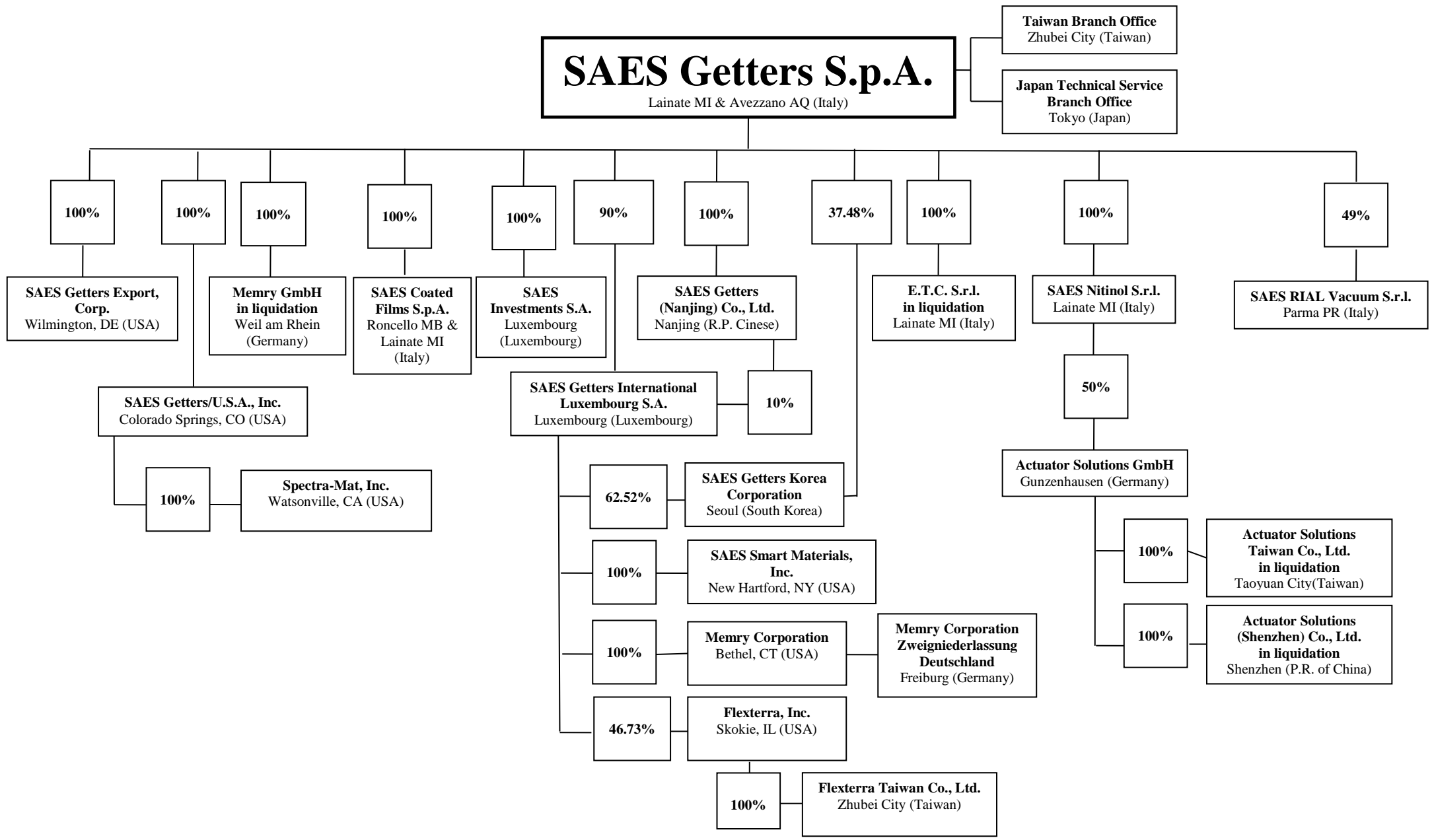




Interim Consolidated Financial Statements 2020



SAES Getters S.p.A.
Lainate MI & Avezzano AQ (Italy)

Taiwan Branch Office
Zhubei City (Taiwan)

Japan Technical Service
Branch Office
Tokyo (Japan)

100%
SAES Getters Export, Corp.
Wilmington, DE (USA)

100%
SAES Getters/U.S.A., Inc.
Colorado Springs, CO (USA)

100%
**Memry GmbH
in liquidation**
Weil am Rhein (Germany)

100%
Spectra-Mat, Inc.
Watsonville, CA (USA)

100%
SAES Coated Films S.p.A.
Roncello MB & Lainate MI (Italy)

100%
SAES Investments S.A.
Luxembourg (Luxembourg)

SAES Getters International Luxembourg S.A.
Luxembourg (Luxembourg)

90%
SAES Getters (Nanjing) Co., Ltd.
Nanjing (R.P. Chinese)

10%

37.48%
**E.T.C. S.r.l.
in liquidation**
Lainate MI (Italy)

**Memry Corporation
Zweigniederlassung
Deutschland**
Freiburg (Germany)

100%
**E.T.C. S.r.l.
in liquidation**
Lainate MI (Italy)

100%
SAES Nitinol S.r.l.
Lainate MI (Italy)

50%

Actuator Solutions GmbH
Gunzenhausen (Germany)

100%

**Actuator Solutions Taiwan Co., Ltd.
in liquidation**
Taoyuan City (Taiwan)

100%

**Actuator Solutions (Shenzhen) Co., Ltd.
in liquidation**
Shenzhen (P.R. of China)

49%
SAES RIAL Vacuum S.r.l.
Parma PR (Italy)

62.52%
SAES Getters Korea Corporation
Seoul (South Korea)

100%
SAES Smart Materials, Inc.
New Hartford, NY (USA)

100%
Memry Corporation
Bethel, CT (USA)

46.73%
Flexterra, Inc.
Skokie, IL (USA)

100%
Flexterra Taiwan Co., Ltd.
Zhubei City (Taiwan)

*The present is the English translation of the Italian official report.
For any difference between the two texts, the Italian text shall prevail.*



Interim Condensed Consolidated Financial Statements at June 30, 2020

SAES Getters S.p.A.

Capital Stock of Euro 12,220,000 fully paid-in

Corporate Headquarters:
Viale Italia, 77 – 20045 Lainate (Milan), Italy

Registered with the Milan Court Companies Register no.
00774910152

Board of Directors

President

Massimo della Porta

Vice President and Managing Director

Giulio Canale

Directors

Alessandra della Porta (1)

Luigi Lorenzo della Porta (1)

Andrea Dogliotti (1)

Luciana Rovelli (1) (2) (4) (5) (6) (8)

Adriano De Maio (1) (3) (4)

Stefano Proverbio (1) (2) (5) (6) (7) (8)

Gaudiana Giusti (1) (2) (4) (5) (6) (8)

Board of Statutory Auditors

President

Vincenzo Donnataria

Standing Auditors

Maurizio Civardi

Sara Anita Speranza (8)

Alternate Auditors

Massimo Gabelli

Mara Luisa Sartori

Audit Firm

Deloitte & Touche S.p.A. (9)

Representative of holders of savings shares

Massimiliano Perletti (10)

(e-mail: massimiliano.perletti@roedl.it)

(1) Non-executive Director

(2) Independent Director, pursuant to the criteria of the Code of Conduct of the Italian Stock Exchange and according to article 147-ter, paragraph 4 and article 148, paragraph 3 of Legislative Decree 58/1998

(3) Independent Director, pursuant to the combined provisions of article 147-ter, paragraph 4, and article 148, paragraph 3, of Legislative Decree 58/1998

(4) Member of the Remuneration and Appointment Committee

(5) Member of the Audit and Risk and Sustainability Committee

(6) Member of the Committee for Transactions with Related Parties

(7) Lead Independent Director

(8) Member of the Supervisory Body

(9) Appointed for the years 2013-2021 by the Shareholders' Meeting held on April 23, 2013

(10) Appointed for the years 2020-2022 by the Special Meeting of Holders of Savings Shares on April 21, 2020

The mandate of the Board of Directors and the Board of Statutory Auditors, elected on April 24, 2018, will expire on the same date as the Shareholders' Meeting in which the financial statements for the year ended December 31, 2020 will be approved.

Powers of the company bodies

Pursuant to article 20 of the Articles of Association, the President and the Vice President and Managing Director are each of them separately entrusted with the legal representation of the Company, for the execution of Board of Directors' resolutions, within the limits of and for the exercise of the powers attributed to them by the Board itself.

