reflects current market assessments of the time value of money and the risks associated with the asset.

Impairment losses are recognised in the result under other operating expenses.

At subsequent balance sheet dates, indications of the possibility of reversing impairment losses are assessed. The reversal of write-downs is recognised in profit or loss under other operating income.

Other intangible assets include, in particular, the acquired software and licences. In the case of intangible assets with indefinite useful lives, the Group does not recognise amortisation charges, but only regularly tests those assets for impairment.

For intangible assets with finite useful lives, the Group applies the following depreciation periods:

Group	Amortisation period
Capitalised development work	3-5 years
Other intangible assets	3 years

In justified cases, based on the decision of the Management Board, supported by technology utilisation forecasts, the amortisation period of capitalised development work may be extended beyond 5 years.

Amortisation costs are charged to "Cost of goods sold", "Administrative expenses" or "Selling costs" in the statement of income, while those resulting from impairment losses are charged to "Other operating costs".

The Group recognises the right to use of land in accordance with IFRS 16 as a lease.

Tangible assets

Tangible assets are recognised in books at cost.

Property, plant and equipment comprise tangible assets and tangible assets under construction. Property, plant and equipment include tangible assets with an expected useful economic life in excess of 12 months.

The Group distinguishes the following groups of tangible assets:

buildings

- technical equipment and machinery
- vehicles
- furniture and equipment.

All groups of tangible assets are measured at cost and after initial recognition less depreciation and impairment losses. The Group does not remeasure any group of tangible assets.

The Group applies straight-line depreciation for all groups of tangible assets.

The following depreciation periods are applied for each group of tangible assets:

Group	Depreciation period
Buildings	40 years
Plant and machinery, including:	
laboratory equipment	20 years
other technical equipment	10 years
computer equipment	5 years
vehicles	5 years
furniture and equipment.	10 years

In accordance with the provisions of IAS 16, the Group periodically, at least as at the balance sheet date, verifies the adopted depreciation rates, analysing whether they correspond with the economic useful lives of its tangible assets.

In the statement of comprehensive income, depreciation costs are charged to "Cost of goods sold", "Administrative expenses" or "Selling costs", while impairment losses are charged to "Other operating costs".

Non-current assets held for sale are measured in accordance with IFRS 5, i.e. at the lower of the following: the net carrying amount of the asset and its fair value less costs to sell, and are presented separately in the statement of financial position.

Investments in subsidiaries, joint ventures and associates

In accordance with IAS 27, the entity recognises investments in subsidiaries, joint ventures and associates at cost when preparing consolidated financial statements.

Inventories

Inventories are recognised at cost.

Inventories are assets held for sale in the ordinary course of business, being in the course of production for such sale or having the form of materials or supplies of raw materials consumed in the production process or in the course of providing services. The Group distinguishes the following groups in this item of the statement of financial position: materials, semi-finished products and work in progress, finished products, goods, advances on deliveries.

The Group recognises goods and materials in its books at cost not higher than the net realisable sales price. The cost of inventories (cost of purchase or manufacture) comprises all costs of purchase, costs of processing and other costs incurred in bringing the inventories to their present location and condition.

The Group uses the FIFO method to measure the cost of inventories.

When the purchase price or production cost recorded in the books exceeds the realisable selling price, the Group posts impairment allowances. In addition, the Group periodically tests inventories for their continued usefulness and makes allowances based on the period in which they remain in stock. Impairment allowances are charged to costs of the period and recognised in other operating costs.

Each time the Group assesses impairment and posts allowances on the items that it knows to be impaired and will be unusable in the continuing operations.

Loan and other receivables

The Company measures loans and receivables at amortised cost using the expected credit loss model.

The Group posts impairment allowances based on the default ratio. The amount of the allowance on receivables is charged to other operating costs, while the reversal of the allowance increases other operating income in the statement of comprehensive income.

The Group applies the following methodology for calculating the default ratio:

To calculate the default ratio, balances are divided into homogeneous groups based on the similarity of credit risk and past customer behaviour. The Group has one homogeneous group: receivables from customers.

For that group, the analysis is performed in the following steps:

- Step 1: defining the historical periods for which the analysis of the amount of allowances for bad debts and the age ranges is performed. The Group has decided that the bad debt analysis will be conducted for the last 3 years in order to determine the overall default ratio. It was agreed that the default ratio would be determined for the following age ranges: (1) up to date (2) up to 30 days (3) 31-90 days (4) 91-180 days (5) 181-365 days and (6) over 365 days.
- Step 2: The profit of repayments from corporate customers in the last three financial years is determined. A comparison is then made between the balance of written off receivables and the balance of up-to-date receivables to determine the default ratio in the stated range.
- Step 3: An analysis is performed of the likely impact of future factors on the value of credit losses.
- Step 4: An impairment allowance is calculated using the ratio determined in Step 3.

Other financial assets

As at the balance sheet date, the Group has other financial assets classified as financial assets measured at fair value through profit or loss.

Cash and cash equivalents

Cash at bank and on hand is measured at amortised cost.

The item cash shown in the cash flow statement consists of bank deposits with a maturity of three months or less, which have not been treated as investing activities.

Equity

Share capital. This is the capital contributed by the shareholders. It is stated at its nominal value, in accordance with the Articles of Association and the record in the National Court Register.

Share premium account. Under this heading, the Group presents amount of the share premium.

Revaluation reserve. Under this heading the Group presents, e.g. the value of capitals resulting from valuations, as shown in other comprehensive income, as well as actuarial gains and losses, presented in accordance with IAS 19.

Other capitals. Under this heading, the Group presents retained earnings from previous years, including undistributed profits. The Group discloses here the capital created in accordance with the provisions of Article 396 of the Commercial Companies Code.

Profit (loss) of the current period. Under this heading, the Group presents the result (profit or loss) of the current financial year.

Provisions

Provisions are liabilities whose amount or timing is uncertain. The Group recognises provisions when it has a present obligation (legal or constructive) as a result of a past event and it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The Group reviews its provisions at the end of each reporting period to ensure that the above conditions are met and to develop the most appropriate estimate of the provision amount. The Group discounts provisions where the effect of doing so is material.

Provisions are recognised at the estimated amount of expenditure required to settle the present obligation, based on the most reliable evidence available at the date of the standalone financial statements, including the risks and uncertainties.

Financial assets and liabilities

The Group classifies financial assets on initial recognition as:

Assets measured at amortised cost or

• Assets measured at fair value through profit or loss.

An asset is measured at amortised cost if the following two conditions are met: the asset is held within a business model that is designed to hold such in order to earn contractual cash flows; and, its contractual terms give rise at specified times to cash flows that are solely payments of principal and interest on the unpaid portion of the principal.

The Group's financial assets measured at amortised cost include trade receivables with an allowance corresponding to the expected credit loss model, cash at bank and on hand and other financial assets. Gains and losses on measurement of financial assets and liabilities measured at fair value are recognised in profit or loss of the current period.

The Group's financial assets and liabilities measured at fair value recognised in current period profit or loss include forward derivatives. The Group also classifies investments in investment funds as assets measured at fair value.

The Group derecognises an asset only when the contractual rights to the cash flows generated by the asset expire or when the financial asset together with substantially all the risks and rewards of ownership are transferred to another entity. If the Group does not transfer or retain substantially all the risks and rewards of ownership and retains control of the asset, it recognises a retained interest in the asset and a related liability for potential payments. If, on the other hand, the Group retains substantially all the risks and rewards of ownership asset, it continues to recognise the related financial asset. On initial recognition, financial liabilities are classified into one of two categories:

- Liabilities measured at amortised cost or
- Liabilities measured at fair value.

The Group classifies trade liabilities and bank loans as financial liabilities measured at amortised cost.

Financial liabilities measured at fair value through profit or loss are recognised at fair value and the resulting gains or losses are recognised in the income statement taking into account interest paid on the financial liability.

Amortised cost is the amount at which a financial liability is measured at initial recognition, less principal repayments, plus or minus the cumulative amortisation using the effective interest rate of any difference between the initial value and the value at maturity.

The calculation of the effective interest rate includes all commissions and points paid and received by the counterparties that are an integral part of the effective interest rate, transaction costs and any other bonuses or discounts.

The Group derecognises financial liabilities only when the relevant obligations of the Company are discharged, cancelled or when they expire.

Deferred income tax

The Group is a payer of the corporate income tax ("CIT"). The line item "Income tax" in the statement of comprehensive income consists of the current and deferred tax.

The current part, which is charged to profit or loss, is calculated at the end of each reporting period on the basis of the taxable amount, determined taking into account the differences between accounting profit and pre-tax profit.

The deferred part of the tax is calculated using the balance sheet method, i.e. by comparing the balance sheet value of individual asset and liability items from the statement of financial position with their tax value.

The Group recognises deferred tax liabilities when the temporary differences between the tax and balance sheet values are positive, which means that in the future they will lead to an increase in the current tax charge.

Deferred tax assets arise when:

- a. There are deductible temporary differences, which are temporary differences that will reduce the taxable amount in the future
- b. Unused tax losses are carried forward
- c. The Group carries forward unused tax credits.

The Group conducts business activities in the Special Economic Zone in Ożarów Mazowiecki and for this reason posts deferred tax assets (zone exemption) on account of investment relief.

A deferred tax asset is recognised when it is probable that there will be future income against which the tax relief can be written off. Deferred tax assets are recognised in correspondence with the profit (loss) of the period in which the recognition criterion is met. Deferred tax assets are settled in correspondence with the income statement, in the amount of utilisation of the tax exemption in the specific accounting period.

Employee benefits

The organisation has the following employee benefits:

- Current benefits, i.e. wages, annual leave, sick leave, bonuses, Social Fund
- Retirement severance payments.

The Group recognises the cost of employee benefits in the period in which the employee works for the organisation and not when the benefit is paid or payable.

Short-term employee benefits (i.e. those expected to be settled in full within 12 months after the annual period in which the service is provided) are expensed in the period in which the employee renders service. Unpaid benefit obligations are measured at undiscounted value.

Bonuses are recognised only when the Group has a firm legal or constructive obligation to pay them and their cost can be reliably estimated.

Social fund assets do not meet the definition of assets in the IFRS Framework because they are not controlled but only administered by the Group and decisions on how to use them are made by the internal social committee.

Full exclusion of the fund will only be possible if the value of its assets is the same as the value of allocations and increases. In the financial statements the assets and liabilities of the fund will be offset and the surplus will be shown in the statement of financial position – usually as a component of employee liabilities. At the same time, more information on the Social Fund will be contained in the notes.

Grants received

Government grants are not recognised until there is reasonable assurance that the Group will meet the conditions attached to the grant and that the grant will be received.

For the purposes of accounting for grants, the Group applies the income approach described in IAS 20, whereby grants are recognised as income over one or more periods. Grants are recognised as income on a systematic basis over periods to ensure their commensurability with the related costs the grants are intended to compensate.

In the case of grants to assets, the Group accounts for the grant through deferred income over the depreciation period of the asset covered by the grant.

Grant proceeds are recognised under "Other operating income".

Deferred income

Apart from settled grants and investment relief concerning activity in economic zones, as described in other sections, under deferred income the Group recognises the amounts of uninvoiced revenue in relation to which the conditions for recognising such revenue have not yet been met as they are contractual liabilities. The Group did not distinguish the item of contract liabilities due to insignificant value of prepayments.

Operating segments

An operating segment is a part of the Group:

- Engaged in business activities in connection with which it may earn revenues and incur expenses (including revenues and expenses relating to transactions with other parts of the same organisation)
- Whose performance is regularly reviewed by the main body responsible for making operating decisions in the entity and using such results in making decisions about resources allocated to the segment and in assessing the segment's performance
- For which separate financial information is available.

The Management Board decided to identify segments based on the criterion of differentiated products and services.

Two operating segments have been identified that meet the requirements laid down in IFRS 8. These are:

- Semiconductor modules segment
- Semiconductor materials segment.

Internal reports on segment results are prepared on a monthly basis in an abbreviated version and on an extended basis in quarterly periods. The body that regularly reviews internal financial reports for the purpose of making major investment decisions is the Company's Management Board, which is responsible for the allocation of resources.

Revenue recognition

The principal activity is the manufacture and sale of detectors and semiconductor materials. Revenue is defined as the gross inflow of economic benefits for a given period arising in the (ordinary) course of business and resulting in an increase in equity, other than an increase in equity resulting from shareholder contributions.

The Group recognises revenue in accordance with IFRS 15.

Revenue is recognised when the customer obtains control of the goods or services. The customer obtains such control when it has the ability to manage the use of the goods or services and to obtain benefits from them. However, a transfer of control under IFRS 15 may occur at a particular point in time or over time, e.g. in the course of provision of services.

In the latter case, one of the following three criteria must be met:

- 1. The purchaser simultaneously receives and consumes the benefits delivered as the performance obligations are met
- 2. The asset created or improved is controlled by the purchaser as the work progresses
- 3. The entity's actions do not create an asset that can be used by the entity in the alternative and the entity has a legally enforceable right to receive payment for services already rendered.

If none of these three conditions is met, the transfer of control takes take place at a specific moment in time. In this case, the following criteria can be used:

- 1. Currently, the entity has the right to pay for the asset
- 2. The purchaser has a legal right to the asset
- 3. Significant risks and rewards of ownership have passed to the buyer
- 4. The buyer has accepted the asset.

The Group uses the following 5-element revenue recognition process to determine whether revenue should be spread over time or recognised once at a particular point in time.

Stage 1: Identifying contracts with customers.

The entity may recognise revenue if the sale is recognised in the form of a contract. The contract may be written, oral or may be apparent from the conduct of the parties that reveals their intentions sufficiently. In determining whether a contract with a customer has been formed, the terms of termination may be relevant. Contracts entered into simultaneously or in conjunction with other contracts may also be relevant.

Stage 2: Identifying the obligations that must be performed under the terms of the contract.

Revenue relates to the fulfilment of a promise to provide the customer with goods or services that are the subject of the sale, meeting the following cumulative conditions (§ 22 IFRS 15):

1) The customer can benefit from them independently or in combination with other resources available to the customer (i.e. the goods or services can be separated).

2) The entity's promise to transfer the goods or services to the customer can be distinguished from other promises in the contract (i.e. it stands out in the body of the contract). Example: an entity should recognise its obligations to provide products and services separately if it sells products and provides an optional service to customers under a warranty.

Stage 3: Setting the transaction price at the amount of consideration to which the entity expects to be entitled.

Depending on the nature of the sales contract, the consideration may be a fixed amount or (if it depends on the occurrence of a future event) a variable amount, depending on rebates, price discounts, refunds, incentives, performance bonuses, etc.

Stage 4: Allocating the transaction price to the individual obligations.

If the contract contains separate obligations to be fulfilled (identified in Stage 2), the transaction price should be allocated to them accordingly. The best basis for determining the individual price is the price at which the entity can sell the good or service separately.

Stage 5: Revenue recognition when the entity fulfils the obligation.

The contractual obligations are fulfilled when the entity transfers the promised goods or services to the customer, i.e. when the customer obtains control over them. The amount of revenue is the amount of consideration attributable to the obligation fulfilled. The obligation may be satisfied at a particular point in time (typically upon the delivery of goods) or over a period of time (typically with the provision of services). In the latter case, the entity should choose an appropriate method to measure the progress of the obligation being satisfied.

When preparing financial statements, revenue is recognised on the basis of INCOTERMS 2010 for those transactions where it is assessed that the revenue is recognised at a point in time. The main rule applied by VIGO Photonics is EXW, which

means that the delivery is considered to have been made when the goods are made available to the buyer at a designated place, with no obligation for the seller to undertake any further steps.

Significant payment terms:

- Payment normally becomes due when risk is transferred to the buyer, standard payment terms are 30 days.
- Contracts do not contain a significant element of funding.
- The amount of remuneration is not variable and therefore the estimated variable remuneration is usually not capped.

A 1-year commercial guarantee is provided substantially corresponding to the customary product liability terms.

The Group recognises revenue from the provision of services in accordance with the percentage of completion method, measuring work progress at the end of the accounting period. Under this approach, revenue is recognised in the periods in which the services are performed. The percentage of completion is determined on the basis of the actual performance of the work based on the agreed schedules. Contract costs and revenue are measured accordingly.

2.15 Date of approval of the interim condensed consolidated financial statements

The interim condensed consolidated financial statements were approved by the Company's Management Board on 19 September 2023.

2.16 Going concern assumption

The interim condensed consolidated financial statements have been prepared on the assumption that the Group will continue in operation in the foreseeable future. Taking into account the overall economic and legal position of the Company, including the known economic and social impact of the COVID-19 epidemic, as well as the identified risks related to the war in Ukraine, as at the date of approval of these interim condensed consolidated financial statements, no circumstances indicating a threat to the Group's going concern have been identified.