Following the resolution adopted on April 28, 2015, the Board of Directors granted the President and the Vice President and Managing Director the powers of ordinary and extraordinary administration, with the exception of the powers strictly reserved to the competence of the Board or of those powers reserved by law to the Shareholders' Meeting.

The President Massimo della Porta is confirmed as Group Chief Executive Officer, with the meaning that such definition and role have in English-speaking countries. The Vice President and Managing Director Giulio Canale has been confirmed in the role of Deputy Group Chief Executive Officer and Group Chief Financial Officer, with the meaning that such definitions and roles have in English-speaking countries.

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Interim Group Financial Highlights

INTERIM GROUP FINANCIAL HIGHLIGHTS

(thousands of euro)

Income statement figures	1 st half 2020	1 st half 2019 (1)	Difference	Difference %
NET SALES				
- Metallurgy	33,539	33,217	322	1.0%
- Vacuum Technology	5,359	5,522	(163)	-3.0%
- Medical	40,145	41,272	(1,127)	-2.7%
- Specialty Chemicals	5,024	3,461	1,563	45.2%
- Advanced Packaging	5,032	5,015	17	0.3%
Total	89,099	88,487	612	0.7%
GROSS PROFIT (2)				
- Metallurgy	17,085	17,206	(121)	-0.7%
- Vacuum Technology	3,285	2,853	432	15.1%
- Medical	15,851	16,542	(691)	-4.2%
- Specialty Chemicals	1,396	759	637	83.9%
- Advanced Packaging	609	460	149	32.4%
- Not Allocated Costs (3)	(3)	0	(3)	<i>n.a.</i>
Total	38,223	37,820	403	1.1%
	<i>% on net sales</i>	<i>42.9%</i>	<i>42.7%</i>	
EBITDA (4)	16,473	17,952	(1,479)	-8.2%
	<i>% on net sales</i>	<i>18.5%</i>	<i>20.3%</i>	
OPERATING INCOME (LOSS)	11,143	13,412	(2,269)	-16.9%
	<i>% on net sales</i>	<i>12.5%</i>	<i>15.2%</i>	
INCOME (LOSS) BEFORE TAXES	3,770	15,196	(11,426)	-75.2%
	<i>% on net sales</i>	<i>4.2%</i>	<i>17.2%</i>	
Group NET INCOME (LOSS)	438	9,140	(8,702)	-95.2%
	<i>% on net sales</i>	<i>0.5%</i>	<i>10.3%</i>	
Balance sheet and financial figures	June 30, 2020	December 31, 2019	Difference	Difference %
Tangible fixed assets	74,141	70,893	3,248	4.6%
Group shareholders' equity	243,988	252,530	(8,542)	-3.4%
Net financial position	95,644	115,316	(19,672)	-17.1%
Other information	1 st half 2020	1 st half 2019	Difference	Difference %
Cash flow from operating activities	2,780	2,281	499	21.9%
Research and development expenses	5,283	5,524	(241)	-4.4%
Number of employees as at June 30 (5)	1,078	1,072	6	0.6%
Personnel cost (6)	39,681	38,932	749	1.9%
Disbursement for acquisition of tangible assets	(6,827)	(10,525)	3,698	-35.1%

(1) The revenues and costs by Division at June 30, 2019 presented for comparative purposes, do not coincide with what is set out in the 2019 Annual Financial Report, since they were reclassified to allow for a like-for-like comparison with June 30, 2020. In particular, from January 1, 2020, the Group was organized into the following technological competency areas (or "Divisions"):

- Metallurgy Division (which coincides with the previous Industrial operating sector, excluding Solutions for Vacuum Systems, Functional Chemical Systems and advanced getters for the consumer electronics market, the latter previously classified within the Electronic Devices Business);

- Vacuum Technology Division (which coincides with the Solutions for Vacuum Systems Business, included in the Industrial operating segment);
- Medical Division (unchanged);
- Specialty Chemicals Division (i.e. advanced getters for the consumer electronics market, classified within the Electronic Devices Business in the previous year, in addition to the Functional Chemical Systems segment and Flexterra business, the latter previously unallocated);
- Advanced Packaging Division (unchanged).

(2) This item is calculated as the difference between the net revenues and the industrial costs directly and indirectly attributable to the products sold.

(thousands of euro)

	1 st half 2020	1 st half 2019
Net Sales	89,099	88,487
Raw materials	(16,854)	(15,767)
Direct labour	(14,452)	(14,426)
Manufacturing overhead	(23,019)	(21,224)
Increase (decrease) in work in progress and finished goods	3,449	750
Cost of sales	(50,876)	(50,667)
Gross profit	38,223	37,820
<i>% on net sales</i>	<i>42.9%</i>	<i>42.7%</i>

(3) This item includes costs that cannot be directly attributed or allocated in a reasonable way to the Business Units, but which refer to the Group as a whole.

(4) EBITDA is not deemed an accounting measure under International Financial Reporting Standards (IFRSs); however, it is believed that EBITDA is an important parameter for measuring the Group's performance and therefore it is presented as an alternative indicator. Since its calculation is not regulated by applicable accounting standards, the method applied by the Group may not be homogeneous with the ones adopted by other Groups. EBITDA is calculated as "Earnings before interest, taxes, depreciation and amortization".

(thousands of euro)

	1 st half 2020	1 st half 2019
Operating income	11,143	13,412
Depreciation and amortization	(4,161)	(3,902)
Right of use amortization	(1,035)	(662)
Write-down of assets	(115)	(1)
Bad debt provision (accrual) release	(19)	25
EBITDA	16,473	17,952
<i>% on net sales</i>	<i>18.5%</i>	<i>20.3%</i>

(5) As at June 30, 2020 this includes:

- 999 employees (963 as at June 30, 2019);
 - personnel employed in the Group's companies with contract types other than employment agreements, equal to 79 (109 as at June 30, 2019).
- This figure does not include the personnel (employees and temporary workers) of the joint ventures amounting, according to the percentage of ownership held by the Group, to 42 as at June 30, 2020 (58 at the end of the first half of the previous year, again according to the percentage of ownership held by the Group).

(6) At June 30, 2019, the severance costs, included in personnel costs, amounted to 355 thousand euro, and are mainly related to the finalization of the staff reduction process in the Parent Company which began at the end of 2018, following the sale of the gas purification business. In the first half of 2020, there were no staff reduction costs.

Interim Report on Operations of SAES Group

REPORT ON OPERATIONS

A pioneer in the development of getter technology, the Company SAES Getters S.p.A., together with its subsidiaries, (hereinafter “SAES® Group”) is the world leader in a variety of scientific and industrial applications where stringent vacuum conditions are required. In 80 years of activity, the Group’s getter solutions have been supporting innovation in the information display and lamp industries, in sophisticated high vacuum systems and in vacuum thermal insulation, in technologies spanning from large vacuum power tubes to miniaturized silicon-based microelectronic and micromechanical (MEMS) devices.

Starting in 2004, by leveraging its core competencies in special metallurgy and in the materials sciences, the SAES Group has expanded its business into the advanced material markets, in particular the market of shape memory alloys, a family of materials characterized by super elasticity and by the property of assuming predefined forms when heated. These special alloys, which today are mainly applied in the biomedical sector, are also perfectly suited to the realization of actuator devices for the industrial sector (home automation, white goods industry, consumer electronics, automotive sector and luxury goods).

More recently, SAES has expanded its business by developing a technological platform which integrates getter materials in a polymeric matrix. These products, initially developed for OLED displays, are currently used in new application sectors, including implantable medical devices and solid-state diagnostics imaging. Among the new applications, advanced food packaging is a particularly strategic sector, where SAES offers new sustainable packaging products and intends to compete with completely recyclable and biodegradable solutions.

A total production capacity distributed in ten facilities, a global sales and service network, and over 1,000 employees allow the Group to combine multi-cultural skills and experience and to form a truly worldwide enterprise.

SAES Group is headquartered in Lainate, in the Milan area.

SAES Getters S.p.A. is listed on the Italian Stock Exchange Market, STAR segment, since 1986.

S.G.G Holding S.p.A. is a relative majority shareholder and does not exercise any management and coordination activity towards SAES Getters S.p.A. pursuant to article 2497 of the Italian Civil Code (as specified in the 2019 Report of corporate governance and ownership).

Group structure

The Group’s business structure has five Divisions: Metallurgy, Vacuum Technology, Medical, Specialty Chemicals and Advanced Packaging. The corporate costs, i.e. those expenses that cannot be directly attributed or allocated in a reasonable way to the business units, but which refer to the Group as a whole, and the costs related to the basic research projects or aimed to diversify into innovative businesses, are shown separately from the five Divisions.