The Group decided to suspend the sale of its products to Russia and Belarus. The suspension of sales to Russia will not have a material impact on the Company's financial results.

2.17 Functional and presentation currency

The functional currency and presentation currency of these interim condensed consolidated financial statements is the Polish zloty. Data in the financial statements are rounded to the nearest thousand zlotys, unless stated otherwise in specific situations.

Due to the presentation of amounts in the financial statements rounded to the nearest thousand, differences of +/-1 may appear in the report.

2.18 Professional judgement

In the process of applying accounting policies to the items listed below, the greatest importance was attached to management's professional judgement, in addition to accounting estimates.

Allowance for overdue receivables

The Company measures loans and receivables at amortised cost using the expected credit loss model.

As at 30 June 2023, the balance of allowances for overdue receivables was PLN 48 thousand, and at the end of 2022 this value was PLN 80 thousand.

As at 30 June 20232, the balance of allowances for loans granted was PLN 1,182 thousand, and at the end of 2022 this value was PLN 1,256 thousand.

The Group posts impairment allowances based on the default ratio. The amount of the allowance on receivables is charged to other operating costs, while the reversal of the allowance increases other operating income in the statement of comprehensive income.

Impairment allowance for cash

The Group estimated impairment allowances for cash based on the probability of default during the contractual period, less than 3 months, determined on the basis of external ratings of the banks where the cash is held and publicly available information from rating agencies regarding the probability of default. A decision was made not to recognise any impairment allowance due to its insignificant nature.

Impairment allowances were determined individually for each balance relating to a given financial institution. External bank ratings were used to assess credit risk. The Group uses the services of two banks: ING Bank Śląski SA. and mBank S.A. The analysis showed that due to the positive rating assessment of banks, cash has a low credit risk as at the reporting date, therefore the amount of the adjustment would be insignificant.

Impairment allowance on inventories on stock

At each balance sheet date, the Group analyses the ageing of goods held in stock and makes an individual assessment of the price obtainable as at the balance sheet date. On that basis, it takes a decision to create an revaluation allowance.

The balance of allowances on inventories on stock as at 30 June 2023 was PLN 1,305 thousand vs PLN 1,011 thousand as at the end of 2022.

The Group releases finished goods, previously held only as replacement products in the case of delays in the production process. The management decided that due to the planned increase in production volumes, the majority of the goods in stock will be consumed in the production process in the following financial year.

2.19 Estimation uncertainty

Discussed below are the key assumptions regarding the future and other key sources of uncertainty at the balance sheet date that carry a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

Impairment of assets

At each balance sheet date, the entity assesses whether there are any indications that any of its assets may be impaired. If this is the case, the entity estimates the recoverable amount of the asset.

Valuation of provisions

Provisions for employee benefits were estimated using actuarial methods. The discount rate, the salary growth rate and the turnover rate are the key actuarial assumptions affecting provisions for employee benefits. The choice of the discount rate is related to the current situation in the treasury bond market, while the choice of planned salary increases reflects the Company's strategy of shaping the remuneration policy in future. Further to this, the balance of provisions for employee benefits is influenced by the employee turnover rate, which depends on the historical turnover of employees.

In accordance with IAS 19, the Group discloses a sensitivity analysis for each significant actuarial assumption at the end of the reporting period, showing how the liability would be affected by changes in the relevant actuarial assumptions.

Accordingly, a sensitivity analysis was performed for the following assumptions:

- a. Change in the discount rate of \pm 0.5 p.p.
- b. Change in the growth rate of future salaries of \pm 0.5 p.p.
- c. Change in the employee turnover ratio of \pm 0.5 p.p.

The sensitivity analysis was carried out on the assumption that all other actuarial assumptions would remain unchanged. The results of the calculations are as follows:

Item	0			Sensitivity	y analysis		
(PLN	Carrying amount	Discount rate		Salary growth rate		Turnover rate	
thousand)		- 0.5%	+ 0.5%	- 0.5%	+ 0.5%	- 0.5%	+ 0.5%
Retirement severance payments	172	185	160	160	185	180	164
Disability severance payments	33	34	31	32	34	34	31
Unused holiday leaves	2,422	2,422	2,422	2,422	2,422	2,422	2,422
Total	2,626	2,641	2,613	2,612	2,641	2,636	2,617

Provisions for future claims.

In the financial period, based on the professional judgment of the management, the provision is PLN 573 thousand, and 0.85% of sales revenues for the last twelve months. If this level was 0.5 p.p. higher than the Company's estimate, the provision would increase to PLN 910 thousand.

Deferred tax assets and liabilities

The organisation is a payer of the corporate income tax ("CIT"). The line item "Income tax" in the statement of comprehensive income consists of the current and deferred tax.

The current part, which is charged to profit or loss, is calculated at the end of each reporting period on the basis of the taxable amount, determined taking into account the differences between accounting profit and pre-tax profit.

The deferred part of the tax is calculated using the balance sheet method, i.e. by comparing the balance sheet value of individual asset and liability items from the statement of financial position with their tax value.

The Group recognises deferred tax liabilities when the temporary differences between the tax and balance sheet values are positive, which means that in the future they will lead to an increase in the current tax charge.

Deferred tax assets arise when:

- There are deductible temporary differences, which are temporary differences that will reduce the taxable amount in the future
- Unused tax losses are carried forward
- The Group carries forward unused tax credits.

The entity conducts business activities in the Special Economic Zone in Ożarów Mazowiecki and for this reason posts deferred tax assets (zone exemption) on account of investment relief.

A deferred tax asset is recognised when it is probable that there will be future income against which the tax relief can be written off. The Group recognises deferred tax assets in correspondence with the profit (loss) of the period in which the recognition criterion is met. Deferred tax assets are settled in correspondence with the income statement, in the amount of utilisation of the tax exemption in the specific accounting period.

Fair value of derivatives and other financial instruments

The fair value of financial instruments is based on the valuation of those instruments at the balance sheet date received from financial institutions. Other financial instruments are not measured at fair value as it is assumed that their fair value is substantially the same as their carrying amount.

Revenue recognition

The Group recognises revenue on the basis of INCOTERMS 2020. The main rule applied by VIGO Photonics is EXW, which means that the delivery is considered to have been made when the goods are made available to the buyer at a designated place, with no obligation for the seller to undertake any further steps.

In accordance with IFRS 15, revenue is recognised when the customer obtains control of the goods or services. The customer obtains such control when it has the ability to manage the use of the goods or services and to obtain benefits from them. In accordance with each arrangement with customers, the Group, on their behalf and at their request, mediates in ordering courier companies for the delivery of products. Customers themselves decide where the shipment is to be delivered. Therefore, VIGO is of the opinion that control over the goods or services always passes to the customer when VIGO acts as an intermediary in arranging transport.

Depreciation and amortisation rates.

The amount of depreciation and amortisation rates is determined on the basis of the expected economic useful life of tangible and intangible assets. Each year, the Group verifies the adopted periods of economic useful life based on current estimates.

2.20 Unusual items

In the first half of 2023, the Group incurred expenditure on the modernisation of its production facility and purchased new machines and technical equipment for a total value of over PLN 6.1 million.

2.21 Significant changes in estimates

There were no significant changes in estimates in the first half of 2023.

2.22 PLN exchange rates

In the period covered by the financial statements, the following PLN/EUR exchange rates were applied:

Ref.	Description	01.01.2023 - 30.06.2023	01.01.2022 - 31.12.2022	01.01.2022 - 30.06.2022
1.	Average exchange rate at the end of the period	4.4503	4.6899	4.6806
2.	Average exchange rate for the period	4.6130	4.6907	4.6427

The average exchange rate for the period is the arithmetic average of the average exchange rates applicable on the last day of each month in the period based on information published by the National Bank of Poland.

The following exchange rates were adopted for the valuation of balance sheet and income statement items expressed in foreign currencies:

Currency type	Currency rate	Table No.	Date
EUR	4.4503	121/A/NBP/2023	30.06.2023
USD	4.1066	121/A/NBP/2023	30.06.2023

3 INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

INTERIM CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	As at:	As at:
	30.06.2023	31.12.2022
ASSETS		
Non-current assets	228,939	218,908
Property, plant and equipment	115,790	113,502
Intangible assets	16,644	19,432
Right of use	3,849	3,854
Development expenditure	64,595	53,444
Deferred tax assets	21,240	22,012
Investments in jointly controlled entities	6,799	6,666
Prepayments	22	
Current assets	34,133	35,106
Inventories	15,100	15,281
Trade receivables	13,117	14,256
Other receivables	1,144	2,226
Other financial receivables	40	16
Prepayments	603	1,068
Cash and cash equivalents	4,128	2,258
TOTAL ASSETS	263,072	254,015
	As at:	As at:
	30.06.2023	31.12.2022
EQUITY AND LIABILITIES		
Equity	145,599	138,524
Share capital	729	729
Share premium account	8,865	8,865
Revaluation reserve	105	99
Other capitals	129,051	121,611
Profit (loss) of the current period	6,849	7,219
Long-term liabilities	85,390	81,896
Bank and other loans	25,734	28,057
Deferred income	58,654	52,854
Provision for pensions and similar benefits	204	184
Lease obligations	797	800
Short-term liabilities	32,082	33,596
Bank and other loans	21,106	21,328
Trade and other liabilities	2,301	4,408
Other liabilities	1,390	1,251
Lease obligations	35	46
Deferred income	3,080	2,611
Provision for pensions and similar benefits	2,422	1,953
Other provisions	1,750	2,000
TOTAL EQUITY AND LIABILITIES	263,072	254,015

INTERIM CONDENSED CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

	For the period:	For the period:
	from 01.01.2023 to 30.06.2023	from 01.01.2022 to 30.06.2022
Revenue from sales	37,005	30,723
Revenue from the sale of products	35,603	29,088
Revenue from the sale of services	1,355	1,635
Revenue from the sale of goods and materials	47	
Cost of products, goods and materials sold	19,254	12,111
Cost of production of products and services sold	19,254	12,111
Gross profit (loss) on sale	17,751	18,612
Selling costs	4,260	5,314
General and administrative expenses	9,032	12,246
Other operating income	3,885	4,042
Other operating costs	1,684	1,802
Profit (loss) on operating activities	6,660	3,292
Financial income	2,247	
Financial costs	1,236	621
Profit/ loss before tax	7,670	2,671
Income tax	821	-3,460
Net profit (loss) on continued operations	6,849	6,131
Profit (loss) after tax	6,849	6,131
Components of other comprehensive income:	6	102
Actuarial gains (losses) on defined benefit plans	6	102
Total comprehensive income	6,855	6,233
Net profit (loss) per share (in PLN)	8.90	8.41
Basic for the financial period	8.90	8.41
Diluted for the financial period	8.90	8.41
Net profit (loss) per share (in PLN)	8.90	8.41
Basic for the financial period	8.90	8.41
Diluted for the financial period	8.90	8.41

INTERIM CONDENSED CONSOLIDATED STATEMENT OF CASH FLOWS

	For the period:	For the period:
	from 01.01.2023	from 01.01.2022
	to 30.06.2023	to 30.06.2022
OPERATING ACTIVITIES		
Profit/ loss before tax	7,670	2,671
Income tax	821	-3,460
Profit/ loss after tax	6,849	6,131
Total adjustments:	2,787	4,606
Depreciation/ amortisation	5,757	5,008
FX gains (losses)	-1,816	581
Interest and profit distributions (dividends)	1,058	512
Profit (loss) on investing activities	-4	-28
Change in the balance of provisions	245	297
Change in the balance of inventories	181	-3,704
Change in the balance of receivables	2,221	4,464
Change in liabilities, except for bank and non-bank loans	-1,927	594
Change in prepayments		-324
Change in accrued income	-3,596	-3,540
Other adjustments	667	747
Cash from operating activities	10,457	7,277
Income tax (paid)/ returned	-49	-21
A. Net cash flows from operating activities	10,408	7,256
INVESTING ACTIVITIES		
Inflows	9,874	9,656
Grants received	9,865	9,556
Proceeds from the sale of tangible assets	9	101
Outflows	-16,941	-26,561
Acquisition of intangible and tangible assets	-6,099	-14,067
Expenditure on acquisition of shares	-440	-224
Expenditure on in-process development	-10,402	-11,635
Loans granted		-635
B. Net cash flows from investing activities	-7,068	-16,905
FINANCING ACTIVITIES		
Inflows	5,220	12,283
Bank and other loans	5,220	12,283
Outflows	-6,755	-4,993
Repayment of bank and non-bank loans	-5,728	-4,430
Interest	-1,058	-546
Lease payments	32	-17
C. Net cash flows from financing activities	-1,535	7,290
D. Total net cash flows	1,806	-2,359
E. Balance sheet change in cash	1,870	-2,410
- change in cash due to FX differences	64	51
F. Cash at the beginning of the period	2,258	6,495
G. Cash at the end of the period	4,128	4,133

INTERIM CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

	Share capital	Share premium account	Revaluation reserve	Other capitals	Profit (loss) of the current period	Total equity
		Twelve months ended 30) June 2023		<u>_</u>	
Equity as at 01.01.2023	729	8,865	99	121,611	7,219	138,524
Profit (loss) of the period					6,849	6,849
Distribution of profit (loss) for 2022				7,219	-7,219	
Translation differences				221		221
Other comprehensive income: actuarial gains/losses			6			6
Equity as at 30.06.2023	729	8,865	105	129,051	6,849	145,599
		Twelve months ended 31 D	ecember 2022			
Equity as at 01.01.2022	729	8,865	-24	91,148	30,509	131,228
Profit (loss) of the period					7,219	7,219
Distribution of profit (loss) for 2021				30,509	-30,509	
Conditional increase in capital				-47		-47
Other comprehensive income: actuarial gains/losses			123			123
Equity as at 31.12.2022	729	8,865	99	121,611	7,219	138,524
		Twelve months ended 30) June 2022			
Equity as at 01.01.2022	729	8,865	-24	121,657		131,228
Profit (loss) of the period					6,131	6,131
Other comprehensive income: actuarial gains/losses			102			102
Equity as at 30.06.2022	729	8,865	78	121,657	6,131	137,461



4 NOTES TO THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

- 4.1 Assets
- 4.1.1 Non-current assets

Significant tangible asset purchase and sale transactions

In the first half of 2023, the expenditure on intangible assets and on tangible assets and tangible assets under construction was PLN 6.1 million, and development expenditure was PLN 10.4 million. In the first half of 2022, the expenditure on intangible assets and on tangible assets and tangible assets under construction was PLN 14.3 million, and development expenditure was PLN 11.4 million.

4.1.2 Intangible assets

Changes in intangible assets (by type groups) in H1 2023

	Completed development	Other (including computer software)	Total
Gross carrying amount as at 01.01.2023	26,333	2,603	28,937
Increases, due to:			
Decreases, due to:	818		818
- liquidation	818		818
Gross carrying amount as at 30.06.2023	25,515	2,603	28,119
Amortisation as at 01.01.2023	7,385	2,120	9,505
Increases, due to:			
- depreciation/ amortisation	2,515	273	2,788
Decreases, due to:			
- liquidation	818		818
Amortisation as at 30.06.2023	9,082	2,393	11,474
Net carrying amount as at 30.06.2023	16,433	210	16,644

Changes in intangible assets (by type groups) in H1 2022

	Completed development	Other (including computer software)	Total
Gross carrying amount as at 01.01.2022	15,480	2,603	18,084
Increases, due to:	5,091		5,091
- acquisition			
- development projects completed and accepted	5,091		5,091
Decreases, due to:	695		695
- liquidation	695		695
Gross carrying amount as at 30.06.2022	19,876	2,603	22,480
Amortisation as at 01.01.2022	6,015	1,571	7,586
Increases, due to:	1,514	275	1,789
- amortisation	1,514	275	1,789



	Completed development	Other (including computer software)	Total
Decreases, due to:	695		695
- liquidation	695		695
Amortisation as at 30.06.2022	6,834	1,846	8,679
Net carrying amount as at 30.06.2022	13,042	757	13,800

Value and area of land in perpetual usufruct

Property address	Land and mortgage register or file number	Plot area (m ²) as at 30.06.202 3	Value as at 30.06.2023 (PLN thousand)	Plot area (m ²) as at 31.12.202 2	Value as at 31.12.202 2 (PLN thousand)	Plot area (m ²) as at 30.06.2	Value as at 30.06.202 2 (PLN thousand)
05-850 Ożarów	WA1P/00087633/6	1,302	363	1,302	363	1,302	363
Mazowiecki,	WA1P/00082343/1	2,750	252	2,750	252	2,750	252
ul. Poznańska	WA1P/00083348/3	4,928	2,435	4,928	2,435	4,928	2,435
129/133	WA1P/00104889/1	1,694	45	1,694	45	1,694	45
	Total	10,674	3,095	10,674	3,095	10,674	3,095

The address for the above land plots is: 05-850 Ożarów Mazowiecki, ul. Poznańska 129/133

4.1.3 Finance lease

	Interim condensed consolidated financial statements			
	As at 30.06.2023	As at 31.12.2022		
Right of use	3,849	3,854		
Lease obligations	832	846		
Financial costs of lease	6	10		
Depreciation costs	57	39		
Discount rate	5.88%	5.88%		
	Lease payments:			
principal	22	45		
interest	4	6		

4.1.4 Property, plant and equipment

Changes in property, plant and equipment (by type) in the first half of 2023

	Buildings and structures	Machinery and devices	Vehicles	Other tangible assets	Tangible assets under construction	Total
Gross carrying amount as at 01.01.2023	45,817	45,367	2,079	28,285	21,675	143,222



	Buildings and structures	Machinery and devices	Vehicles	Other tangible assets	Tangible assets under construction	Total
Increases, due to:		2,826		5,016	5,858	13,700
- acquisition		151		3		154
 settlement of tangible assets under construction 		2,675		5,013	5,858	13,546
- increase in value						
- deliveries en route						
Decreases, due to:		321			7,688	8,009
- liquidation		321				321
 taking tangible assets into inventory 					7,688	7,688
Gross carrying amount as at 30.06.2023	45,817	47,872	2,079	33,301	19,845	148,914
Depreciation as at 01.01.2023	5,456	16,159	535	7,570		29,720
Increases, due to:	610	1,730	200	1,179		3,719
- depreciation	610	1,730	200	1,179		3,719
Decreases, due to:		131		184		315
- liquidation		131		184		315
Depreciation as at 30.06.2023	6,067	17,758	734	8,565		33,124
Net carrying amount as at 30.06.2023	39,750	30,114	1,345	24,736	19,845	115,790

Changes in property, plant and equipment (by type groups) 2022

Gross carrying amount as at	37,584	35,438	935	16,332	32,368	122,657
01.01.2022 Increases, due to:	8,233	10,091	1,704	12,014	18,464	50,506
- acquisition of tangible assets	8,233	10,091	1,704	545	10,101	20,573
 settlement of tangible assets under construction 				11,469	18,464	29,933
Decreases, due to:		163	559	61	29,157	29,940
- liquidation		163	559	61		783
 taking tangible assets into inventory 					29,157	29,157
Gross carrying amount as at 31.12.2022	45,817	45,367	2,079	28,285	21,675	143,222
Depreciation as at 01.01.2022	4,290	12,816	782	5,550		23,438
Increases, due to:	1,166	3,481	312	2,075		7,034
- depreciation	1,166	3,481	312	2,075		7,034
Decreases, due to:		138	559	55		752
- liquidation		138	559	55		752
Depreciation as at 31.12.2022	5,456	16,159	535	7,570		29,720
Net carrying amount as at 31.12.2022	40,360	29,207	1,545	20,714	21,675	113,502

Changes in property, plant and equipment (by type) in the first half of 2022

	Buildings and structures	Machinery and devices	Vehicles	Other tangible assets	Tangible assets under construction	Total
Gross carrying amount as at 01.01.2022	37,584	35,438	935	16,332	32,369	122,657
Increases, due to:	8,188	9,002	1,704	11,325	8,220	38,438
- acquisition		81	1,651	275	8,176	10,183
 settlement of tangible assets under construction 	8,042	8,921	53	11,050		28,066
- increase in value	100					100
 reclassified from intangible assets 	45					45
- deliveries en route					44	44
Decreases, due to:		122	229	61	28,066	28,478
- liquidation		122	229	61		412
 taking tangible assets into inventory 					28,066	28,066
Gross carrying amount as at 30.06.2022	45,772	44,318	2,410	27,595	12,522	132,617
Depreciation as at 01.01.2022	4,290	12,816	782	5,550		23,438
Increases, due to:	549	1,662	112	930		3,253
- depreciation	549	1,662	112	930		3,253
Decreases, due to:		117	229	55		401
- liquidation		117	229	55		401
Depreciation as at 30.06.2022	4,839	14,361	665	6,425		26,290
Net carrying amount as at 30.06.2022	40,933	29,957	1,745	21,170	12,522	106,327

4.1.5 Investments in jointly controlled entities

As at 30 June 2023, VIGO VENTURES ASI	Value of shares at purchase price (in PLN thousand)		Revaluation	Carrying amount of shares (in PLN thousand) Revaluation		Percentage	Percentage
Group was included in the consolidated financial	As at 30.06.2023	As at 30.06.2022	adjustments	As at 30.06.2023	As at 30.06.2022	of shares held	of votes held
VIGO VENTURES ASI	9,765	50	2,966	6,799	50	44.2%	44.2%

4.1.6 Expenditure on development projects and deferred income

The Group in engaged in development on a number of projects, including those co-financed from the state budget and EU funds. The summary of expenditure incurred in the consolidated financial statements is presented in the table below:

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
MIRPHAB			2,243
TRANSFER			1,247
INNOVATION VOUCHER PIAP			648
INNOVATION VOUCHER WAT			385
New production plant			704



	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Low-cost detector module			523
Production quality improvement			31
Multi-element detectors			1,126
Processing 2.0			1,034
Sensory-Przemysł 4.0	15,202	15,202	14,155
Epitaxial structures and VCSELs	10,634	10,429	9,048
DEMETER	4,471	4,471	4,471
Car2Tera	85	77	. 74
WidePower			618
WikiNet	537	533	400
TRAVEL	379	373	341
TRIAGE	1,436	1,365	1,133
MCT+		-,	415
MIRPIC	6,005	4,874	3,181
Matrices	8,471	6,354	3,362
PEMIR	857	822	604
INGAAS WITH ASIC	9,996	6,829	4,110
AI PRISM	187	40	1,110
CHIPS	107	96	
DETECTORS COOLED WITH LIQUID NITROGEN	101	26	
LN2 DETECTORS	496	20	
TOXX LWIR DETECTORS	224	63	
TOXX LWIR DETECTORS	718	444	
	201		
CERTIFICATION OF NEW SUPPLIERS OF		125	
VIGO PRODUCTION SUPERVISION	89	27	
DEDICATED MODULES	61	37	
NDIR	152	72	
PHOTOGENIC	1,210	263	
SMD	188	82	_
SOMBRERO	354	125	6
TMD	578	398	
TOP20	875	344	
IBAIA	237		
OPMMEG	618		
MINIBOT	469		
LWIRPSBDA	13		
BROMEDIR	93		
Development expenditure, including:	64,595	53,444	49,940
long term	64,595	53,444	49,940
short term			

A detailed description of development is provided in Section 5.3 of the Report.

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Property insurance	100	242	14
Subscriptions, charges		571	233
Invoices to be settled in the new period	346	47	12
Membership fees	6	7	6
Advance invoices	75	105	120
Property tax	97		88
Other		95	
Prepaid expenses (short term), including:	624	1,068	472
long term	22		



	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
short term	602	1,068	472

4.1.7 Current assets

Inventories

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Materials for production	7,592	9,644	4,829
Deliveries en route	214	131	319
Semi-finished products and work in progress	1,869	1,015	1,776
Finished products	6,730	5,502	4,556
Gross inventories	16,405	16,292	11,480
Impairment allowance on inventories	1,305	1,011	876
Net inventories	15,100	15,281	10,603

Age analysis of inventories as at 30 June 2023

	Aged inventories in days			Aged inventories in days				
	1-180	181-365	366-548	549-730	over 730	Total		
Materials (gross)	2,842	3,620	423	185	522	7,592		
Materials (allowances)			211	139	522	872		
Materials, net	2,842	3,620	212	46		6,720		
Semi-finished products and work in progress (gross)	1,281	479	29	24	56	1,869		
Semi-finished products and work in progress (allowances)			15	18	56	89		
Semi-finished products and work in progress (net)	1,281	479	14	6		1,780		
Finished products (gross)	1,043	253	186	84	188	1,754		
Finished products (allowances)			93	63	188	344		
Deviations from fixed prices	2,959	717	529	239	533	4,977		
Finished products (net)	4,002	970	622	260	533	6,387		
Advances on deliveries (net)	214					214		
Total inventories	8,339	5,069	848	312	533	15,100		

Age analysis of inventories as at 31 December 2022

		Aged inventories in days				
	1-180	181-365	366-548	549-730	over 730	Total
Materials (gross)	7,915	885	241	109	494	9,644
Materials (allowances)			121	82	494	697
Materials, net	7,915	885	121	27		8,948
Semi-finished products and work in progress (gross)	872	47	41	20	35	1,015
Semi-finished products and work in progress (allowances)			21	15	35	70
Semi-finished products and work in progress (net)	872	47	21	5		945
Finished products (gross)	1,678	246	129	83	117	2,253



		Aged inventories in days					
	1-180	181-365	366-548	549-730	over 730	Total	
Finished products (allowances)			65	62	117	244	
Deviations from fixed prices	2,048	514	270	173	245	3,249	
Finished products (net)	3,726	760	334	193	245	5,258	
Advances on deliveries (net)	131					131	
Total inventories	12,644	1,692	476	225	245	15,281	

Age analysis of inventories as at 30 June 2022

		Aged inventories in days				
	1-180	181-365	366-548	549-730	over 730	Total
Materials (gross)	3,396	502	256	184	491	4,829
Materials (allowances)			32	138	491	660
Materials, net	3,396	502	224	46	0	4,169
Semi-finished products and work in progress (gross)	1,545	148	34	12	36	1,776
Semi-finished products and work in progress (allowances)			5	9	34	48
Semi-finished products and work in progress (net)	1,545	148	29	3	2	1,728
Finished products (gross)	1,615	221	105	74	78	2,093
Finished products (allowances)			38	55	74	168
Deviations from fixed prices	1,900	260	124	87	92	2,463
Finished products (net)	3,515	481	191	106	96	4,388
Advances on deliveries (net)	319					319
Total inventories	8,775	1,131	444	155	98	10,603

Change in inventory allowances

	Allowances on materials	Allowances on semi- finished products and work in progress	Allowances on goods	Total allowances on inventories
Status as at 01.01.2023	697	70	244	1,011
Increases, including:	176	18	100	295
 recognition of allowances in correspondence with other operating costs 	176	18	100	295
As at 30.06.2023	873	88	344	1,305

	Allowances on materials	Allowances on semi- finished products and work in progress	Allowances on goods	Total allowances on inventories
Status as at 01.01.2022	417	20		437
Increases, including:	280	50	244	574
 recognition of allowances in correspondence with other operating costs 	280	50	244	574
Status as at 31.12.2022	697	70	244	1,011



	Allowances on materials	Allowances on semi- finished products and work in progress	Allowances on goods	Total allowances on inventories
Status as at 01.01.2022	417	20		437
Increases, including:	244	28	168	439
 recognition of allowances in correspondence with other operating costs 	244	28	168	439
As at 30.06.2022	660	48	168	876

Materials in stock constitute a reserve for securing technological processes and will be used in the next accounting period. Material items are held in stock for the following reasons:

- Holding items withdrawn from production by suppliers for the purposes of their maintenance service
- Holding items used for orders that appear only rarely but in large quantities
- Items which are used for infrequent orders with special parameters.

Finished products staying in stock for more than 365 days are surplus products manufactured during the minimum technological process series. They can be sold in the future if there is individual demand for them.

Due to the planned increase in production volumes, part of the inventories in stock will be consumed in the production process in subsequent years.

Finished products are kept in stock for the following reasons:

- To cater to high-volume production orders
- To have in stock individual detectors manufactured in excess as part of single orders with very specific parameters, where repetition of such special parameters occurs at intervals of several months
- As a result of manufacturing of products in larger batches in order to reduce the price for the customer, with a part
 of the batch being sold immediately and the rest within the following few months.

Receivables

The amount receivables is based on the standard payment terms granted by the Group to customers. In the opinion of the Management Board, there is no significant risk of non-payment of the above receivables. The amount of receivables at the end of June 2023 is lower by PLN 0.3 million compared to 31 December 2022.

For trade receivables (except for those that are treated individually as defaulted), a collective analysis was carried out and a simplified matrix of allowances was used in individual age ranges based on expected credit losses over the entire life of the receivable. The analysis was performed for receivables from corporate customers based on default rates determined on the basis of historical data for 2020–2022.

As a result, for trade receivables that are overdue for less than 90 days, the impairment allowance is PLN 9,000, while the allowance for receivables overdue for more than 90 days is PLN 15,000.

Receivables from corporate customers	Total	Up to date	Current 1-30 days	31-90 days	91- 180 days	181- 365 days	Above 365 years
Balance of receivables as at 30.06.2023 (1)	13,117	11,386	511	994	42	132	52
Default rate (2)		0.03%	0.27%	0.88%	2.10%	10.48%	33.33%
Expected credit loss (1)*(2)	48	3	2	9	1	14	18
Allowances on defaulted receivables	48	4	2	9	1	14	18
Total allowances	48	4	1	9	1	14	48

Change in impairment allowance on trade receivables



	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Impairment allowance on trade receivables at the beginning of the period	80	40	40
Increases, including:		222	32
- allowances on overdue and disputed receivables		195	32
- allowances on uncollectible receivables		27	
Decreases, including:	32	181	48
- impairment allowances used	32		48
- reversal of impairment allowances in connection with the repayment of receivables		181	
Impairment allowance on trade receivables from other entities at the beginning of the period	48	80	24

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Gross trade receivables	13,165	14,336	13,528
- from other entities	13,165	14,336	13,528
Impairment allowances	48	80	24
Net trade receivables	13,117	14,256	13,504

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Other receivables, including:			
- on account of taxes	1,059	2,132	2,011
- other	85	94	59
Other financial receivables – gross/net	1,144	2,226	2,070
Other financial receivables – gross	40	16	1,153
- loans granted	40	16	250
Impairment allowances			484
Other financial receivables – net	40		669
Total short-term receivables – net	1,184	2,242	16,244

Currency structure of gross short-term receivables

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
in Polish currency	603	982	955
in foreign currencies (by currency and after conversion to PLN)	13,698	14,336	15,289
EUR	2,241	2,452	1,660
after conversion to PLN	9,971	11,499	7,770
USD	907	931	1,677
after conversion to PLN	3,727	4,098	7,519
Total short-term receivables	14,301	16,579	16,244

Structure of receivables



					Overdue in c	lays	
	Total	Up to date	up to 1 month	up to 3 month s	up to 6 months	up to 12 months	over 12 months
As at 30.06.2023	14,301	12,620	511	994	42	132	52
Trade receivables	13,263	11,532	511	994	42	132	52
Impairment allowances	48	48					
Other receivables	1,184	1,184					
As at 31.12.2022	16,499	13,868	1,622	476	430	91	13
Trade receivables	14,337	11,706	1,622	476	430	91	13
Impairment allowances	80	80					
Other receivables	2,242	2,242					
As at 30.06.2022	16,244	14,935	494	284	506	1	23
Trade receivables	13,528	12,201	496	287	514	1	29
Impairment allowances	24	4	2	3	8		6
Other receivables	2,758	2,758					

Cash

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Cash in hand and cash at bank:			
bank PLN	2,650	1,816	3,273
bank EUR	141	39	125
converted into PLN	628	184	586
bank USD	207	59	50
converted into PLN	850	258	225
Total	4,128	2,258	4,084

The difference between the change in cash in the interim condensed statement of financial position and the change in this item presented in the interim condensed statement of cash flows is due to negative exchange differences – presented as a FX loss of PLN 64 thousand based on the balance sheet valuation as at 30 June 2023.

Restricted cash:

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Cash received for development projects	531	1,116	3,394

Cash at the disposal of the entity not included in the balance sheet item

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Cash in the Social Fund	275	85	414

Financial instruments

Financial assets Carrying amount				Qualification			
(consolidated statement)	30.06.2023	31.12.2022	30.06.2022	30.06.2022	31.12.2021	30.06.2021	category
Trade and other receivables	14,301	16,483	14,173	14,301/ *	16,483/ *	14 173*	AAC
Cash and cash	4,128	2,258	4 084*	4,128/ *	2,258/ *	4 084*	AAC



equivalents

*It is assumed that the fair value is close to the carrying amount – for this reason, no approach was used to measure those balance sheet items

Financial liabilities	C	arrying amoun	t	Fair value			Qualificati
(consolidated statement)	30.06.2023	31.12.2022	30.06.2022	30.06.2023	31.12.2022	30.06.2022	on category
Interest bearing bank and other loans, including:	46,840	49,384	42,194	46,840/ *	49,384/ *	42 194*	
- other - short term	21,106	21,327	22,944	21,106/ *	21,327/ *	22 944*	Financial liabilities
- other - long term	25,734	28,057	19,250	25,734/ *	28,057/ *	19 250*	measured at amortised cost.
Trade and other liabilities	4,392	5,658	6,382	4,392/ *	5,658/ *	6 382*	

*It is assumed that the fair value is close to the carrying amount – for this reason, no approach was used to measure those balance sheet items

During the two quarters of 2023, terms of price change and credit risk, the Group did not observe any significant disruptions in terms of cash flows as a result of changes in interest rates, or in terms of liquidity.