The business structure by Division is illustrated in the following table.

Metallurgy Division	
Security & defence	Getters and metal dispensers for electronic vacuum devices
Electronic Devices	Getters for microelectronic, micromechanical systems (MEMS) and sensors
Healthcare Diagnostics	Getters for X-ray tubes used in image diagnostic systems
Thermal Insulated Devices	Products for thermal insulation

Lamps	Getters and metal dispensers used in discharge lamps and fluorescent lamps
Sintered Components for Electronic Devices & Lasers	Cathodes and materials for thermal dissipation in electronic tubes, lasers and solid-state devices
SMA Industrial	Shape Memory Alloy actuator devices for the industrial sector (home automation, white goods industry, consumer electronics, automotive sector and luxury goods)
Vacuum Technology Division	
Solutions for Vacuum Systems	Getter pumps for vacuum systems with applications in the industrial sector, in research and in particle accelerators
Medical Division	
Nitinol for Medical Devices	Nitinol raw material and components for the biomedical sector
Specialty Chemicals Division	
Functional Dispensable Products	Getter materials integrated into polymeric matrices for organic and hybrid electronic applications, photonics and implantable medical devices
Advanced Packaging Division	
Advanced Coatings	Advanced lacquers and plastic films for the sustainable packaging sector

Compared to the previous year, from January 1, 2020, the Group is organized in the following technological competency areas (or “Divisions”):

- Metallurgy Division (which coincides with the previous Industrial operating sector, excluding Solutions for Vacuum Systems, Functional Chemical Systems and advanced getters for the consumer electronics market, the latter previously classified within the Electronic Devices Business);
- Vacuum Technology Division (which coincides with the Solutions for Vacuum Systems Business, included in the Industrial operating segment);
- Medical Division (unchanged);
- Specialty Chemicals Division (i.e. advanced getters for the consumer electronics market, classified within the Electronic Devices Business in the previous year, in addition to the Functional Chemical Systems segment and Flexterra business, the latter previously unallocated);
- Advanced Packaging Division (unchanged).

The amounts for the first half of 2019 were reclassified according to the new operating structure so they are comparable with the 2020 figures.

Main events in the half-year period (January 1 – June 30, 2020)

The **interim results** confirm the solidity of the Group even in the situation of general instability caused by the COVID-19 emergency.

Revenues in the first half of 2020, amounting to 89.1 million euro, remained strongly stable with the first six months of the previous year (overall decrease of just -1%). After a first quarter that closed with a double-digit growth in revenue, in part aided by inventory movement that was also a consequence of the health emergency, the second quarter saw the gradual reabsorption of these changes in inventory, added to which was the slowing in certain sectors, particularly medical due to the postponement of elective surgeries, mainly in the USA.

The segments that recorded the strongest increases in the first half of the year were **security and defense** (higher sales of getters for infrared sensors and night-vision systems for defence applications) and **advanced getters for the consumer electronics market**. These growth figures offset the decline in other segments, more negatively impacted by the COVID-19 crisis (**medical devices in Nitinol** and **industrial SMAs** for automotive and consumer applications).

The **total revenues** of the Group for the first half of 2020, including the portion of revenue from the joint ventures¹, amounted to 93.5 million euro, essentially in line (-0.8%) with the 94.2 million euro of the first six months of 2019, mainly thanks to the steady consolidated sales revenue (+0.7%), also assisted by the positive exchange rates effect, and the increase in revenue from the joint venture SAES RIAL Vacuum S.r.l. (+50.2%).

The stability of the consolidated revenue meant that all the **operating indicators** also remained steady. Note in particular the **gross profit**² of 42.9% and **consolidated EBITDA**³ of 18.5% recorded in the first half of this year (42.7% and 20.3%, respectively, in the first half of 2019).

The **consolidated net profit** was instead only slightly positive, at 0.4 million euro (+9.1 million euro in the first half of 2019), penalized by the decrease in fair value of securities in the portfolio (-6.5 million euro) due to the effect of the COVID-19 crisis on the financial markets.

The main events that occurred in the first half of 2020 are set out below.

As part of the **incentive plan based on phantom shares** known as the “2018 Phantom Shares Plan”, approved by the Shareholders' Meeting held on October 1, 2018, the Board of Directors of SAES Getters S.p.A. on February 13, 2020, upon the proposal of the Remuneration and Appointment Committee, assigned 195,618 phantom shares, from those still assignable pursuant to article 5 of the aforementioned plan, to Paolo Vacca, appointed Manager with Key Responsibilities effective January 1, 2020. The assignment value was calculated at 21.14 euro.

Accepting the provisions and recommendations issued by the Lombardy Region for precautionary containment of the **COVID-19** epidemic, the Lainate offices of the Parent Company and the Roncello facility of SAES Coated Films S.p.A. were closed from the afternoon of February 24 to February 28, 2020, also in order to arrange the necessary risk containment measures and to draw up the COVID operations protocol.

Later, the two facilities returned to operations, whereas the other Group production plants in Italy and abroad had remained operative, complying with all regulatory provisions in force to guarantee workplace safety and, where possible, encouraging recourse to smart working.

Also note that, on March 26, 2020, the Group reached an agreement with the trade union representatives regarding the use, for nine weeks from March 30, 2020, of the social shock absorbers envisaged in the “Cura Italia” Decree, DPCM of March 17, 2020 (**CIGO furlough scheme**) for a number of employees at the Lainate facility, with salary integration 40% supported by the company.

Lastly, on May 14, 2020, an agreement was reached with the trade unions for the gradual return to work of employees at the Lainate operating unit (150 presences per day at Lainate in June and July, alternating shifts with smart working). All employees returned to work from the beginning of August and, again from that date, a **smart working pilot project** was launched on a voluntary basis for a period of 12 months, with maximum three days a week smart working for every employee participating in the project.

On March 6, 2020, SAES Getters S.p.A. signed a **new line of credit** with Unicredit S.p.A. for a maximum amount of 30 million euro as a revolving line, intended for general corporate, capex and acquisition uses. The duration of the credit line is set at thirty-six months. SAES may request its use in tranches of not less than 0.5 million euro and with a duration of one to three months. The contract provides for the payment of interest indexed at the one/three-month Euribor rate, plus a spread of 1.2%, and just one covenant (positive consolidated net financial position) subject to half-yearly review.

¹ Actuator Solutions (50%), SAES RIAL Vacuum S.r.l. (49%) and Flexterra (46.73%).

² Calculated as the ratio between the gross profit and the net consolidated revenues.

³ EBITDA is not deemed an accounting measure under International Financial Reporting Standards (IFRSs); however, it is believed that EBITDA is an important parameter for measuring the Group's performance and therefore it is presented as an alternative indicator. Since its calculation is not regulated by applicable accounting standards, the method applied by the Group may not be homogeneous with the ones adopted by other Groups. EBITDA is calculated as “Earnings before interest, taxes, depreciation and amortization”.

On March 12, 2020, SAES Group decided to **donate 0.5 million euro to research institutes working on the front lines against COVID-19, as well as to Civil Defense personnel**. SAES is thus offering its contribution to overcome the emergency that the whole country is facing. The donation was specifically disbursed to the specialized research institutes IRCCS Ca' Granda Ospedale Maggiore Policlinico Foundation and the IRCCS Policlinico San Matteo di Pavia Foundation, as well as to Civil Defense. In addition, in the second quarter of 2020, note the **donation of two ventilators** to treat respiratory insufficiency **and a video laryngoscope to the ICU of Avezzano Hospital**, high quality equipment with sophisticated pulmonary monitoring systems to improve the safety of patients and health workers. The total value of the equipment was around 0.1 million euro.

On March 12, 2020, SAES Getters S.p.A., as Single Shareholder, resolved a **capital payment** of 800 thousand euro **in favour of SAES Nitinol S.r.l.**, aimed at covering the losses recognized during 2019 and establishing a cash reserve of 21 thousand euro.

On April 30, 2020, SAES Getters S.p.A. signed a **new revolving line of credit** with Intesa Sanpaolo S.p.A. for a maximum amount of 30 million euro, intended as support for business operations or financial needs associated with capex and acquisitions. The duration of the credit line is set at thirty-six months. SAES can request its use in tranches, each with a minimum value of 1 million euro and thereafter in multiples of 0.5 million euro. The contract provides for the payment of interest indexed at the one/three-month Euribor rate, plus a spread of 1.10%, and just one covenant (positive consolidated net financial position) subject to half-yearly review.

In June, the **Colussi** food products group, through its proprietary brand **Misura**, launched a **marketing campaign** relating to the use of an innovative **fully compostable packaging** solution, created for Colussi through a partnership between Novamont, TicinoPlast, SAES Group, Sacchital and IMA. The new packaging, biodegradable and from 100% renewable sources, can be composted along with food waste and has a barrier against oxygen and damp, offered by the coating technology developed by SAES. The news emphasises the innovative strength of SAES Coated Films S.p.A.'s advanced solutions for compostable food packaging.

On June 23, 2020, an agreement was signed with **EUREKA! Venture SGR S.p.A.** which will see SAES invest in the **EUREKA! Fund I - Technology Transfer** venture capital fund (a closed alternative investment fund qualifying as a 'EuVECA' fund pursuant to Regulation (EU) 345/2013), established and managed by the SGR and with investors including Cassa Depositi e Prestiti (CDP) and the European Investment Fund (EIF). The investment in the Fund, finalized through the Parent Company SAES Getters S.p.A., will total 3 million euro with a ten-year duration (coinciding with the maturity of the Fund). The financial outlay for SAES will not be immediate, but rather in the form of drawdown transactions, based on investment opportunities that gradually arise and related calls for capital subscriptions from the SGR. The Fund managed by EUREKA! Venture SGR will be specialized and focus solely on deeptech investments in start-ups and spin-offs of research centres and universities, in applications and technologies attributable to the science of materials, sensors, advanced electronics, photonics, IoT - the Internet of Things and Lab-on-a-chip applications, attentive to the principles of sustainability and ESG (Environmental, Social and Governance) criteria. In fact, the fund regulation envisages clear investment policies inspired by ESG principles. Similarly, also for the asset management company, procedures and processes will focus on compliance with these investment policies.

Based on the specific agreement signed, SAES will become an investor and strategic partner of EUREKA! in the advanced materials sector. SAES will have access to the Fund's deal flow in sectors and business areas of interest to the Group, with priority co-investment rights. Lastly, based on the exit strategies from target companies, SAES can formulate a right of first offer purchase proposal to be submitted to the asset management company for assessment.

There were no drawdowns in the period between June 23 and June 30, 2020.

Sales and economic results of the first half of 2020

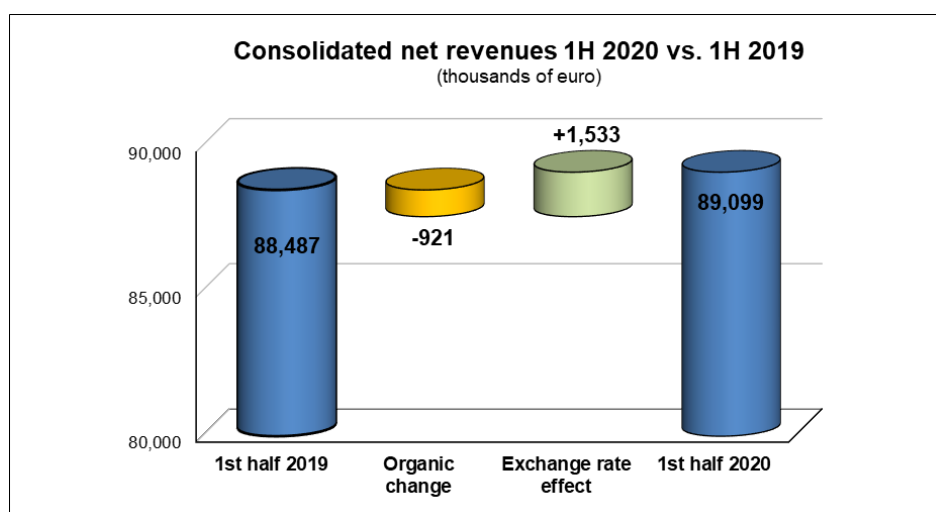
In the first half of 2020 the SAES Group achieved **consolidated net revenue** of 89,099 thousand euro, up by 0.7% compared to 88,487 thousand euro in the corresponding period of 2019. The increase was entirely due to the positive **exchange rate effect** (+1.7%), related to changes in the US dollar rate against the euro in the first few months of the year. Without the exchange rate effect, consolidated revenue was essentially at break-even point with a very slight negative **overall change** of -1%. The segments that recorded the strongest increases in the first half of the year were **security and defense** (higher sales of getters for infrared sensors and night-vision systems for defence applications) and **advanced getters for the consumer electronics market** (Functional Dispensable Products business). These growth figures offset the decline in other businesses, more negatively affected by the COVID-19 crisis (**medical devices in Nitinol** and **industrial SMAs** for automotive and consumer applications).

Total revenues, including the portion of revenue from the joint ventures⁴, amounted to 93,522 thousand euro, compared to 94,245 thousand euro in the first six months of 2019, essentially remaining steady (-0.8%) largely due to the stability of consolidated revenues and the increase in revenue of the joint venture SAES RIAL Vacuum S.r.l. (+50.2%). The revenue of the joint venture Actuator Solutions was down, also penalized by the COVID-19 epidemic as well as by the automotive market crisis that had already begun in 2019.

(thousands of euro)

	1 st half 2020	1 st half 2019	Total difference	Total difference %
Consolidated net sales	89,099	88,487	612	0.7%
50% Actuator Solutions' net sales	3,940	5,488	(1,548)	-28.2%
49% SAES RIAL Vacuum S.r.l.'s net sales	868	578	290	50.2%
46.73% Flexterra's net sales	23	6	17	283.3%
Intercompany eliminations	(418)	(280)	(138)	49.3%
Other adjustments	10	(34)	44	-129.4%
Total revenues of the Group	93,522	94,245	(723)	-0.8%

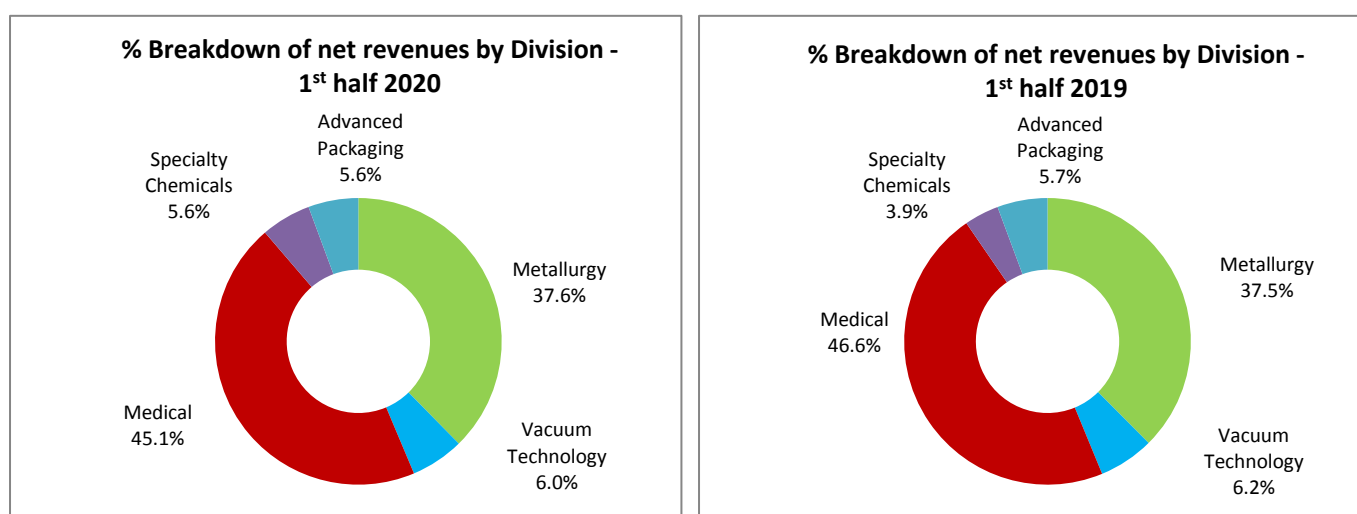
The following chart compares the consolidated revenue from the first half of 2020 with that of the corresponding period of 2019, highlighting the effect of exchange rates and the variations due to the changes in selling prices and sales volumes (overall change).



⁴ Actuator Solutions (50%), SAES RIAL Vacuum S.r.l. (49%) and Flexterra (46.73%).