The Group estimates that the risk related to trade receivables is limited due to the fact that it does business only with counterparties with proven credibility. Moreover, the Group continuously monitors its collection process.

The risk associated with trade liabilities is limited due to the fact that inflows and outflows are continuously tracked to gain advance knowledge about the amounts to be settled. Moreover, in the opinion of the Management Board, the Group has a very high repayment capacity, which means that the Group can obtain additional debt financing, as provided for in its strategic plan.

4.1.8 Deferred income tax

In connection with temporary differences between the value of assets and liabilities reported in the books and their tax value, the entity establishes deferred tax assets or liabilities for which it is a taxpayer. As at 30 June 2023, the Company used a deferred tax asset of PLN 772 thousand created in connection with the investment premium in the Tarnobrzeg Special Economic Zone and other temporary differences.

Income tax disclosed in the statement of comprehensive income (PLN thousand)	01.01.2023 - 30.06.2023	01.01.2022 - 30.06.2022
Current income tax	49	21
For the financial year	49	21
Deferred income tax	772	-2,990
Origination and reversal of temporary differences	772	-2,990
Tax charge disclosed in the statement of comprehensive income	772	-2,990

Deferred tax assets and liabilities affect the financial statements as follows:

PLN thousand	01.01.2023 - 30.06.2023	01.01.2022 - 31.12.2022
Balance at the beginning of the period		
Deferred tax assets	+22,792	+22,840
Deferred tax liability	-782	-455
Net deferred tax at the beginning of the period	+22,012	+22,385
Change in the balance in the period affecting:	-772	-383



Profit or loss (+/-)	-772	-383
Net deferred tax at the end of the period, including	+21,240	+22,002
Deferred tax assets	+22,268	+22,792
Deferred tax liability	-1,028	-782

Deferred tax assets as at 30.06.2023

	Balance at the	Change	Balance at the end	
Temporary differences	beginning of the period	Profit or loss /Equity	of the period	
Assets				
Inventories	1,011	+294	1,305	
Trade receivables	80	-32	48	
Investments in related parties	1,256	-75	1,182	
Liabilities				
Provisions for employee benefits	3,512	+209	3,721	
Other provisions	584	-11	573	
Other liabilities	33	+2	35	
Total	6,475	387	6,862	

Deferred tax liabilities as at 30.06.2023

Assets				
Property, plant and equipment	4,693		+718	5,410
Total	4,693		+718	5,410
Tax rate		19%		
Deferred tax asset	1,238			
Deferred tax liability	-892			
Change in the balance of deferred tax		-772		
Investment tax credit in TSEZ	21,664		-625	21,039
Deferred tax in the statement of comprehensive income	22,012			21,240

Deferred tax assets as at 31.12.2022

Temporary differences as at 31.12.2022	Balance at the beginning of the period	Change Profit or loss /Equity	Balance at the end of the period
Assets			
Inventories	436	+574	1,011
Trade receivables	40	+40	80
Investments in related parties	1,042	+214	1,256
Liabilities			
Provisions for employee benefits	4,175	-663	3,512
Other provisions	608	-24	584
Other liabilities	465	-432	33
Total	6,766	-291	6,475

Deferred tax liabilities as at 31.12.2022

Assets			
Property, plant and equipment	2,918	1,774	4,693
Total	2,918	1,774	4,693
Tax rate		19%	
Deferred tax asset	1,286	-48	1,238



Deferred tax liability	-554	-338	-892
Change in the balance of deferred tax		-383	
Investment tax credit in TSEZ	21,664		21,664
Deferred tax in the statement of comprehensive income	22,395		22,012

Deferred tax assets as at 30.06.2022

Balance at the	Change	Balance at the end of the period	
beginning of the period	Profit or loss /Equity		
436	+439	876	
40	-16	24	
1,042	-49	993	
4,175	+280	4,456	
608	+702	1,310	
465	-389	75	
6,766	967	7,734	
	beginning of the period 436 40 1,042 4,175 608 465	beginning of the period Profit or loss / Equity 436 +439 40 -16 1,042 -49 4,175 +280 608 +702 465 -389	

Deferred tax liabilities as at 30.06.2022

Assets			
Property, plant and equipment	2,918	+603	3,521
Total	2,918	603	3,521
Tax rate		19%	
Deferred tax asset	22,950	+3,595	26,546
Deferred tax liability	-554	-115	-669
Change in the balance of deferred tax		+3,482	
Deferred tax in the statement of comprehensive income	22,395	+3,482	25,877

4.2 Equity and liabilities

4.2.1 Provisions

Provision for pensions and similar benefits

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Provisions for retirement and disability severance payments	205	187	186
Provisions for holiday leaves	2,422	1,950	2,446
Total, including:	2,627	2,138	2,632
- long-term	202	184	153
- short term	2,425	1,953	2,478

Changes in provisions for pensions and similar benefits



	Provisions for retirement and disability severance payments	Provisions for holiday leaves
As at 01.01.2023	187	1,950
Provisions raised	23	472
Provisions released	5	
Balance as at 30.06.2023, including:	205	2,422
- long-term	202	
- short term	3	2,422
As at 01.01.2022	272	1,671
Provisions raised		280
Provisions released	84	
Balance as at 31.12.2022, including:	187	1,950
- long-term	184	
- short term	3	1,950
As at 01.01.2022	272	1,671
Provisions raised		775
Provisions released	86	
Balance as at 30.06.2022, including:	186	2,446
- long-term	153	
- short term	32	2,446

Other provisions

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Provision for remuneration	1,149	1,375	1,825
Provisions for warranty repairs and returns	573	584	603
Provision for the audit of financial statements	24	38	16
Provision for probable future liabilities	5	3	2
Total, including:	1,751	2,000	2,448
- short term	1,751	2,000	2,448

Change in other provisions

	Provisions for warranty repairs and returns	Other provisions	Total
As at 01.01.2023	584	1,416	2,000
Recognised during the financial year	141	2,167	2,308
Released	152	2,405	2,557
Balance as at 30.06.2023, including:	573	1,178	1,751
- short term	573	1,178	1,751
As at 01.01.2022	607	2,336	2,943
Recognised during the financial year	20		20
Released	44	919	962
Balance as at 31.12.2022, including:	584	1,416	2,000
- short term	584	1,416	2,000
As at 01.01.2022	607	2,336	2,943
Recognised during the financial year	20	3,249	3,269
Released	24	3,741	3,765
Balance as at 30.06.2022, including:	603	1,844	2,447
- short term	603	2,531	3,134

Provision for employee bonuses



Provisions (PLN 900 thousand) were recognised for remuneration related to the equalisation of the bonus for Q2 2023 due to employees under remuneration regulations, payable by the end of the month following the quarter for which the bonus is accounted for.

Provision for performance bonuses payable to Management Board members a given year

A provision of PLN 249 thousand was recognised for bonuses payable to Management Board members for H1 2023 to be paid following the approval of the 2023 financial statements by the AGM.

Provision for costs of anticipated warranty repairs

Provisions are raised for the costs of anticipated warranty repairs and returns of products sold in the last 3 financial years years. based on the level of warrantv repairs and returns recorded in previous Most of these costs are expected to be incurred in the next financial year (and all of them within 3 years from the balance sheet date). The assumptions underlying the calculation of the provision for warranty repairs and returns are based on current sales levels and available current information on returns, and a one-year warranty period for all products sold.

Provisions for retirement and disability severance payments, and holiday accruals

In the reporting period, provisions for retirement and disability severance payments, and holiday accruals of PLN 488 thousand were recognised.

4.2.2 Liabilities

The balance of loans outstanding as at 30 June 2023 is presented in the table below.

Bank loans as at 30.06.2023 Lender and loan type	Loan amount under the agreement (PLN k/ EUR k)	Loan balance (PLN k/ EUR k)	Nominal interest rate	Maturity date
ING Bank Śląski - corporate FX investment loan	EUR 5,800	EUR 1,390	1M EURIBOR + margin	31.03.2026
ING Bank Śląski - corporate FX investment loan	EUR 3,600	EUR 1,413	1M EURIBOR + margin	31.12.2026
ING Bank Śląski - corporate FX investment loan	EUR 2,000	EUR 1,375	1M EURIBOR + margin	31.03.2026
ING Bank Śląski – technological investment loan in PLN	EUR 5,950	EUR 4,591	1M EURIBOR + margin	21.06.2028
ING Bank Śląski - working capital facility (overdraft)	EUR 5,500	EUR 1,858	1M EURIBOR + margin	possible extension

Bank loans as at 31.12.2022

Lender and loan type	Loan amount under the agreement (PLN k/ EUR k)	Loan balance (PLN k/ EUR k)	Nominal interest rate	Maturity date
ING Bank Śląski - corporate FX investment loan	EUR 5,800	EUR 1,831	1M EURIBOR + margin	31.03.2026
ING Bank Śląski - corporate FX investment loan	EUR 3,600	EUR 1,670	1M EURIBOR + margin	31.12.2026
ING Bank Śląski - corporate FX investment loan	EUR 2,000	EUR 1,625	1M EURIBOR + margin	31.03.2026
ING Bank Śląski – technological investment loan in PLN	EUR 5,950	EUR 3,347	1M EURIBOR + margin	21.06.2028
ING Bank Śląski - working capital facility (overdraft)	EUR 5,500	EUR 2,050	1M EURIBOR + margin	possible extension

Bank loans as at 30.06.2022



Lender and loan type	Loan amount under the agreement (PLN k/ EUR k)	Loan balance (PLN k/ EUR k)	Nominal interest rate	Maturity date
ING Bank Śląski - corporate FX investment loan	EUR 5,800	EUR 2,271	1M EURIBOR + margin	31.03.2026
ING Bank Śląski - corporate FX investment loan	EUR 3,600	EUR 1,927	1M EURIBOR + margin	31.12.2026
ING Bank Śląski - corporate FX investment loan	EUR 2,000	EUR 1,875	1M EURIBOR + margin	31.03.2026
ING Bank Śląski – technological investment loan in PLN	PLN 6,000	PLN 3,687	1M WIBOR + margin	30.09.2022
ING Bank Śląski - corporate FX investment loan	EUR 5,950	EUR 589	1M EURIBOR + margin	21.06.2028
ING Bank Śląski - working capital facility (overdraft)	EUR 2,500	EUR 1,618	1M EURIBOR + margin	21.03.2023

Collateral for the above loans is described in Section 4.2.9 of the Annual Report for 2022.

Presented below are the covenants of active credit agreements that were breached as at 30 June 2023:

- 1. Starting from the full calendar month following the date of signing the annex to the Agreement, the minimum inflows on all bank accounts in EUR maintained for the Client by the Bank, excluding the social fund account (if any) and excluding transfers and currency conversions between the Client's own accounts, reversals, proceeds from the purchase of receivables and credit drawdowns must not be lower than EUR 1,600,000.00 in each calendar month. The Bank is to test this covenant quarterly as of 1 January 2023.
- 2. Throughout the Loan Period: the DSCR calculated as FCF (EBITDA less CIT, Net Investment Expenditures, Net Changes in Working Capital, Dividends and other payments to owners, Net Loans Granted and increased by Cash at the Beginning of the Period) to the amount of principal installments payable during the previous 12 months (or a shorter period if data from the last 12 months are not available) and the level of interest calculated on the basis of the last 12 months (or a shorter period if data from the last 12 months are not available) must not be lower than 1.2.

Maturity structure of borrowings

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
	PLN	PLN	PLN
Short-term borrowings	21,579	21,326	19,574
Long-term borrowings	25,262	28,057	22,896
- maturing between 1 to 3 years	20,277	25,129	22,896
- maturing above 3 years	4,985	2,928	
	46,840	49,384	42,469

Loans currency structure

	As at		As at:		As at	
	30.06.2	023	31.12.2022		30.06.2	022
	Currency	PLN	Currency	PLN	Currency	PLN
PLN		13		8		3,689
EUR	10,520	46,827	10,523	49,350	8,280	38,783
USD			6	27		
		46,840		49,384		42,472



Table of credit facility movements (PLN/ EUR thousand)

Loan amount	As at 01.01.2023	+/- principal	+ / - interest paid /- accrued	+ / - valuation	As at 30.06.2023
EUR 5,800	8,585	-/-2 044	+132/-132	+175/-529	6,186
EUR 3,600	7,832	-/-1 186	+130/-130	+81/-439	6,288
EUR 2,000	7,621	-/-1 153	+144/-144	+17/-364	6,119
EUR 5,950	15,698	+5,709/-	+357/-357	+1/-976	20,431
EUR 5,500	9,614	+7,796/-9,614	+111/-111	-/-	7,796
overdraft	7	+98/-84	-/-	-/-	20
Total	49,357	+14,075/-14,082	+874/-874	+273/-2,310	46,840
Loan amount	As at 01.01.2022	+/- principal	+ / - interest paid /- accrued	+ / - valuation	As at 31.12.2022
EUR 5,800	12,472	-/-4 124	+135/-135	+349/-111	8,585
EUR 3,600	10,046	-/-2 410	+118/-118	+201/-6	7,832
EUR 2,000	6,993	+2,186/-1,765	+143/-143	+210/-3	7,621
PLN 6,000	4,270	-/-4 270	+128/-128	-/-	
EUR 5,950		+15,892/-	+129/-129	+6/-200	15,698
EUR 5,500		+9,614/-	+101/-101	-/-	9,614
overdraft	29	+34/-29			34
Total	33,810	+27,726/-12,598	+754/-754	+766/-320	49,384
Loan amount	As at 01.01.2022	+/- principal	+ / - interest paid /- accrued	+ / - valuation	As at 30.06.2022
EUR 5,800	12,472	-/-2 046	+58/-59	+204/-	10,630
EUR 3,600	10,046	-/-1 192	+48/-48	+166/-	9,020
EUR 2,000	6,993	+2,186/-580	+54/-54	+182/-4	8,776
PLN 6,000	4,270	-/-583	+86/-86		3,687
Credit cards	29	+26/-29			26
EUR 5,950		+2,772/-		+/-17	2,775
EUR 2,500		+7,576/-			7,575
Total	33,810	+12,559/-4,423	+247/-248	+551/-21	42,469

Other long-term liabilities

The Group has a long-term lease liability of PLN 670 thousand (2022: PLN 640 thousand).

Loans and guarantees granted

The Group did not grant any loans or guarantees to members of the Management Board or Supervisory Board.

4.2.3 Deferred income

	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
Grants to tangible assets	10,484	10,939	7,892
Deferred income (grants towards development projects)	51,238	44,468	35,205
EXPOSURE	938	1,250	1,563
PETRA	0		55
LASERS	0		2
PLAISIR	0		37
MIREGAS	243	325	406
CHEQUERS	947	1,151	1,354
MIRPHAB	1,370	1,523	1,257
WATERSPY	984	1,158	1,332
INDII5	257	330	403
AQUARIUS	1,142	1,343	1,545
ACCORDS	344	407	469



	As at:	As at:	As at:
	30.06.2023	31.12.2022	30.06.2022
TRANSFER	663	737	737
Sensors for Industry 4.0 and IoT	9,471	9,475	9,713
EPITAXIAL STRUCTURES AND VCSELS	7,435	7,458	7,622
INNOVATION VOUCHER	306	340	340
TRAVEL	221	164	113
PEMIR	661	648	488
WidePOWER	305	351	366
WikiNet	399	400	154
VAT VOUCHER FOR INNOVATIONS	286	327	327
MIRPIC	4,581	3,860	2,301
TRIAGE	906	638	750
DEMETER	2,539	2,539	2,539
CAR2TERA	25	26	27
MATRICES	3,492	2,068	1,164
INGAAS WITH ASIC	3,977	2,751	144
AI PRISM	553	353	
PHOTOGENIC	4,546	4,846	
IBAIA	723		
OPMMEG	1,636		
MINIBOT	1,458		
BROMEDIR	831		
LWIRPSBDA	-2		
Tangible assets received as a donation	12	18	25
Prepayments received for future obligations	0	40	
Deferred income, including:	61,734	55,465	43,122
Long term	58,654	52,854	40,826
Short term	3,080	2,611	2,296

4.3 Interim condensed consolidated statement of comprehensive income

4.3.1 Revenue structure

The Group recognises revenue on the basis of INCOTERMS 2020. The main rule applied by VIGO is EXW, which means that the delivery is considered to have been made when the goods are made available to the buyer at a designated place, with no obligation for the seller to undertake any further steps.