The graph below shows the **percentage weight** of the **revenue for each Division** for the first half of 2020 and for the corresponding period of 2019.

The percentage effect of the divisions remains in line with the previous year. Note the slight increase in the percentage weight of the **Specialty Chemicals Division**, due to higher sales of advanced components for the consumer electronics market in the first three months of the current year; vice versa, the **Medical Division** recorded a slight decline, penalized by the slowdown in scheduling surgeries in the USA, especially in the second quarter, adopted to focus hospital resources on COVID-19 cases. The percentage weight of the **Metallurgy Division** remained unchanged, as the drop in Industrial SMAs was offset by higher revenue, particularly in the security and defense sector. Also in line with the previous year were the percentage weights of the **Vacuum Technology Division** and the **Advanced Packaging Division**, both characterized by revenue in absolute terms that essentially coincided with those of the first half of 2019.



The following table contains the breakdown of the consolidated revenues in both the first half of 2020 and the first half of 2019, for each business sector, with the relative percentage variation at current and comparable exchange rates.

(thousands of euro)

Businesses	1 st half 2020	1 st half 2019	Total difference	Total difference %	Exchange rate effect %	Organic change %
Security & Defense	9,524	6,365	3,159	49.6%	1.9%	47.7%
Electronic Devices	7,702	7,507	195	2.6%	1.0%	1.6%
Healthcare Diagnostics	2,752	2,450	302	12.3%	1.2%	11.1%
Lamps	1,946	2,274	(328)	-14.4%	1.2%	-15.6%
Thermal Insulated Devices	1,674	1,833	(159)	-8.7%	2.4%	-11.1%
Sintered Components for Electronic Devices & Lasers	3,733	4,542	(809)	-17.8%	2.0%	-19.8%
SMA Industrial	6,208	8,246	(2,038)	-24.7%	1.0%	-25.7%
Metallurgy Division	33,539	33,217	322	1.0%	1.4%	-0.4%
Solutions for Vacuum Systems	5,359	5,522	(163)	-3.0%	1.3%	-4.3%
Vacuum Technology Division	5,359	5,522	(163)	-3.0%	1.3%	-4.3%
Nitinol for Medical Devices	40,145	41,272	(1,127)	-2.7%	2.4%	-5.1%
Medical Division	40,145	41,272	(1,127)	-2.7%	2.4%	-5.1%
Functional Disposable Products	5,024	3,461	1,563	45.2%	0.5%	44.7%
Specialty Chemicals Division	5,024	3,461	1,563	45.2%	0.5%	44.7%
Advanced Coatings	5,032	5,015	17	0.3%	0.0%	0.3%
Advanced Packaging Division	5,032	5,015	17	0.3%	0.0%	0.3%
Total consolidated net revenues	89,099	88,487	612	0.7%	1.7%	-1.0%

The consolidated revenues of the **Metallurgy Division** in the first half of 2020 amounted to 33,539 thousand euro, up by 1% compared to 33,217 thousand euro in the corresponding half-year period of

2019. The performance of the euro against the major foreign currencies led to a positive exchange rate effect equal to +1.4%, net of which the sales were in line (-0.4%).

Growth was recorded as follows:

- in the Security & Defense Business (+47.7%), due to stronger sales of getter components for infrared sensors and night vision systems for defense applications, in addition to good sales performance linked to certain orders for avionic and satellite telecommunication devices;
- in the Electronic Devices Business (+1.6%), driven mainly by infrared applications in heat sensors for temperature and thermographic measurement, also aided by the recent COVID-19 crisis;
- in the Healthcare Diagnostics Business (+11.1%), due to stockpiling and the increase in demand in the image diagnostics sector from some major customers as a result of the COVID-19 crisis.

All other segments, however, recorded a decline. In particular:

- the SMA Industrial Business (-25.7%), due to the effect of COVID-19 on the consumer electronics and automotive markets;
- the Sintered Components for Electronic Devices & Lasers Business (down -19.8% overall), due to lower sales of heat dissipation devices used in semiconductor lasers, higher than average in the first half of 2019, due to stock adjustments;
- the Thermal Insulated Devices Business (-11.1%) and Lamps Business (-15.6%). In the former, the decline is mainly due to slowing demand in vacuum bottles and insulated tubes for oil market applications due to COVID-19; in the latter, the decline is due to the structural crisis in the fluorescent lamps and high-intensity discharge lamps market.

The consolidated revenues of the **Vacuum Technology Division** in the first half of 2020 amounted to 5,359 thousand euro, down by 3% compared to 5,522 thousand euro in the corresponding half-year period of 2019. The positive exchange rates effect was +1.3%, net of which the sales saw an overall decrease of 4.3%. The decline is due to lower sales to research centres and universities, caused by COVID-19, partly offset by higher sales of pumps in the analytics instruments and particle accelerator sectors which were less affected by the crisis.

The consolidated revenues of the **Medical Division** in the first half of 2020 amounted to 40,145 thousand euro, down by 2.7% compared to 41,272 thousand euro in the corresponding half-year period of 2019. The exchange rate effect was positive for +2.4%, net of which the overall change was -5.1%, particularly resulting from the strong decrease of a major US customer whose stock levels were already high prior to the pandemic. Note that from the second half of the period, the demand slowed for medical devices due to hospitals' suspension of elective surgeries in order to focus resources on COVID-19 cases.

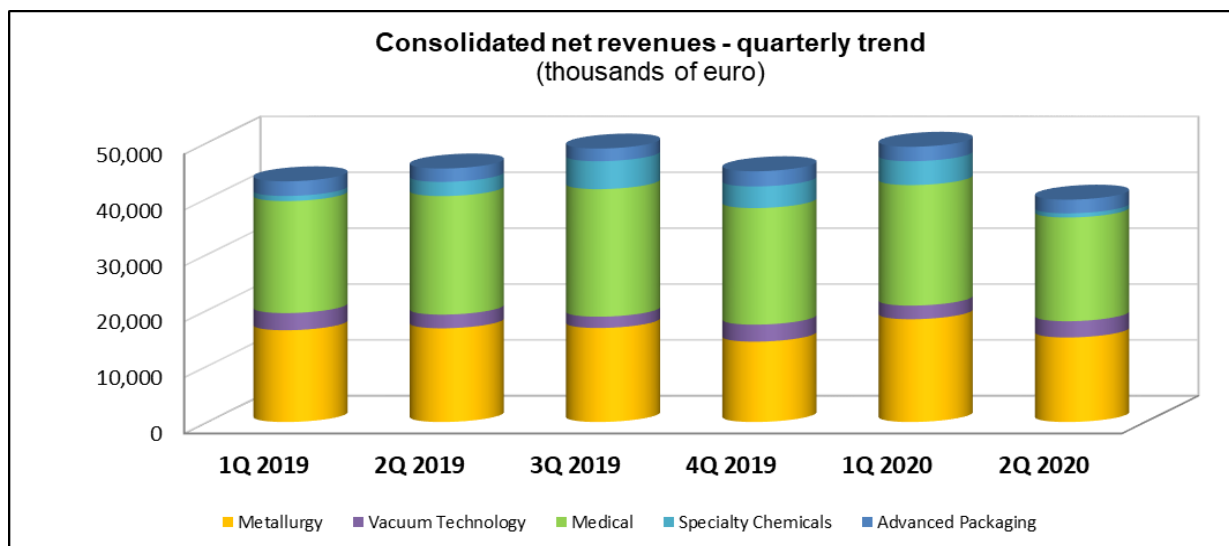
The consolidated revenues of the **Specialty Chemicals Division** in the first half of 2020 amounted to 5,024 thousand euro, up strongly (+45.2%) compared to 3,461 thousand euro in the corresponding half-year period of 2019. The exchange rates effect was positive for +0.5%, net of which the overall increase was +44.7%, driven by higher sales of advanced components for the consumer electronics market (in turn assisted by stronger market penetration of the SAES product, which more than offset the decline in the telecoms market caused by the pandemic) and, with distinctly lower values, by higher sales of dispensable dryers for passive matrix OLED applications to cover mass production in China and Taiwan.

The consolidated revenues of the **Advanced Packaging Division** in the first half of 2020 amounted to 5,032 thousand euro compared to 5,015 thousand euro in the corresponding period of 2019.

Sales are exclusively denominated in euro.

Revenues in the first half of the year was in line (+0.3%) with the corresponding period of the previous year, but the breakdown of the product portfolio is different and shows a prevalence of lacquered (rather than metallized) products for sustainable and compostable applications, confirming the repositioning strategy of the product mix with a higher added value.