In accordance with IFRS 15, revenue is recognised when the customer obtains control of the goods or services. The customer obtains such control when it has the ability to manage the use of the goods or services and to obtain benefits from them. In accordance with each arrangement with customers, the Group, on their behalf and at their request, mediates in ordering courier companies for the delivery of products. Customers themselves decide where the shipment is to be delivered. Therefore, control over the goods or services always passes to the customer when the Company acts as an intermediary in arranging transport.

Revenue structure

	For the period:	For the period:	For the period:
	from 01.01.2023 to 30.06.2023		from 01.01.2022 to 30.06.2022
Continued operations	37,005	76,568	34,765
Sale of goods and materials	47	381	0
Sale of products, including	35,603	63,513	29,088
- Detection modules segment	33,289	62,133	28,509
- Semiconductor materials segment	2,314	1,380	579
Sale of services, including:	1,355	3,980	1,635
- Detection modules segment	928	1,212	364
- Semiconductor materials segment	427	2,768	1,271



	For the period:	For the period:	For the period:
	from 01.01.2023 to 30.06.2023	from 01.01.2022 to 31.12.2022	
Total revenue from sales	37,005	67,874	30,723
Other operating income	3,885	8,270	4,042
Financial income	2,247	424	
TOTAL revenue from continued operations	43,137	76,567	34,765
TOTAL revenue	43,137	76,567	34,765

	For the pe	eriod:	For the period:		For the period:	
		om 01.01.2023 to 30.06.2023		From 01.01.2022 to 31.12.2022		2022 to 022
	PLN thousand	%	PLN	%	PLN thousand	%
Domestic	3,167	8.56	4,167	6.74	1,599	5.20
Exports,	33,838	91.44	63,707	93.86	29,124	94.80
European Union	18,366	49.63	37,668	55.50	20,360	66.27
Third countries	15,472	41.81	26,039	38.36	8,764	28.53
Total	37,005	100.00	67,874	100.00	30,723	100.00

4.3.2 Operating segments

		Continued		
Specification	01.01.2023 - 30.06.2023	Detection modules	Semiconductor materials	Total
	including:	37,498	3,392	40,890
Segment income	Revenue from sales	34,264	2,741	37,005
	Other operating income	3,234	651	3,885
	including:	32,062	2,168	34,230
	Cost of products, services and materials sold	17,754	1,500	19,254
Segment costs	Selling costs	3,954	306	4,260
	General and administrative expenses	8,670	362	9,032
	Other operating costs	1,684		1,684
Segment's profit/(lo	oss).	5,436	1,224	6,660
Profit/(loss) from conti financial income (costs	nued operations before tax and	5,436	1,224	6,660
Interest expense		716	211	927
Significant items of inc	ome	735	1,431	2,166
Significant cost items of	lisclosed	318		318
Profit/(loss) before	tax	5,226	2,444	7,670
Income tax		821		821
Profit (loss) after ta	x	4,405	2,444	6,849
Total assets		207,706	56,383	264,089
Segment assets		207,706	56,383	264,089
Total liabilities		72,074	46,100	118,174
Segment liabilities		72,074	46,100	118,174



	Continued	Continued operations		
Specification 01.01.2023 - 30.06.2023	Detection modules Semiconductor materials		Total	
Other segment information				
Capital expenditure				
- tangible assets	76,761	39,029	115,790	
- intangible assets	14,940	1,704	16,644	
Depreciation/ amortisation	5,360	377	5,737	

		Continued	Continued operations		
Specification	01.01.2022 - 31.12.2022	Detection modules	Semiconductor materials	Total	
	including:	71,494	4,650	76,144	
Segment income	Revenue from sales	63,725	4,149	67,874	
	Other operating income	7,769	502	8,270	
	including:	62,927	4,513	67,440	
	Cost of products, services and materials sold	29,735	3,060	32,795	
Segment costs	Selling costs	10,310	85	10,395	
	General and administrative expenses	20,015	659	20,674	
	Other operating costs	2,868	708	3,576	
Segment profit/(los	ss)	8,567	137	8,704	
Profit/(loss) from continuing financial income (costs	inued operations before tax and	8,567	137	8,704	
Interest expense		907	320	1,227	
Significant items of inc	come	226	142	368	
Significant items of cos	sts	214		214	
Profit/(loss) before	tax	7,724	-40	7,684	
Income tax		-465		-465	
Profit (loss) after ta	x	7,259	-40	7,219	
Total assets		168,010	50,898	218,908	
Segment assets		168,010	50,898	218,908	
Total liabilities		76,528	38,963	115,491	
Segment liabilities		76,528	38,963	115,491	
Other segment information					
Capital expenditure		94,944	37,990	132,934	
- tangible assets		77,216	36,286	113,502	
- intangible assets		17,728	1,704	19,432	
Depreciation/ amortisa	tion	9,025	325	9,349	



		Continued	operations	
Specification	01.01.2022 - 30.06.2022	Detection modules	Semiconductor materials	Total
	including:	32,693	34,765	34,765
Segment income	Revenue from sales	28,874	30,723	30,723
	Other operating income	3,819	4,042	4,042
	including:	29,542	31,474	31,474
	Cost of products, services and materials sold	11,216	12,111	12,111
Segment costs	Selling costs	5,230	5,314	5,314
	General and administrative expenses	11,843	12,246	12,246
	Other operating costs	1,254	1,802	1,802
Segment's profit/(l	oss).	3,151	141	3,291
Profit/(loss) from cont financial income (costs	inued operations before tax and	3,151	141	3,291
Interest income				
Interest expense		34	136	170
Significant items of inc	come			
Significant cost items	disclosed	390	61	451
Profit/(loss) before	tax	2,727	-56	2,671
Income tax		-3,460	0	-3,460
Profit (loss) after ta	X	6,187	-56	6,131
Total assets		193,273	41,926	235,199
Segment assets		193,273	41,926	235,199
Total liabilities		74,015	23,723	97,738
Segment liabilities		74,015	23,723	97,738
Other segment info	rmation			
Capital expenditure		91,660	28,466	120,127
- tangible assets		79,577	26,750	106,327
- intangible assets		12,083	1,717	13,800
Depreciation/ amortisa	ation	3,998	103	4,101

4.3.3 Costs

Costs by type

	For the period:	For the period:	For the period:
	from 01.01.2023 to 30.06.2023	from 01.01.2022 to 31.12.2022	
Depreciation/ amortisation	5,737	9,349	4,101
Use of materials and energy	8,750	13,471	7,816
External services	5,518	9,826	5,217
Taxes and charges	312	349	191
Salaries	13,017	24,704	11,064
Social security and other benefits	2,546	8,345	2,697
Other costs by type	414	1,009	615



	For the period:	=	-
	from 01.01.2023 to 30.06.2023	from 01.01.2022 to 31.12.2022	
Total costs by type, including:	36,294	67,053	31,701
Change in finished products	-3,748	-3,189	-2,030
Selling costs (negative value)	-4,260	-10,395	-5,314
General and administrative expenses (negative value)	-9,032	-20,674	-12,246
Cost of production of products and services sold	19,254	32,795	12,111

4.4 Impairment allowances

Impairment allowances are presented in detail in Section 4.1.7 of this report.

4.5 Settlements in respect of court cases

No settlements were made in respect of court cases. During the reporting period, the Group was not involved in any significant court case.

4.6 Correction of errors from previous periods

During the reporting period, the Group did not make any corrections/ adjustments to the financial statements for prior years.

4.7 Consolidation adjustments

Items of the statement of financial position for 01.01.2023-30.06.2023 (in PLN thousand)	Dr amount	Cr amount
Elimination of investments in subordinated entities	-505	
Elimination of financial receivables	-4,245	
Elimination of trade receivables	-381	-161
Elimination of financial liabilities		-4,750
Elimination of trade liabilities	-161	-381
Total	-5,292	-5,292
Items of the statement of comprehensive income for 01.01.2023- 30.06.2023 (in PLN thousand)	Dr amount	Cr amount
Revenue elimination in the group		-1,751
Elimination of selling costs	-1,751	
Elimination of financial income		
Elimination of financial costs		
Total	-1,751	-1,751

Items of the statement of financial position for 01.01.2022-31.12.2022 (in PLN thousand)	Dr amount	Cr amount
Elimination of investments in subordinated entities	-541	
Elimination of financial receivables	-3,575	
Elimination of trade receivables	-1,716	-207
Elimination of inventories	3,241	-3,296
Elimination of financial liabilities		-3,575



Items of the statement of financial position for 01.01.2022-31.12.2022 (in PLN thousand)	Dr amount	Cr amount
Elimination of trade liabilities	-207	-1,716
Elimination of investments in subordinated entities from the share capital		-541
Total	-2,798	-9,335
Items of the statement of financial position for 01.01.2022-31.12.2022 (in PLN thousand)	Dr amount	Cr amount
Revenue elimination in the group	-3,500	-1,106
Elimination of the cost of production of products and services sold	-3,241	-205
Elimination of selling costs	-1,106	
Elimination of financial costs	-109	-109
Total	-7,957	-1,420
Total consolidation adjustments	-10,755	-10,755

Items of the statement of financial position for 01.01.2022-30.06.2022 (in PLN thousand)	Dr amount	Cr amount
Elimination of investments in subordinated entities	717	
Elimination of financial receivables	2,417	
Elimination of trade receivables	1,357	687
Elimination of inventories	-1,189	1,427
Elimination of financial liabilities		3,136
Elimination of trade liabilities		1,357
Elimination of provisions	687	
Total	3,989	6,605
Items of the statement of financial position for 01.01.2022-30.06.2022 (in PLN thousand)	Dr amount	Cr amount
Revenue elimination in the group	1,427	687
Elimination of the cost of production of products and services sold	1,189	
Elimination of selling costs	687	
Elimination of financial income	42	
Elimination of financial costs		42
Total	3,345	729

4.8 Changes in the economic situation and business environment

There have been no changes in the economic situation or business environment that would affect the fair value of the financial assets.

4.9 Seasonality and cyclicality of business

In its current operations, the Group has not observed any seasonality or cyclicality of its sales performance.

4.10 Issue, redemption or repayment of non-equity and equity instruments

In the reporting period, no non-equity or equity securities were issued, redeemed or repaid



4.11 Related party transactions

Commercial transactions with VIGO Photonics USA:

- Sale of products of PLN 633 thousand.
- The current costs of the period include a contractual commission on sales of PLN 1,287 thousand.

4.12 Changes in the classification of financial assets

During the period from 1 January 2023 to 30 June 2023, the Group did not make any changes in the classification of financial assets.

4.13 Dividend paid or declared

The Company' AGM held on 13 June 2023 adopted Resolution No. 10/13/06/2023 whereby it decided not to pay any dividend and allocate the entire profit for the financial year 2022 to the Company's supplementary capital.

4.14 Change in accounting policies

During the period from 1 January 2023 to 30 June 2023, the Group did not make any changes in its accounting policies.

4.15 Contingent liabilities and contingent assets

The Group has no contingent assets. In addition to the contingent liabilities described in detail in the Annual Report for 2022, Section 4.2.13, the additional contingent liability is blank promissory note for National Centre for Research and Development (NCBiR) as collateral for the proper performance of obligations under the grant agreement POLTAJ10/2022/37/LWIRPSBDA/2023 of 14 June 2023.

4.16 Subsequent events

- On 31 July 2023, VIGO Photonics and a company from Caterpillar Company Inc. Group entered into purchase and sale agreement of EUR 3,672,250.00, i.e. PLN 16,252,277 at the average exchange rate announced by the National Bank of Poland on the day preceding the date of conclusion of the agreement. The agreement provides for the sale of infrared detectors by the Group in the period until 30 May 2025, with a potential extension of the delivery date to maximum 30 August 2025. The value of the agreement exceeds 10% of the Company's equity, so it can be considered a significant agreement. The agreement does not contain provisions regarding liquidated damages and does not provide for any conditions precedent or conditions subsequent. The parties agreed on clauses concerning the possibility of withdrawing from the agreement or suspending deliveries. The buyer has the right to terminate the agreement in the event of failure to meet certain quality parameters or significant delivery delays. The Group has the right to withdraw from the agreement if the buyer exceeds the payment deadline by a stated period stipulated in the agreement. The remaining arrangements are in line with the customary market conditions.
- On 29 August 2023, VIGO Photonics entered into an amending annex to the agreement of 16 October 2017 ("Agreement") with an entity from Polska Grupa Zbrojeniowa Group ("Ordering Party"). The Agreement provides for the delivery of detectors by the Issuer to the Ordering Party in the quantities specified each time by the Ordering Party in the orders. The Ordering Party declared that during the period of the Agreement it would purchase detectors with a value of PLN 15,750,000.00 (fifteen million seven hundred and fifty thousand PLN), calculated at the current price. The supplied detectors are one of the most important components of the explosion suppression and fire extinguishing system developed by Polish entities in tanks, combat vehicles and other vehicles for both military and civilian purposes. The Agreement was concluded for a fixed term expiring on 31 December 2035. Taking into account the current market conditions, the level of technological and business development of the parties and the Issuer's production capacity that might change before the end of 2035, each party has the right to request a change to the provisions of the Agreement and its term. Starting from 2025, on 1 January of each subsequent year of the Agreement, the price for detectors will automatically increase by indexing it by the average annual inflation rate published by Statistics Poland (GUS) for the calendar year preceding the year in which the price change occurs. The Group provided the Ordering Party with a 24month quality warranty for the detectors. The warranty term runs from the date of installation on the target device, but will not continue for longer than 30 months from the date of signing the acceptance certificate. The agreement does not contain provisions regarding liquidated damages and does not provide for any conditions precedent or conditions subsequent. Other terms of the Agreement are in line with the customary market conditions applicable to such agreements. Due to its value, the Agreement is considered a significant agreement.

Ożarów Mazowiecki, 19 September 2023



Adam Piotrowski

Management Board President

Łukasz Piekarski

Management Board Member

Marcin Szrom Management Board Member

Sylwia Wiśniewska-Filipiak Chief Accountant

5 MANAGEMENT BOARD'S REPORT ON THE COMPANY'S ACTIVITIES

5.1 Summary of activities of VIGO Photonics in the first half of 2023

5.1.1 Revenue from sales

In the first half of 2023, the Group achieved PLN 37 million of consolidated sales revenues, up 20.45% YoY (including: sales of semiconductor materials of PLN 2.7 million, i.e. up 47.35% YoY).

The Group recorded the highest growth in the military segment (up 29.9% YoY), in the industrial segment (up 18.6% YoY) and in the transport segment (up more than 13% YoY). Additionally, the Group recorded an increase in the science and medicine segment – up 1.3% YoY.

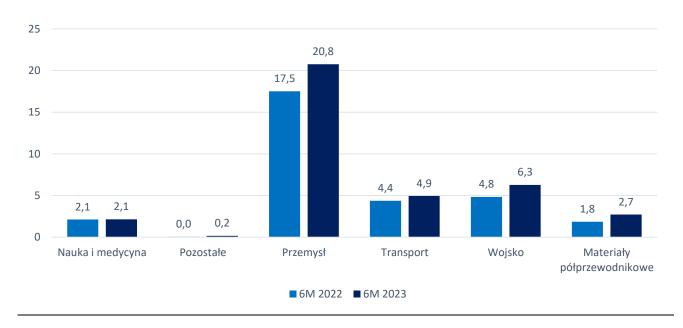


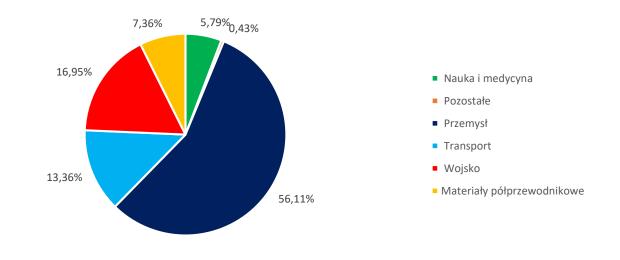
Chart1. Total sales for H1 2023 and 2022 by application [PLN million]

The H1 2023 performance was driven by the following factors:

- Growing revenues in the industrial segment sales increased by 18.6% YoY on the back of constant, strong
 demand trends in the broadly understood industrial segment, in particular for detectors applied in industrial gas
 analysers and used in the semiconductor industry.
- Revenues in the transport segment rose helped by e.g. increasing orders from the Chinese market.
- The increase in revenues in the military segment was caused by greater demand for the Company's products related to the increase in military spend in Poland and other European countries.