The **quarterly performance** of the **net consolidated revenues**, with the details by Division is provided in the following chart and in the table below.



(thousands of euro)

Businesses	2 nd quarter 2020	1 st quarter 2020	4 th quarter 2019	3 rd quarter 2019	2 nd quarter 2019	1 st quarter 2019
Security & Defense	4,916	4,608	2,908	3,505	2,732	3,633
Electronic Devices	3,534	4,168	3,236	3,610	3,968	3,539
Healthcare Diagnostics	1,087	1,665	965	1,023	1,248	1,202
Lamps	893	1,053	804	995	1,204	1,070
Thermal Insulated Devices	712	962	847	697	888	945
Sintered Components for Electronic Devices & Lasers	1,660	2,073	2,091	1,819	2,149	2,393
SMA Industrial	2,333	3,875	3,537	5,186	4,591	3,655
Metallurgy Division	15,135	18,404	14,388	16,835	16,780	16,437
Solutions for Vacuum Systems	2,917	2,442	3,046	2,024	2,453	3,069
Vacuum Technology Division	2,917	2,442	3,046	2,024	2,453	3,069
Nitinol for Medical Devices	18,566	21,579	20,871	22,836	21,220	20,052
Medical Division	18,566	21,579	20,871	22,836	21,220	20,052
Functional Dispensable Products	749	4,275	3,873	5,000	2,543	918
Specialty Chemicals Division	749	4,275	3,873	5,000	2,543	918
Advanced Coatings	2,447	2,585	2,723	2,269	2,392	2,623
Advanced Packaging Division	2,447	2,585	2,723	2,269	2,392	2,623
Consolidated net revenues	39,814	49,285	44,901	48,964	45,388	43,099

Note the generally negative impact of COVID-19, which almost exclusively affected the second quarter of this year, after a first quarter assisted by stockpiling in various segments pending arrival of the imminent pandemic-related crisis.

The following table shows details of the **consolidated revenues in the first two quarters of the current year** for the various business sectors, along with information on the overall variation and the exchange rates effect.

(thousands of euro)

Businesses	2 nd quarter 2020	1 st quarter 2020	Total difference	Total difference %	Exchange rate effect %	Organic change %
Security & Defense	4,916	4,608	308	6.7%	-0.1%	6.8%
Electronic Devices	3,534	4,168	(634)	-15.2%	-0.1%	-15.1%
Healthcare Diagnostics	1,087	1,665	(578)	-34.7%	0.1%	-34.8%
Lamps	893	1,053	(160)	-15.2%	0.1%	-15.3%
Thermal Insulated Devices	712	962	(250)	-26.0%	0.3%	-26.3%
Sintered Components for Electronic Devices & Lasers	1,660	2,073	(413)	-19.9%	0.1%	-20.0%
SMA Industrial	2,333	3,875	(1,542)	-39.8%	0.0%	-39.8%
Metallurgy Division	15,135	18,404	(3,269)	-17.8%	0.0%	-17.8%
Solutions for Vacuum Systems	2,917	2,442	475	19.5%	0.2%	19.3%
Vacuum Technology Division	2,917	2,442	475	19.5%	0.2%	19.3%
Nitinol for Medical Devices	18,566	21,579	(3,013)	-14.0%	0.1%	-14.1%
Medical Division	18,566	21,579	(3,013)	-14.0%	0.1%	-14.1%
Functional Dispensable Products	749	4,275	(3,526)	-82.5%	0.0%	-82.5%
Specialty Chemicals Division	749	4,275	(3,526)	-82.5%	0.0%	-82.5%
Advanced Coatings	2,447	2,585	(138)	-5.3%	0.0%	-5.3%
Advanced Packaging Division	2,447	2,585	(138)	-5.3%	0.0%	-5.3%
Consolidated net revenues	39,814	49,285	(9,471)	-19.2%	0.1%	-19.3%

After a first quarter that closed with revenues up on the previous year, aided by inventory movement that was also a consequence of the COVID-19 emergency, the second quarter saw the gradual reabsorption of these changes in inventory, added to which was the slowing in certain sectors, particularly medical, due to the postponement of elective surgeries, mainly in the USA.

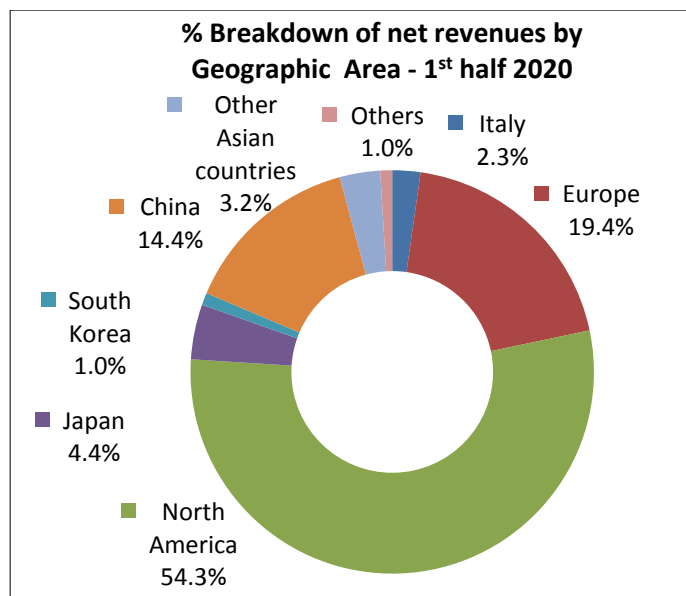
The comparison of revenues for the first two quarters of this year sees an overall negative change of -19.3%, against an immaterial exchange rate effect (+0.1%). The decline was widespread in almost all business areas, except the security and defense business, which saw further consolidation in the second quarter, and in the vacuum systems business which benefited from higher revenues in the sector of accelerators for research. The overall decline is concentrated in the following sectors:

- SMA industrial (-39.8%), which in the first quarter saw stockpiling due to COVID-19 precautions in the consumer electronics sector and a second quarter strongly penalized by the pandemic;
- Electronic Devices (-15.1%) and Healthcare Diagnostics (-34.8%), where growth in the first quarter - also aided by the COVID-19 crisis - fell back in the second quarter;
- Nitinol for Medical Devices (-14.1%) for the previously mentioned postponement of elective surgeries due to COVID-19;
- Functional Dispensable Products (-82.5%), which after a first quarter characterized by early orders to overcome the COVID-19 crisis, in the second saw a strong overall decline, also due to the temporary stoppage of production for scheduled extraordinary maintenance work.

The breakdown of the **consolidated revenues by geographic location of customers** is provided below.

(thousands of euro)

Geographic area	1 st half 2020	%	1 st half 2019	%	Total difference	Total difference %
Italy	2,008	2.3%	1,683	1.9%	325	19.3%
Europe	17,324	19.4%	17,448	19.7%	(124)	-0.7%
North America	48,382	54.3%	51,859	58.6%	(3,477)	-6.7%
Japan	3,923	4.4%	2,645	3.0%	1,278	48.3%
South Korea	876	1.0%	601	0.7%	275	45.8%
China	12,851	14.4%	11,285	12.8%	1,566	13.9%
Other Asian countries	2,887	3.2%	2,082	2.4%	805	38.7%
Others	848	1.0%	884	1.0%	(36)	-4.1%
Total net sales	89,099	100.0%	88,487	100.0%	612	0.7%



With regard to the **geographic distribution of consolidated revenues**, the first half of 2020 showed a decline in sales in **North America**, penalized by the COVID-19 crisis in the Nitinol sector for medical applications. Vice versa, revenues increased in **China, Japan** and other **Asian countries**, driven by security and defense business, the medical diagnostics segment and the sector of advanced getters for consumer electronics applications, which offset the declining sales of SMA wires for industrial applications.

The percentage weight of the **European markets** remained essentially stable.

Consolidated gross profit⁵ amounted to 38,223 thousand euro in the first half of 2020, compared to 37,820 thousand euro in the first half of 2019. The slight growth (+403 thousand euro in absolute terms and +1.1% in percentage terms) was mainly due to the exchange rates effect (+706 thousand euro, +1.9%), net of which the gross result would be essentially in line with the corresponding period of 2019 (-303 thousand euro).

The **gross profit margin**⁶ was also aligned, with a slight increase (from 42.7% to 42.9%), despite the different contribution from the various Divisions. Please refer to an analysis on the operating sector for further details.

The following table shows the consolidated gross profit in the first half of 2020 by Division, compared with the corresponding period of the previous year.