Chart 2 Total sales for H1 2023 by application [%]



Until the end of Q2 2023, the status of implementation of significant agreements and orders was as follows:

- Agreement with a Caterpillar group company of 31 July 2023 with a value of EUR 3.7 million (information on the agreement was provided in current report No. 30/2023 of 31 July 2023) has been completed in 24%;
- Agreement with a German company of 4 May 2023 with a value of EUR 2.9 million (information on the agreement
 was provided in current report No. 12/2023 of 4 May 2023) has been completed in 17%.

5.1.2 Costs of core activities

The consolidated cost of goods and services sold reached PLN 19.25 million, up 59% vs the corresponding period of 2022, which is mainly related to:

- Higher production and sales volume;
- Growing depreciation and amortisation costs caused by the purchase of new tangible assets and the adoption of new intangible assets (technology);
- Employment growth;
- An increase in the costs of utilities (notably electricity and heating costs), as well as materials and components, which is related to the limited availability of certain materials, as well as the increase in prices caused by the war in Ukraine.

Items of the statement of comprehensive income for 01.01.2023- 30.06.2023 (in PLN thousand)	Dr amount	Cr amount
Revenue elimination in the group	-33	-1,287
Elimination of selling costs	-1,287	

The Group's general and administrative expenses for H1 2023 reached PLN 9.03 million, down 26.2% YoY.

The Group's selling costs for H1 2023 reached PLN 4.3 million, down 19.8% YoY.

The Group's total operating costs in H1 2023 were PLN 36.3 million, up 12.7% YoY.



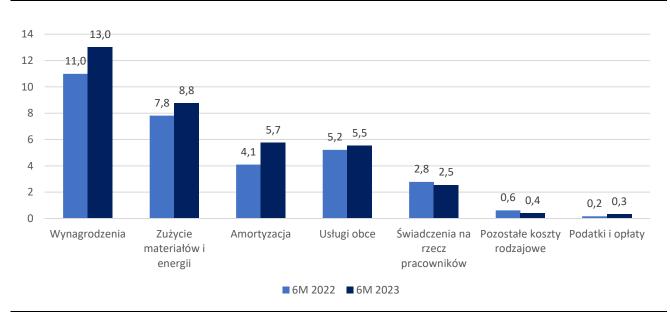


Chart 3 Costs by type [PLN million]

5.1.3 Profitability

Operating profit (EBIT¹) for H1 2023 was PLN 6.66 million (up 102.4% YoY). Adjusted² EBITDA³ reached PLN 10.5 million, up PLN 4.4 million (+71.4%) compared to 2022. In H1 2023, adjusted net profit came in at PLN 7.62 million.

¹ EBIT is an economic indicator that is not reflected in the current IASs/IFRSs and is not applicable for financial reporting purposes. For this reason, in the Company's opinion, it represents an "alternative performance measure" (APM). The disclosed EBIT figure corresponds to operating profit/loss.

²Adjusted EBITDA is the sum of the result (profit/loss) on operating activities and depreciation increased by the settlement of grants and subsidies to tangible assets.

³ EBITA is an economic indicator that is not reflected in the current IASs/IFRSs and is not applicable for financial reporting purposes. For this reason, in the Company's opinion, it represents an "alternative performance measure" (APM). The presented and calculated EBITDA value is the sum of the result (profit/loss) on operating activities and depreciation.



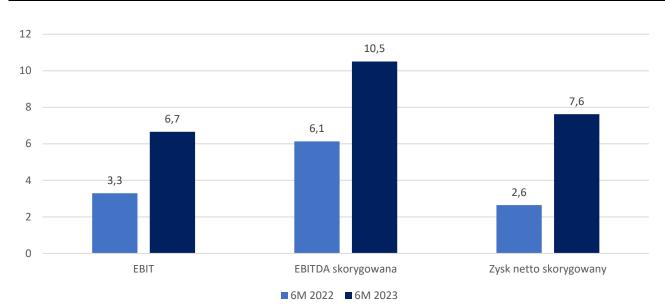


Chart 4 Financial results for H1 2023 and 2022 [PLN million]

Specification (adjusted for non-recurring items)		6M 2023	6M 2022
EBIT	[PLN thousand]	6,660	3,291
Adjusted EBITDA	[PLN thousand]	10,510	6,130
Operating profit (loss)	[PLN thousand]	6,660	3,291
Depreciation/ amortisation	[PLN thousand]	5,737	4,101
Settlement of subsidies to grants and tangible assets	[PLN thousand]	-1,916	-1,338
Incentive scheme	[PLN thousand]	29	76
EBIT margin		18.0%	10.7%
Adjusted EBITDA margin		28.4%	20.0%
Adjusted net profit margin		20.6%	8.6%

The Group's net margin for H1 2023 was 20.6%, up 12% percentage points YoY. Adjusted EBITDA margin was 28.4% (up 8.4 p.p. YoY), while EBIT margin was 18% (up 7.3 p.p. YoY).



28,4% 30% 25% 20,6% 20,0% 18,0% 20% 15% 10,7% 8,6% 10% 5% 0% marża EBIT marża EBITDA skorygowana Rentowność netto skorygowana ■ 6M 2022 ■ 6M 2023

Chart 6 Profitability and margins earned for H1 2023 and 2022 (%)

5.2 Events related to the Company

20 January	Introduction of new IR detectors based on material from groups III-V.
28 January – 2 February	Participation in the international Photonics West 2023 Exhibition in the United States
14 February	Publication of a new VIGO Photonics product catalogue.
22–23 February	Participation in the Space Industry Days organised by the European Space Agency (ESA).
8 March	Organisation of a webinar devoted to a new product – SWIR Matrix.
15 March	Placing second in the Listed Group of the Year ranking in the Innovative Products and Services category.
3–6 April	Participation in the Smart City Summit & Expo in Taiwan.
4 April	Presentation and participation in the panel discussion "Challenges and Opportunities for Electronic and Photonic Ecosystems Resulting from the EU Chips Act".
7 April	Publication of a database of scientific publications from around the world based on VIGO Photonics infrared detectors.
20 April	Co-creation of the Microelectronics, Electronics and Photonics Cluster.
19–21 April	Participation in the Optics & Photonics International Exhibition OPIE23 in Japan.
25 April	Participation in a discussion panel on the space industry during the European Economic Congress.
27 April	Participation in and presentation at the SPIE Optics + Optoelectronics show in the Czech Republic.
28 April	Participation in the Photonics21 Partnership Annual Meeting and a presentation related to the EU Chips Act.
4 May	Receiving the "Forbes Diamond 2023" award.
12 May	Participation in the International Photonics Job Fair.
16–17 May	Sponsorship and presentation at the Infrared Colloquium conference in Switzerland.
29 May	Adding a new product to the VIGO Photonics offer - QCL epi-wafers
7 June	Organisation of a webinar on new infrared detectors based on materials from groups III-V.



8 June	European Commission's decision approving the amount of public aid for the HyperPIC project under the IPCEI mechanism
27–30 June	Participation in the largest photonics industry fair in Europe – Laser World of Photonics in Germany.

5.3 Implementation of R&D projects

The organisation implements the following R&D projects (details of individual projects are provided in the Annual Report for 2022⁴):

Ref.	Project	Agreement date	Project budget for the Company [PLN thousand]	Grant for the Company	Project implementation period
1.	Production technology of innovative epitaxial structures and VCSEL laser devices, key to the development of photonics	21.11.2019	13,015	9,111	01.01.2020 31.03.2023
2.	PEMIR - development of mid-infrared detectors using plasmonic amplification	15.03.2021	1,115	836	01.03.2021 31.10.2023
3.	MIRPIC - new transparent electrodes for VCSEL lasers	22.02.2021	472	354	01.10.2020 30.09.2023
4.	WIKINET - Long-wave VCSEL lasers for fibre optic transmission	09.02.2021	666	500	01.01.2021 01.01.2023
5.	MATRIX - Integrated photonics circuit technologies for the mid-infrared range	25.05.2021	9,492	6,801	01.04.2021 31.03.2024
6.	INGAS WITH ASIC – Manufacture of InGaAs sensors with integrated ASIC electronics for the range of 1.7 - 2.6 μm	23.09.2021	12,650	8,521	1.01.2021 31.12.2023
7.	Polish matrix active in infrared for space applications	24.05.2021	9,374	6,218	01.01.2021 31.12.2023
8.	Car2TERA - Terahertz sensors and networks for next generation smart automotive electronic systems	01.01.2020	113 (EUR 24,113.74)	113 (EUR 24,113.74)	01.01.2020 31.03.2023
9.	TRIAGE - Ultra- broadband infrared gas sensor for pollution detection	01.01.2021	1,967 (EUR 420,392.25)	1,377 (EUR 294,274.58)	01.01.2021 29.02.2024

⁴ Available here: <u>https://vigo.com.pl/raporty/wyniki-finansowe-za-2021/</u>



Ref.	Project	Agreement date	Project budget for the Company [PLN thousand]	Grant for the Company	Project implementation period
10.	Photogenic - Photonics on Germanium - New Industrial Consortium	22.06.2022	6,230 (EUR 1,331,250.00)	6,230 (EUR 1,331,250.00)	01.10.2022 30.09.2025
11.	AI-Prism - AI Powered human-centred Robot Interactions for Smart Manufacturing	23.05.2022	1,122 (EUR 239,700.00)	785 (EUR 167,790.00)	01.10.2022 30.09.2025
12.	MINIBOT- Miniaturized Board- mountable Optical Transceiver for high data rate military satellite communications	02.12.2022	2,711 (EUR 609,098.84)	2,711 (EUR 609,098.84)	01.12.2022 30.11.2025
13.	OPMMEG – Optically- pumped magnetometer arrays for magnetoencephalography	04.11.2022	2,225 (EUR 500,000.00)	2,225 (EUR 500,000.00)	01.12.2022 30.11.2025
14.	IBAIA- Innovative environmental multisensing for waterbody quality monitoring and remediation assessment	30.11.2022	1,498 (EUR 336,625.00)	1,498 (EUR 336,625.00)	01.12.2022 30.11.2026
15.	BROMEDIR- Broadband MEMS- based infrared spectrometers: the core of a multipurpose spectral sensing photonic platform	17.11.2022	1,964 (EUR 441,375.00)	1,964 (EUR 441,375.00)	01.01.2023 30.06.2026
16.	LWIRPSBDA – Long wave detectors supported by dielectric antennas	14.06.2023	1,163	680	01.04.2023 31.03.2026

In 2021, the Group presented its new Strategy for 2021-2026. The strategy is divided into two phases. In Phase 1 (2021-2023), the Group will focus on:

1) Continuation of existing development projects, including photonic integrated circuit technology, III-V material detectors, semiconductor material epitaxy and infrared source technology.

2) Development of the technological and technical base common to key growth support initiatives by investing in R&D and universal infrastructure.

3) Selection, based on outcomes of R&D projects and analysis of the market situation, of the most promising growth initiatives and preparation of an investment plan to support their implementation.

The Group is currently implementing the following strategic growth initiatives:

MCT+ Initiative

The initiative seeks to improve the technologies and manufacturing processes of products based on mercury cadmium telluride (MCT). Particular attention is paid to the marketing of new products for industrial, military and space applications, in jurisdictions not covered by regulations excluding the use of mercury and cadmium in detectors.

At present, the initiative focuses on commercial projects, notably optimising the existing product range adding new processes and technologies implemented as a result of recent investments. The Group plans to launch projects for new products only if it attracts customers interested in this type of products.

III-V Initiative

In connection with the introduction of the EU RoHS Directive, the possibility of marketing goods containing substances hazardous to the environment (such as mercury) will be limited in the civil market during the next several years. Ahead of those changes, the Company has been developing detectors based on A3B5 materials, e.g.: indium and arsenic antimonides.



Within this initiative, implementation is underway of project POLTUR4/PEMIR/2/2021, titled "Development of high-temperature mid-infrared detectors using plasmonic enhancement", abbreviated as **PEMIR** The project seeks to develop high temperature mid-infrared (3–16 μ m) detectors using plasmonic absorption enhancement to increase signal-to-noise ratio and response rate at room temperature or at temperatures achievable with Peltier coolers. The detectors proposed in the project can be very useful in many existing and new applications, including industrial (automotive, production control), environmental (pollution control), medical and military. The total cost of the project is: PLN 1,115,343.81, including the grant: PLN 836,507.86. The project is co-financed by the National Centre for Research and Development under the POLTUR4 competition.

One of the Group's current projects under this initiative is also **TRIAGE** "Ultra-broadband infrared gas sensor for pollution detection" (grant agreement ID: 101015825), which will develop a smart and compact network of air quality sensors for hyperspectral detection of all relevant gases polluting the atmosphere. VIGO's role in the project is to develop and supply dedicated infrared detector modules for TRIAGE sensors. VIGO's role is also to optimise the detector modules to achieve the best possible compatibility with the project requirements and to enable integration with the FTIR spectrophotometer. The project is carried out in an international consortium of nine partners. Implementation period: 1.01.2021-29.02.2024. Total project costs: EUR 5,853,623.50, including the EU funding: EUR 4,994,300.96. The project is co-financed under the Horizon 2020 programme.

Under the Initiative, solutions are being implemented that have been developed within the "Low-cost detection module" area, a project that provides for marketing low-cost (<EUR 100) detection modules (detectors with signal amplification) for wide use in industrial and environmental protection applications. Two tasks are currently being carried out under the project:

- Development of a simple detection module consisting of a detection chip directly on a PCB board containing an
 integrated amplifier circuit with an analogue output. The new module will allow customers to automate assembly
 and reduce production costs of systems based on infrared detectors.
- Development of diffractive optics technology i.e. lenses manufactured directly on epitaxial wafers. Diffractive lenses will help achieve similar parameters as when using immersion lenses, but at much lower production cost.

In recent months, the initiative has begun to receive the first orders for volumes exceeding several hundred items.

Another project co-financed under the initiative is **AI-PRISM**. As part of the project, AI solutions will be adapted to improve production processes in areas considered difficult to automate. The consortium consists of 26 partners from all over Europe. Under the project, VIGO will cooperate most closely with the National Institute of Automation and Measurements. The entities will jointly design and implement a tailor-made solution for automatic and adhesive-free positioning of detectors on rods for VIGO immersion products. The AI challenge is to adapt this experience-requiring process to the needs of the wide range of VIGO products. The goal of the implementation is to shorten the operation time by 80% and halve the amount of waste generated in the process. The project is co-financed under the Horizon Europe programme. Implementation period: 1.04.2021-31.03.2024 Total cost of the project: EUR 239,700.00, including the grant: EUR 167,790.00. The project starts on 1 October 2022. The project work plan spans three years.

IBAIA is another project implemented under the III-V initiative. The main task of the IBAIA project is to develop four innovative, optimised and functional sensor modules based on complementary photonic and electrochemical technologies. These four modules will include:

a) photonic sensors in the visible and near-infrared for the detection of microplastics and salinity measurement, and midinfrared for organic chemical detection;

b) electrochemical sensors for nutrient salts and heavy metal detection; and chemical transducer coupled with an optical sensor (Optode) for sensing physicochemical parameters.

Within the project, these four sensors will be packaged into a modular advanced multi-sensing system that can monitor a broader range of parameters with greater accuracy than existing solutions while also being more cost-effective, reliable, environmentally friendly in manufacturing, and user-friendly in operation. The integrated multi-sensing system will be tested at the end of the project in real in situ conditions.

The IBAIA project is expected to result in a highly competitive product that will serve as a one-size-fits-all solution for many end users, with a highly EU-centric supply chain, and provide technological innovation that will aid in the achievement of the European Green Deal actions.

Under the project, VIGO Photonics S.A. will participate in the implementation of the following tasks: participation in the development of Mid-IR transducers; production of QSL heterostructure (epitaxy) and photonic detector; participation in the integration of the VIGO's manufactured photonic detector into the sensor module; participation in factory and environmental acceptance tests of the manufactured detector.

The project is co-financed under the Horizon Europe programme. Implementation period: 1.12.2022–30.11.2026 Total cost of the project: EUR 336,625.00, including the grant: EUR 336,625.00.



The last project acquired by the Group is "LWIR photodetectors supported by dielectric antennas (**LWIRPSBDA**)". The aim of the project is to develop and demonstrate a new detection device operating in high-temperature conditions (HOT – high operating temperature, 230 K in the first stage and 300 K) and in the long-wave range – 10.6 micrometers with performance exceeding currently available HgCdTe detectors. The proposed architecture of the device will allow for higher detectivity by reducing the volume of the detector, thus reducing the noise level and increasing optical coupling through the use of an amorphous silicon dielectric antenna, optimized for the longwave range (10.6 micrometers). The detector structure will be based on InAs/InAsSb type-II superlattice. The use of a dielectric antenna will increase the quantum efficiency 2.5 times for the wavelength of 10.6 micrometers.

The project is co-financed by the National Centre for Research and Development under the 10th Polish-Taiwanese/Taiwanese-Polish Joint Research Call (2022). Implementation period: 1.04.2021-31.03.2024. The total cost of the project implementation by VIGO is PLN 1,162,725.00, including the grant: PLN 679,625.00 VIGO is the leader of the consortium that also includes: Jarosław Dąbrowski Military University of Technology, National Taiwan University, Department of Electrical Engineering, Graduate Institute of Photonics and Optoelectronics and Taiwan Semiconductor Research Institute (TSRI), National Applied Research Laboratories (NARLabs)

InGaAs Initiative

The aim of the InGaAs initiative is to enter the existing market of detectors operating in the so-called Short Wavelength Infrared (SWIR) range, which have the potential to be used in consumer electronics (e.g. for measurement of various compounds in the human body - e.g. measurement of glucose, alcohol or lactate levels).

The initiative covers the project "**Production of InGaAs sensors with integrated ASIC electronics for the range of 1.7 - 2.6 \mum**", which seeks to develop and market a new mass-market product: a miniaturised high-temperature InGaAs sensor for the range of 1.7-2.6 μ m for modern consumer electronics, integrated with a dedicated ASIC chip, which will increase the competitiveness of VIGO.

PIC Initiative

The initiative seeks to develop optoelectronic systems for infrared range photonics. They will ultimately take the form of hybrid photonic integrated circuits (PICs). PICs are photonic circuits consisting of multiple optical and electronic components with different functionalities integrated on a common (usually semiconductor) substrate. The first task in this area will be to develop a PIC operating in the 3-5.5 µm wavelength range, understood as a monolithically assembled: source (lasers), detector, optical components and electronics. Potential applications the PIC include:

- Analyses of chemical composition of gases
- Analysis of impurities in liquids
- FSO (free space optical) communications
- Medical, telemedicine and gas detection-related applications.

The initiative will build a technology platform to enable mass production of integrated photonic circuits for the mid-infrared range. The aim of the initiative is also entry into the market of integrated photonics circuits manufacturers, by presenting technology demonstrators to a group of key clients (mobile applications, IoT, wearables) and subsequently manufacturing pilot series for customer testing. The Initiative continues the work of the "optoelectronic systems" programme – from the Company's previous strategy.

In April 2021, the Group signed an agreement for the project "photonics integrated circuits technologies for MidIR", abbreviated as: MIRPIC, agreement no.: TECHMATSTRATEG-III/0026/2019-00. The project will result in a product innovation in the form of specialised integrated photonics circuits (ASPICs) designed to operate in the mid-infrared, MidIR (3-5.5 µm) range. In particular, the individual building blocks necessary to define ASPICs will be designed, fabricated and tested, facilitating the design, fabrication and performance testing of an ASPIC demonstrator. The demonstrator will reflect the typical characteristics of integrated photonics circuits, i.e. multi-channel performance, integration on a common substrate, electronic and optical interfaces and packaging.

The project is co-financed by the National Centre for Research and Development under the TECHMATSTRATEG programme. Implementation period: 1.04.2021-31.03.2024 Total cost of the project: PLN 29,255,381.61, including the grant: PLN 26,564,942.41.

The aim of another project: **BROMEDIR** is to develop and test demonstrators of a system that will be able to meet the growing market demand for miniaturised sensors that can analyse many chemical parameters at the same time. For many years, simultaneous measurement of many substances has been possible thanks to the use of spectroscopy. The BROMEDIR project will develop next-generation miniature spectrophotometers that will next be used in three application domains: agriculture, hydrogen supply chain quality monitoring and fuel quality monitoring.

The main tasks of VIGO Photonics S.A. in this project are: development of a modern uncooled mid-infrared photonic detector; participation in the integration and testing of the ultra-compact FTIR spectrophotometer; participation in the validation of

the FTIR spectrophotometer in appropriate environments; participation in performance evaluation and development of recommendations.

The project is co-financed under the Horizon Europe programme. Implementation period: 1.01.2023–30.06.2026 Total cost of the project: EUR 441,375.00, including the grant: EUR 441,375.00.

At the current stage of work, the Company's Management Board does not foresee any threats to the implementation of projects under this initiative.

Matrices Initiative

The initiative seeks to develop technology and build competences in the manufacture of matrix detectors both cooled (thermal) and uncooled (SWIR InGaAs), epitaxy, high density processing, ROIC, hybridisation and encapsulation.

The continuation of the Matrices programme under the new strategy is designed to develop technologies for the production of cooled infrared detector matrices. Initially, cooled arrays will be developed with technical parameters compatible with equipment already in use in industry and existing in the market; this will enable a smooth transition from the research to the production phase. In the next step, following global trends, work will focus on competing technological solutions. The ubiquity of infrared radiation finds a number of applications for its detection. The project is implemented under the competition of the National Centre for Research and Development: Fast Track for Mazovia.

In 2021, based on the agreement: POIR.01.01.01-00-0185/20-00, the Group began implementation of the project: **"Polish matrix active in infrared for space applications".** The main objective of the project is to develop a matrix for the infrared range of 2-5 µm for space applications. An additional objective is to develop a measurement set for characterisation of typical matrices, modules and mid-resolution infrared cameras. The infrared array proposed in the project will be made of a technologically advanced material - type II InAs/InAsSb superlattice, which will be a new and entirely innovative product in the Polish market. The matrix will constitute an innovative product on a global scale and will replace the existing indium antimonide InSb matrices.

The project is co-financed by the European Union from the European Regional Development Fund under the Intelligent Development Programme. The project is implemented under the competition of the National Centre for Research and Development: Fast Track for Mazovia. Project implementation period: 1.01.2021-31.12.2023, total project value: PLN 15,582,310.69, and the grant amount: PLN 11,568,965.39.

MOCVD Epitaxy Initiative

The Initiative seeks to develop the epitaxy of III-V semiconductor materials and produce near-infrared sources (VCSEL lasers) along with the continuous improvement of the production of epitaxial heterostructures of semiconductor compounds based on GaAs and InP by the MOCVD method, leading to beyond state-of-the-art technologies for epitaxy of PD ext InGaAs, PD InGaAs 1.7, QCL, VCSEL, LD, TJSC structures. PD, ext InGaAs, PD InGaAs 1.7, QCL, VCSEL, LD, TJSC.

On 21.11.2019, an agreement was signed on co-financing of the research project MAZOWSZE/0032/19-00: **"Production technology of novel epitaxial structures and VCSEL laser devices critical for the development of photonics**" within the competition "Path for Mazovia". The entity is the leader of the consortium that also includes Warsaw University of Technology and Łódź University of Technology. The total amount of eligible costs of the Project is PLN 16,302,135.55, while the grant amount is PLN 12,398,365.18, i.e. 76.05% of the total eligible costs. Eligible costs of the organisation are PLN 13,014,525.55 and the grant for the Company is PLN 9,110,755.18. The project seeks to develop new solutions in MOCVD technology for the fabrication of advanced photonic heterostructures of III-V epitaxial semiconductor compounds based on GaAs and InP. Technological innovations resulting from the project will be used in the production of structures of vertical cavity resonance lasers (VCSEL) and quantum cascade lasers (QCL). The project will also include the design of VCSEL laser structure adapted to single-mode operation and the design of laser array optimised for maximum emitted power by means of simulation and optimisation of temperature distribution.

Research on improvement of spectral emission characteristics of lasers will be based on the application of subwavelength gratings placed on the emission surface of the laser. Independently, the research on the technology of epitaxy of GaAsbased structures and the design of VCSEL device will be used in the ground-breaking research on the national scale on the modified methods for producing single-mode lasers as discrete devices and their matrices.

As a result of the initiative, the organisation will start the production of epitaxial wafers and their sale on the global market and will be the first in Poland to start the technological process of VCSEL devices production from own material and according to the design developed by the consortium.

Another ongoing activity in this area is the **Car2TERA** project, "Terahertz sensors and networks for next generation smart automotive electronic systems", (agreement no. 824962), implemented under Horizon 2020 by a European consortium comprising the following companies and R&D units: TECHNIKON FORSCHUNGS- UND PLANUNGSGESELLSCHAFT (AT), Kungliga Tkniska Hoegskolan (SE), Infineaon Technologies Austria AG (AT) Chalmers Tekniska Hoegskola AB (SE), VIGO System S.A. (PL) (now VIGO Photonics SA), Ericsson Telecomunicazioni (IT), Anteral SL (ES), Veoneer Sweden AB (SE). The project seeks to develop terahertz sensors and networks for a new generation of intelligent automotive electronic systems.



The Group is also implementing the **TRAVEL** project: "New transparent electrodes for VCSEL lasers", agreement no: M-ERA.NET2/2019/9/2020. The project is carried out together with Łódź University of Technology and Laboratory for Analysis and Architecture of Systems CNRS. The project aims to create an industrially viable method of manufacturing VCSEL lasers with a transparent electrode as upper contact and irregular aperture, which enable more efficient conversion of electrical energy into optical energy. VIGO's task within the project is to produce structures characterised by high optical parameters and high repeatability required in the production of this type of lasers. The growth of the epitaxial structure will be completed by the fabrication of the device and its characterisation. VCSEL lasers are widely used in the photonics industry, mainly in short-range communication systems, LIDARs, time-of-flight (ToF) sensors, autonomous vehicles, robots and drones. The project is co-financed by the National Centre for Research and Development as part of the M-ERA.NET Call 2019. Eligible costs: PLN 1,142,725.35, including a grant of PLN 1,024,808.10.

The initiative also includes work on the **WikiNET** project: "Vertical Cavity Surface Emitting Lasers", agreement no.: NCBR/VII/PL-IL/1/2020. The project seeks to produce long-wave, single-mode integrated VCSEL wafers that allow fast modulation while maintaining a low unit cost. Vigo's task is to develop high quality strained quantum wells for O and C bands. The project lays the foundation for large-scale industrial production of long-wavelength VCSEL lasers. The project is co-financed by the National Centre for Research and Development under the 7th Polish-Israeli competition. Eligible costs: PLN 1,166,233.70, grant amount: PLN 999,675.28.

In Q2 2022, the Group signed an agreement (GA: 101069490) for the implementation of the **PHOTOGENIC** project – "Photonics on Germanium – New Industrial Consortium", which aims to develop an innovative technology for the fabrication (TRL 5) of VCSELs (vertical-cavity surface-emitting lasers) epi-structure grown on germanium substrates The project provides for iterative optimisation of structure growth using MBE and MOCVD techniques, resulting in the achievement of high-quality crystal structures and, consequently develop competitive (compared to GaAs substrates) functional parameters of the fabricated lasers. It should be noted that compared to deposition on gallium arsenide-based substrates the VCESL fabrication technology proposed in the project is safer for the environment and allows production costs to be reduced (fewer losses, better process efficiency, higher yields, 8-inch substrates). It is expected that stabilising large-volume production will attract customers from other application areas, such as optical communications (datacom), medical or industrial applications (autonomous vehicles, drones, robots). The project will develop and test 3D camera and LIDAR demonstrators using the fabricated structures. The total value of the grant towards the project under the Horizon Europe Programme is: EUR 4,788,752.00, including the grant for VIGO at EUR 1,331,250.00.

As part of another project – **OPMMEG** – OPM matrix will be developed that will meet the requirements for the wide use of optically pumped magnetometers in magnetoencephalography (MEG). It is expected that the matrix created as part of the project will confirm the usefulness of OPM technology in magnetoencephalography. The project connects together several world leaders in the fields of development and producing quantum sensor components and systems, commercial MEG systems and MEG applications for medical purposes. The expected effects of this project include the development of the photonics market, including the creation of a value chain of photonic devices for modern systems, which will connect all relevant stakeholders. The main tasks of VIGO Photonics S.A. under this project will include: development, design and epitaxy of VCSEL heterostructures; VCSEL processing and optoelectronic tests and participation in the preparation of a validation report.

The project is co-financed under the Horizon Europe programme. Implementation period: 1.12.2022-30.11.2025. Total cost of the project: EUR 500,000.00, including the grant: EUR 500,000.00.

The main goal of the next project under the initiative with the acronym of **Mini-BOT**, is to create an optical transceiver for satellite communications based on European technology and thus to unlock the full potential of military fiber optics to the European A&D and space industry.

As part of the Mini-BOT project, the consortium will develop, design, produce and test modern European OTRXs that will correspond to the SWaP-C criteria. One of the key components of future OTRXs will be VCSELs (Vertical Cavity Surface Emitting Lasers).

Under the project, VIGO Photonics S.A. will be engaged in the implementation of the following tasks: participation in development of configuration and interfaces of the OTRX module, and development and production of epitaxy heterostructure to VCSELs.

The project is co-financed under the Horizon Europe programme. Implementation period: 1.12.2022-30.11.2025. Total cost of the project: PLN 609,098.84, including the grant: EUR 609,098.84.

5.4 Factors affecting the Group's performance in H1 2023 and in subsequent periods

In June 2021, the Management Board adopted a strategy to be implemented in the period 2021–2026.

Under the strategy, the Company's primary objective is to grow its capital and increase its value for Shareholders in the perspective until 2026. This will be achieved by continued growth in the global photonics market, including by supporting the development of the market segments where the Company is active and expanding Company's operations into new areas.



The Management Board identifies a number of potential business opportunities available to the Company within the photonics market. When leveraged, they may help the Company to achieve its growth ambitions in the 2026 perspective. The Management Board considers the following initiatives the most promising in terms of the Company's growth vision:

- a. Exploration of the MCT (HgCdTe) detector market, including expansion (in terms of geographies and segments) in market areas not covered by regulations excluding the use of mercury and cadmium in detectors.
- b. Development of technologies for infrared detectors and modules made of materials based on compounds from groups III and V of the periodic table of elements, compliant with the European Union Restriction of Hazardous Substances (RoHS) Directive.
- c. Development of epitaxy of III-V semiconductor materials and production of near-infrared sources (VCSEL lasers).
- d. Development of infrared source technologies.
- e. Development of optoelectronic systems technology and photonic integrated circuits for the mid- and short-wave infrared.
- f. Development of infrared detector array technology.

The VIGO 2026 Strategy consists of two phases.

2021-2023 Perspective

In Phase 1 (2021-2023), the key focus was on:

1) Continuation of existing development projects, including photonic integrated circuit technology, III-V material detectors, semiconductor material epitaxy and infrared source technology.

2) Development of the technological and technical base common to key growth support initiatives by investing in R&D and universal infrastructure.

3) Selection, based on outcomes of R&D projects and analysis of the market situation, of the most promising growth initiatives and preparation of an investment plan to support their implementation.

In June 2021, the following strategic goals were published:

- 1) PLN 67 million in revenue and PLN 29.5 million in EBITDA in 2021.
- 2) PLN 80 million in revenue and PLN 33.5 million in EBITDA in 2022.
- 3) PLN 100 million in revenue and PLN 40 million in EBITDA in 2023.

Due to unfavorable changes in the macroeconomic environment, the Group did not achieve its goal for 2022. However, a number of growth initiatives are being implemented that are intended to ensure a sustainable increase in sales revenues in the coming years.

2024-2026 Perspective

In Phase 2, we will focus on implementing and executing the most promising growth initiatives selected in Phase 1 of the Strategy, including:

- Accelerating sales growth under development initiatives that form the core business (sales of infrared detectors and modules and semiconductor materials), by supporting operational activities throughout the value chain, in particular investments in the development of own sales structures in key markets and continued development of technologies and new products, in order to further strengthen the organisation's position as a leading supplier of mid-infrared photon detectors and a supplier of semiconductor materials for applications in photonics and microelectronics.
- Continuation of the project related to the development of infrared detector array technology for civilian and military applications and the launch of serial production of infrared detector arrays.
- Implementation of a project related to the development of photonic integrated circuit technologies and their subsequent implementation into serial production as part of the PIC Initiative. The key project under this initiative is HyperPIC, for which the Group obtained a decision from the European Commission approving public aid of EUR 102.9 million. The decision on a grant and on its final amount will be taken as part of the competition procedure within the European Funds for a Modern Economy programme. The grant procedure will be available to the entities for which the European Commission has issued a positive decision regarding the eligibility for aid. The HyperPIC project will allow the Company to significantly scale its business by becoming a leading supplier of integrated mid-infrared sensor solutions.

The Company's ambition is to maintain the revenue growth rate at 20-30% p.a. and high profitability of its ordinary activities, including a gross margin in excess of 60% and EBITDA margin in excess of 40%.