⁵Calculated as the difference between the net revenues and industrial costs directly and indirectly attributable to the products sold.

⁶ Calculated as the ratio between the gross profit and the net consolidated revenues.

(thousands of euro)

Business	1st half 2020	1st half 2019	Total difference	Difference %
Metallurgy	17,085	17,206	(121)	-0.7%
<i>% on the Division net sales</i>	<i>50.9%</i>	<i>51.8%</i>		
Vacuum Technology	3,285	2,853	432	15.1%
<i>% on the Division net sales</i>	<i>61.3%</i>	<i>51.7%</i>		
Medical	15,851	16,542	(691)	-4.2%
<i>% on the Division net sales</i>	<i>39.5%</i>	<i>40.1%</i>		
Specialty Chemicals	1,396	759	637	83.9%
<i>% on the Division net sales</i>	<i>27.8%</i>	<i>21.9%</i>		
Advanced Packaging	609	460	149	32.4%
<i>% on the Division net sales</i>	<i>12.1%</i>	<i>9.2%</i>		
Non Allocato	(3)	0	(3)	n.a.
<i>% on the Division net sales</i>	<i>n.a.</i>	<i>n.a.</i>		
Gross profit	38,223	37,820	403	1.1%
<i>% on net sales</i>	<i>42.9%</i>	<i>42.7%</i>		

Gross profit in the **Metallurgy Division** amounted to 17,085 thousand euro compared to 17,206 thousand euro in the first half of 2019. The gross profit margin declined slightly, from 51.8% to 50.9%. This difference is mainly due to the electronic device business, characterized by a different product mix, and the industrial SMA business, where COVID-19 penalized sales in the consumer electronics and automotive sectors and affected by the resulting narrower economies of scale.

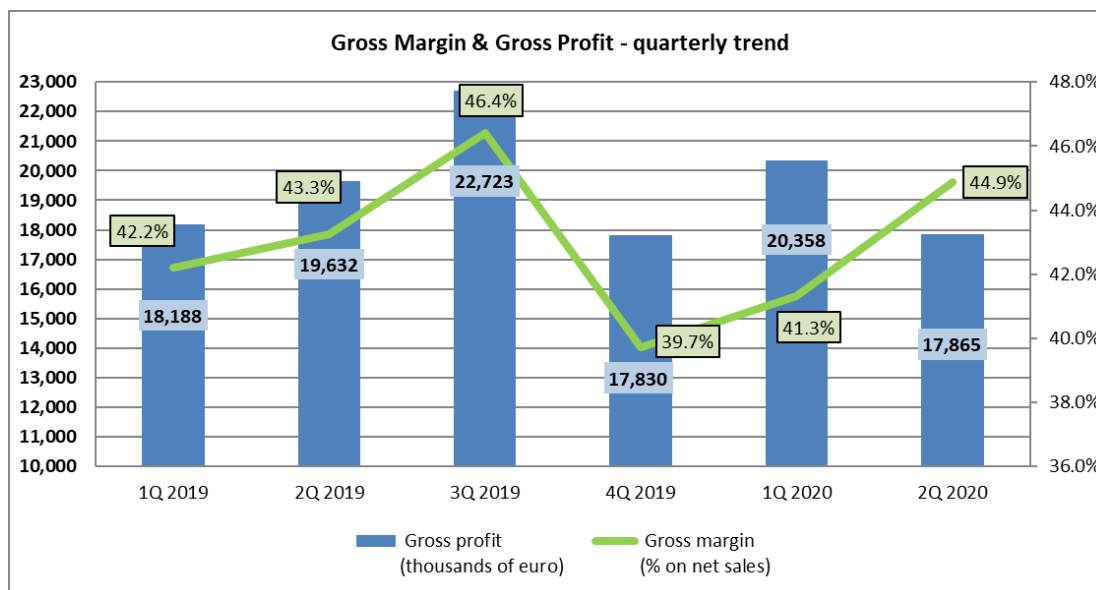
Gross profit in the **Vacuum Technology Division** amounted to 3,285 thousand euro in the first half of 2020, up strongly (+15.1%) on the 2,853 thousand euro of the corresponding period of 2019. In particular, this growth is attributable to the different margins (from 51.7% to 61.3%), in turn due to the different product mix, with an increase in sales in the particle accelerators sector, characterized by higher margins.

In the **Medical Division**, the gross profit was 15,851 thousand euro, down on the 16,542 thousand euro of the first half of 2019, mainly due to the decline in sales, with an essentially steady profit margin (from 40.1% to 39.5%), despite production costs for the project still in progress to construct a new tubes department in Bethel and the related increase in indirect production costs.

The **Specialty Chemicals Division** closed the first half of 2020 with gross profit of 1,396 thousand euro, almost double (+83.9%) compared to 759 thousand euro, due to stronger sales of advanced getters for the mobile phones market and resulting saturation of the related production line, and to the different mix in the sales of dispensable organic getters.

The **Advanced Packaging Division** closed the current half year with a gross profit of 609 thousand euro (12.1% of revenues), compared to 460 thousand euro in the corresponding period of 2019 (9.2% of revenues): the increase, both in absolute terms and as a percentage of revenues, was mainly due to the consolidation of lacquered product sales, with a higher added value than metallized.

The following chart shows the quarterly trend of both the consolidated gross profit and gross margin.



Comparing the two quarters of the current year, note that despite the decline in gross profit penalized by the COVID-19 crisis, the increase in the profit margin in the second quarter compared to the first, driven by the Medical Division and the improved margins of the Specialty Chemicals Division (both divisions benefiting from temporary stock increases at Memry Corporation and the Parent Company's Avezzano facility, respectively).

Consolidated operating profit amounted to 11,143 thousand euro in the half year period (12.5% of consolidated revenues), compared to 13,412 thousand euro in the corresponding period of the previous year (15.2% of consolidated revenues): excluding the positive effect of the exchange rates (+527 thousand euro, +3.9%), the decrease (-2,796 thousand euro, -20.8%) is entirely attributable to non-recurring items recognized under "Other net income (expenses)", respectively as revenues in the first half of 2019 (gain due from a related party for 2,267 thousand euro for the sale of the joint venture Flexterra, Inc. of OLET patents owned by E.T.C. S.r.l. in liquidation) and as a cost in the current half year (donations to research centres and hospitals in relation to the COVID-19 crisis for 689 thousand euro).

The following table shows the consolidated operating profit for the first half of 2020 by Division, compared with the corresponding period of the previous year.

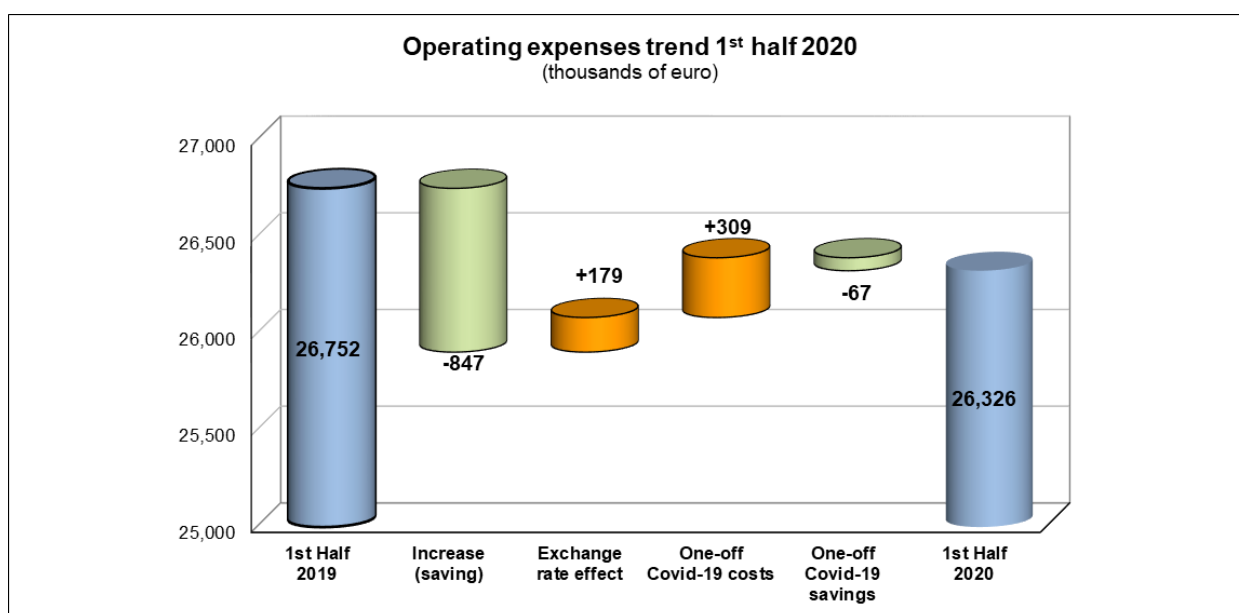
(thousands of euro)