Taking into account the investment needs arising from the implementation of the adopted Strategy, the Management Board decided to change the dividend policy, whereby the Management Board will recommend to the Company's General Meeting not to pay dividends during the Strategy implementation and to re-invest the generated profits to accelerate the organisation's development.

The final recommendation as to dividend payment will depend on a number of factors relating to the Company and its industry, including in particular the prospects for the Company's future activities, earnings and financial position, and will take account of all possible restrictions on dividend payment, liquidity ratios, expansion plans and legal requirements with respect to the above. The dividend amount recommended by the Management Board will depend on the Company's need to reinvest the generated profits in order to fund the Company's operations and support its continued robust growth. The dividend policy will be subject to periodic reviews by the Management Board.

5.5 Description of key threats and risks for the Company

The Company's business, financial performance and results have been and may in the future be adversely affected by the occurrence of any of the risk factors described below. The occurrence of even some of the following risk factors could have a material adverse effect on the Company's business, financial position and results, and could result in the loss of some or all of the invested capital. Risk factors and uncertainties other than those described below, including those of which the Group is not currently aware or which it considers immaterial, may also have a material adverse effect on the Company's business, financial condition and results, and may lead to the loss of some or all of the invested capital.

5.5.1 Business and operational factors

Risk of lower-than-expected demand for products

Market growth plans are based on various market reports and analyses, and plans of clients and partners in R&D projects. Forecasts regarding the growth of the uncooled infrared detector market are subject to relatively high uncertainty. Forecasts presented by the Company's clients may not be fully achieved both as a result of failures of ongoing projects and the adoption of erroneous assumptions or expectations, as well as due to significant changes in the global economy related to the business cycle, including the possibility of a recession or economic crisis. As a result, the demand for the Company's products may be lower than expected.

The markets in which the Group is present may be disrupted by various macroeconomic factors (GDP growth, unemployment levels, demand, consumption, etc.), which may reduce demand for technological equipment. The Group takes countermeasures, which involve making strategic and operational decisions based on a planning process that takes into account current market data and demand for the Company's products.

This risk will be mitigated by VIGO's own research and participation in various international projects, including in cooperation with the Company's existing clients, aimed at developing new applications for infrared detectors.

Risk of losing distributors or clients

The main sales channels comprise selling products directly to clients and through distributors. The role of distributors is to conduct marketing campaigns and provide basic technical consulting.

The loss of any distributor may impair access to the market in which the distributor was active. For this reason, the loss of one or more key distributors could adversely affect the Company's financial performance, the value for shareholders and profits.

In addition, there is a risk of losing key clients, who are direct buyers of the Company's products. Quality, economic or customer service issues may discourage partners from further cooperation. Therefore, the loss of key clients, may adversely affect financial results and reduce the Company's value for shareholders.

In order to mitigate the risk, the Group constantly searches the markets for potential new distributors, monitors the satisfaction level of its existing clients and continuously looks for new potential clients to replace any clients lost.

Supplier-related risk

The production process of the infrared detectors uses raw materials that are difficult to obtain (such as cadmium mercury telluride, gallium arsenide and indium) and can be sourced only from a limited group of suppliers that guarantee their high quality.

In 2022, increasing problems were noted with the supply of electronic components used in the production of detection modules (microcontrollers, integrated circuits, etc.) related to the global economic situation. The delivery times of those components have significantly increased, and the prices of available components have substantially risen. These problems affect the entire electronics industry across the world.



In the event of delays in the supply or deterioration of the quality of raw materials, the production of detectors may be temporarily suspended or delayed. Component costs can increase significantly when sourced from a brokerage market.

In the event of a prolonged supply disruption or inability to find an alternative supplier, detector production may be temporarily suspended.

The occurrence of the above risk may adversely affect financial results and reduce the Company's value for its shareholders.

In order to mitigate the risk, the Group continuously monitors the supply market. In order to minimise the risk of electronic component availability, the Group increases the stock of those components and cooperates with its clients to take advantage of their market position and accelerate deliveries.

Competition-related risk

The high technological barriers and the high capital intensity of the technologies used make the radiation detector market a highly concentrated one. Only a few players in this market can be considered direct competitors to the Company. There is a risk that in the event of the emergence of competitors, the Group may lose part of the market and clients with whom it currently cooperates. In addition, the emergence of new competitors may lead to the spread of technologies used in the production of infrared detectors, which in turn may lower the market entry barriers. The risk will increase as the market develops.

The occurrence of the above risk may adversely affect financial results and reduce the Company's value for its shareholders.

The risk is neutralised by the Group through continuous development of technology, ensuring technological superiority over competitors, as well as through planned investments that will reduce the price of products on offer. In addition, the market is being continuously monitored in order to prepare as early as possible for the emergence of new competition.

Risk of losing key employees

Due to the high technological advancement of the Company's products, their manufacturing requires highly qualified personnel with many years of experience. Skills, knowledge and experience of employees are among the most important competitive advantages of VIGO. For this reason, losing a key employee may cause difficulties in the production process, delays in deliveries and deterioration of product quality and thus negatively affect the financial results and reduce the value of the Company for its shareholders.

In order to minimise the above risk, an attractive bonus scheme for employees is applied and opportunities are provided for upskilling and work involving unique technical matters. Employees' performance and skills are evaluated on a continuous basis. There are staff development programmes in place, and talents are promoted to managerial positions.

Risks related to the COVID-19 pandemic

In connection with the COVID-19 pandemic, a risk analysis was conducted in relation to the impact of the pandemic on the Company's operations:

- Supplier-related risks an outbreak of the pandemic in countries, regions or directly at suppliers' production
 facilities could mean disruptions in the supply of components, which could result in disruption of production
 processes and financial losses due to lack of supply to clients. The Group has taken steps to diversify its supplier
 base geographically.
- Risk related to the coronavirus infection on the Company's premises coronavirus infection among the Company's employees may result in the necessity to introduce quarantine for the Company's employees and lead to a temporary shutdown of the plant. In order to minimise the risk, the Group implemented a number of measures (shift work was introduced, the frequency of cleaning and disinfecting workplaces was increased, the percentage of employees working remotely was increased, visits and meetings with suppliers were limited). The risk has now been minimised as most employees have been vaccinated.
- Other risks the development of the pandemic and the restrictions introduced create risks of disruption on the part
 of the Company's clients and introduce great uncertainty about trends in the economy and the photonics industry.
 It is currently impossible to estimate these risks. The Group continuously monitors the situation of its customers,
 including possible liquidity risks.

In the Management Board's opinion, the pandemic also presents a major opportunity for the sensor market. The pandemic accelerates the introduction of production automation, which in the long term should lead to increased demand for the Company's products.

5.5.2 Technological risks

Risks related to research and development



Constant technological progress and developing methods of manufacturing infrared detectors call for continuous research and development. Advanced research into the development of detector production technology help improve the parameters of manufactured products.

The Group has its own research and production laboratory, where it not only carries on development and scientific research on improving infrared detectors but also designs and manufactures detectors.

As the end result of R&D might turn out to be less satisfactory than expected, the anticipated economic benefits might differ from those assumed in the plan. Unsatisfactory R&D results might cause the Company to lose the invested funds and its competitive position.

The occurrence of the above risk may adversely affect financial results and reduce the Company's value for its shareholders.

The R&D results obtained to date confirm the Company's effectiveness in improving and developing new infrared detector manufacturing technologies. Still, there is a possibility that the results of current and future R&D will not be as satisfactory as planned or in line with expectations or past experience.

Risks associated with the emergence of alternative technologies

The Group manufactures detectors based on MOCVD and MBE technologies.

There is a risk that a new technology, alternative to those used by the Company, will emerge, which may adversely affect the Company's financial results and reduce its value for shareholders.

The risk will be neutralised by the Group through the development of its own products and the technology for their manufacture as well as through a gradual increase in production automation, which should also translate into lower prices of the products offered.

Risk of failure or damage to equipment

The Group uses a laboratory furnished with modern and unique equipment for doing research and manufacturing detectors. The apparatus used has been individually customised to the Company's needs and it is not possible to purchase it in the market.

Due to the above, in case of failure or damage to the apparatus, it cannot be replaced in a short time. The materialisation of the risk may disrupt the production or delay order processing, and thus may negatively affect the Company's financial results and reduce its value for shareholders.

In order to minimise the impacts of the risk, the Group accumulates spare parts for the apparatus and stocks of semifinished products securing possible interruptions in supply for the time of liquidation of the failure of the key apparatus. The Group limits the possibility of delays by concluding appropriate agreements with suppliers and monitoring the quality of supplies and services. The Group determines the required stock levels of particular components and plans production taking into account the above risk. The Group puses only proven carriers and transfers the transport risk to clients (deliveries are primarily EXW) or procures insurance against transport damage.

5.5.3 Financial risks

Risk of losing EU grants for planned investments

The implementation of investments supported with EU grants implies a number of additional obligations for the Company, procurement selection and of suppliers and contractors. especially in the area of Failure to meet the stringent requirements may cause the Company to lose some or all of the grants. According to the current terms of the grant agreement, the Group will receive PLN 6 million of technological bonus, which will be used to repay the technology loan. The loss of the technology bonus would mean the need to repay the technology loan from the Company's equity.

The Group has extensive experience and is very successful in independently obtaining EU grants, while the Company's management has experience in the implementation of EU projects. The technologies implemented by the Group are innovative on a global scale (which translates into the highest scores during application assessment), which is confirmed by the opinions of independent Polish scientists.

Currency risk

The Group continuously analyses fluctuations in the EUR/PLN exchange rate in order to eliminate any possible negative impact of exchange rates on its financial position.

The Group uses financial instruments to hedge its foreign exchange risk.



Credit risk

Credit risk is the risk of the Company incurring a financial loss in a situation where the client or the other party to the financial instrument defaults on its contractual obligations. Credit risk is related primarily to receivables from products sold and services provided.

Interest rate risk

Interest rate risk is mainly related to the Group's use of bank loans. Loans are based on variable interest rates which exposes the Company to the risk of changes in profit and cash flows. Due to the current level of borrowings, it is assumed that the effects of changes in interest rates will not have any significant impact on the financial results for 2023.

Liquidity risk

Liquidity risk is the risk that the Group will have difficulties meeting its obligations associated with financial liabilities that are settled in cash or other financial assets. The Group's liquidity management is designed to ensure, to the greatest extent possible, that the Group always has sufficient liquidity to meet its obligations as they fall due, both in normal and emergency situations, without being exposed to unacceptable losses or to reputation risk.

The Group minimises liquidity risk through continuous debt collection, which ensures a constant inflow of cash. In addition, the Group controls and conducts activities to meet the terms and conditions of its bank loan agreements. To ensure funding for its operations, the Group relies on external financing – bank credit.

The Group's liquidity risk management tools include:

- Regular monitoring of cash needs and expenditures
- Continuous ebt collection, which ensures a constant inflow of cash
- Steps designed to meet contractual conditions and covenants
- Using external sources of financing in the form of bank credit.

The Group assesses that in the context of its financial resources to the current debt, the liquidity risk is insignificant.

Market risk

Market risk is the risk that changes in market prices such as foreign exchange rates, interest rates and stock prices will affect the Company's performance or the value of its financial instrument holdings. The objective of market risk management is to maintain and control the Company's exposure to market risk within approved parameters while seeking to optimise returns.

In the opinion of the Management Board, the market risk in relation to the Company concerns primarily exposure to the risk of changes in the PLN/EUR exchange rate as the Group trades mainly as an exporter.

5.6 The ownership structure of VIGO Photonics S.A.

According to the knowledge of the Management Board, as at the date of submitting the interim condensed financial statements the first six months of 2023 (19 September 2023), the following shareholders held at least 5% of the total number of votes at the General Meeting:

Shareholder	Number of shares	% of the registered capital	Number of votes	% of votes at the General Meeting
Warsaw Equity Management S.A.	104,000	14.27	104,000	14.27
Józef Piotrowski	86,650	11.89	86,650	11.89
Investors TFI	47,038	6.45	47,038	6.45
PTE Allianz Polska S.A.	39,071	5.36	39,071	5.36
Janusz Kubrak	48,100	6.60	48,100	6.60
Mirosław Grudzień	37,200	5.10	37,200	5.10
Others	366,941	50.33	366,941	50.33
	729,000	100.00	729,000	100.00

5.7 Other significant information

Impact of the war in Ukraine

In connection with the war in Ukraine, the Company has assessed its impact on the Group's activities and financial results.

A decision was made to suspend the sale of its products to Russia and Belarus. The suspension of sales to Russia will not have a material impact on the Company's financial results. In 2021, sales to Russia were PLN 244 thousand and in previous years ranged from PLN 100 thousand and 150 thousand per year.

In connection with the sanctions, the Group has noted additional risks associated with the supply of components manufactured in the Russian Federation. If additional restrictions are introduced, problems may occur with the timeliness of deliveries or restrictions on the ability to purchase those components. The value of components imported from Russia in 2021 was PLN 7.3 million. The Group has taken steps to find alternative suppliers and is also working with suppliers to change the location of component production. The certification of new suppliers is progressing as planned. The Group successfully completed the certification of a new supplier. In addition, the previous supplier moved its production outside of Russia. At this stage, the Group does not see any significant problems with the availability of components that have been purchased from the Russian market so far. However, due to disruptions in global supply chains in the electronic components market, this risk cannot be completely ruled out.

RoHS directive

Under Directive 2011/65/EU of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment ("ROHS Directive"), certain chemicals must be phased out of electrical and electronic equipment placed on the EU market. Among the hazardous substances identified by the ROHS Directive are mercury and cadmium, which are contained in cadmium mercury telluride (HgCdTe), a basic semiconductor material for uncooled mid-infrared detectors.

Pursuant to Annex IV of the ROHS Directive, mercury and cadmium in infrared detectors are exempted from the restrictions of the Directive until the expiry of the relevant transitional periods:

- Until 21 July 2021 for medical devices
- Until 21 July 2023 for in vitro diagnostic medical devices
- Until 21 July 2024 in the case of control and measuring equipment for industrial use.

The Directive does not cover military or space applications.

The Directive provides for the possibility to apply to the European Commission for an extension of the above deadlines in the event that technical progress does not render it possible to find reliable substitutes for the above substances. In January 2020 and again in January 2023, the Group submitted a request to the European Commission to extend the transitional period for medical devices. Similar requests were also submitted by other manufacturers of equipment using HgCdTe detectors. The requests are now being considered.

In March 2022, a report⁵ ordered by the European Commission was published, containing an assessment of submitted requests for the extension of transitional periods. According to the report, the consultant recommends extending the possibility of using HgCdTe detectors in all three of the above-mentioned applications to 21 July 2028.

⁵ Available here: <u>https://rohs.biois.eu/RoHS-Pack-21_Final-Report.pdf</u>



Ożarów Mazowiecki, 19 September 2023

Adam Piotrowski Management Board President Łukasz Piekarski Management Board Member Marcin Szrom

Management Board Member



6 MANAGEMENT BOARD'S STATEMENTS

Pursuant to the Regulation of the Minister of Finance of 29 March 2018 on current and financial information provided by issuers of securities (i.e. Journal of Laws of 2018, item 757), the Company's Management Board hereby declares that, to the best of its knowledge, these consolidated and standalone financial statements and comparative data have been prepared in accordance with the accounting policies applicable to VIGO Photonics S.A. and that they give a true, fair and clear view of the financial position of the Company as well as its financial result.

The Company's Management Board also declares that the report on the issuer's operations gives a true and fair view of the issuer's development, achievements and position, including a description of the main threats and risks.

These standalone financial statements have been prepared in accordance with the accounting policies compliant with the International Financial Reporting Standards, including the International Accounting Standards (IASs) and Interpretations of the Standing Interpretations Committee and the International Financial Reporting Interpretations Committee, endorsed by the European Union and applicable to reporting periods beginning on 1 January 2017, and with respect to matters not regulated therein in accordance with the requirements of the Accounting Act of 29 September 1994 (i.e. Journal of Laws of 2017, item 2342) and secondary legislation issued on the basis thereof, and to the extent required by the Regulation of the Minister of Finance of 29 March 2018 on current and financial information provided by issuers of securities (i.e. Journal of Laws of 2018, item 757).

The Company's Management Board declares that the statutory auditor responsible for interim review of the annual financial statements of the Company was selected in accordance with the applicable laws, and that the entity and auditors performing the audit met the conditions to issue an impartial and independent opinion on the audited annual financial statements, in compliance with the applicable laws and professional standards.

The Management Board of VIGO Photonics S.A.:

Ożarów Mazowiecki, 19 September 2023

Adam Piotrowski

Management Board President

Łukasz Piekarski

Management Board Member

Marcin Szrom Management Board Member