Business	1 st half 2020	1 st half 2019	Total difference	Difference %
Metallurgy	11,221	11,672	(451)	-3.9%
Vacuum Technology	1,417	958	459	47.9%
Medical	11,558	11,986	(428)	-3.6%
Specialty Chemicals	555	2,359	(1,804)	-76.5%
Advanced Packaging	(1,125)	(1,279)	154	-12.0%
Not Allocated Costs	(12,483)	(12,284)	(199)	1.6%
Operating income (loss)	11,143	13,412	(2,269)	-16.9%
<i>% on net sales</i>	<i>12.5%</i>	<i>15.2%</i>		

Consolidated operating expenses were equal to 26,326 thousand euro (29.5% of revenues), compared to 26,752 thousand euro (30.2% of revenues) in the corresponding half year period of 2019. Excluding the effect of exchange rates (+179 thousand euro), operating expenses decreased by -605 thousand euro. The decrease is main concentrated in the **cost of sales** (-10.2% due to lower travel expenses and reduced marketing costs as a consequence of the COVID-19 pandemic, as well as the reduced commissions to

third parties due to lower SMA trained wire sales). Also down slightly (-5%) were the **research and development costs**, due to reduced consulting and lower patent management costs. Vice versa, **general and administrative expenses** increased slightly (by +2.1% overall) due to extraordinary expenses of around 0.3 million euro incurred to manage to COVID-19 emergency (in particular, costs for sanitization and adaptation of access points and work spaces to ensure employee safety, as well as healthcare and prevention expenses and consulting and training costs). Excluding the latter, the general and administrative expenses would be in line with the corresponding period of 2019 (the higher consulting costs, for special projects and for the IT system development, were offset by lower severance costs⁷, as well as by the lower travel expenses and savings related to the reduced physical presence of staff as a result of the recourse to smart working).

The chart below shows the trend for consolidated operating expenses in the first half of 2020, highlighting the effect attributable to exchange rates and extraordinary savings/costs associated with the COVID-19 emergency.



The total **cost of labour** was 39,681 thousand euro, compared to 38,932 thousand euro in the same period of last year. The increase (+749 thousand euro) is primarily attributable to the effect of exchange rates (+543 thousand euro) and the increase in the average number of employees at the US subsidiaries, the latter partly offset by reduced recourse to temporary work. Lastly, it should be remembered that the first half of 2019 was penalized by severance costs amounting to 0.3 million euro.

The profit for the half year takes account of the **amortization/depreciation of intangible assets and property, plant and equipment** and of **rights of use on leased assets** of 5,196 thousand euro, compared to 4,564 thousand euro in the corresponding period of the previous year: the increase is mainly related to amortization of the additional production floorspace leased by Memry Corporation with effect from the second half of 2019.

Consolidated EBITDA amounted to 16,473 thousand euro (18.5% of consolidated revenues) in the first half of 2020, compared to 17,952 thousand euro in the corresponding period of 2019 (20.3% of consolidated revenues): the decrease is entirely attributable to the above-mentioned non-recurring revenues items in 2019 (gain due from a related party for 2,267 thousand euro for the sale to the joint venture Flexterra, Inc. of OLET patents owned by E.T.C. S.r.l. in liquidation) and the cost in the current period (donations to research centres and hospitals in relation to the COVID-19 crisis for 689 thousand

⁷ 0.3 million euro in the first half of 2019, related to completion of the downsizing process of the Parent Company staff that began at the end of 2018 following the sale of the purification business, versus zero costs in the first half of 2020.

euro). Net of these non-recurring items, EBITDA would be 17,162 thousand, up 9.4%, mainly driven by the Vacuum Technology and Specialty Chemicals Divisions.

The following table shows the reconciliation between EBITDA and operating profit in the first half of 2020, compared with the corresponding period of the previous year.

(thousands of euro)

	1 st half 2020	1 st half 2019	Total difference	Total difference %
Operating income	11,143	13,412	(2,269)	-16.9%
Property, plant and equipment depreciation & intangible assets amortization	(4,161)	(3,902)	(259)	6.6%
Right of use amortization	(1,035)	(662)	(373)	56.3%
Write-down of assets	(115)	(1)	(114)	n.s.
Bad debt provision (accrual) release	(19)	25	(44)	-176.0%
EBITDA	16,473	17,952	(1,479)	-8.2%
<i>% on net sales</i>	<i>18.5%</i>	<i>20.3%</i>		

The balance of **other net income (expenses)** was negative for 754 thousand euro, compared to a positive balance of 2,344 thousand euro in the first half of 2019. The decrease (-3,098 thousand euro) is related to the costs of 689 thousand euro for COVID-19 donations and to extraordinary income recognized in the first half of 2019 (income from a related party, equal to 2,267 thousand euro, for the sale to the joint venture Flexterra, Inc. of OLET patents owned by E.T.C. S.r.l. in liquidation, as well as other extraordinary revenues for 248 thousand euro for insurance reimbursements and a favourable settlement of legal disputes).

The net balance of **financial income and expense** was negative for -6,460 thousand euro, compared to a positive balance of +2,858 thousand euro in the corresponding period of 2019. The decrease (-9,318 thousand euro) is mainly attributable to the reduction in fair value of the securities portfolio caused by the COVID-19 financial crisis (in the first half of 2019 the securities value had increased by 2,316 thousand euro, whilst in this half year the fair value fell by 6,476 thousand euro).

Also note the higher interest on short and long-term loans⁸ and the higher bank charges (in total +704 thousand euro), only partly offset by the increased income from coupons (+322 thousand euro).

The loss deriving from **measurement using the equity method** of the jointly controlled companies amounted to a total of -884 thousand euro, almost exclusively attributable to the joint venture Flexterra, and compares with a cost of -1,043 thousand euro in the corresponding period of the previous financial period, again mainly attributable to Flexterra. For further details on the breakdown of these losses please refer to the paragraph "Performance of the joint ventures in the first half of 2020" and to Notes no. 8 and no. 17. Note that, despite the joint venture Actuator Solutions closing the first half of 2020 with a slight profit, the SAES share of this net profit was not recorded by the Group as the consolidated equity of the joint venture is still negative, against a SAES equity interest that has already been fully written off.

The sum of the **exchange rate differences** recorded a balance essentially equal to zero (-29 thousand euro) in the first six months of 2020, in line with the first half of 2019 (-31 thousand euro). Both these immaterial balances are mainly attributable to the effect of USD fluctuations against the euro on trade-related transactions, including intercompany.

The **consolidated income before taxes** amounted to 3,770 thousand euro, compared to 15,196 thousand euro for the first half of 2019. The decline is attributable to the previously mentioned non-recurring items that caused the decrease in operating profit and the decrease in value of the securities portfolio.

⁸ Higher interest expense associated with the loan signed in April 2019 to fund the purchase of treasury shares.

In the first half of the year, **income taxes** amounted to 3,332 thousand euro, compared to 6,232 thousand euro in the corresponding period of 2019, and mainly comprise taxes of the US companies. The decrease compared to the previous year is largely attributable to the reduction in US taxes against lower taxable amounts and the decrease in taxes of the subsidiary SAES Investments S.A., which closed the first half with a fiscal loss due to losses on securities resulting from the COVID-19 crisis.

The Group's **tax rate** was 88.4%, compared to 41% in the first half of 2019: this high tax rate is due to the fact that the Parent Company, SAES Coated Films S.p.A. and SAES Investments S.A. ended the first half of the year with a negative taxable income, not recorded as deferred tax assets.

The **net profit from operating activities** was equal to 438 thousand euro (0.5% of consolidated revenues), compared to 8,964 thousand euro (10.1% of consolidated revenues) in the first half of 2019.

The result for discontinued operations in the first half of 2020 was zero. In the first half of 2019, the **profit from discontinued operations** amounted to 176 thousand euro, mainly comprising the positive adjustment to the sale price for the gas purification business due to the settlement of the effective value of the tax credit of the companies that were sold - SAES Getters USA, Inc. and SAES Pure Gas, Inc. - resulting from the tax return for the period January 1 – June 24, 2018, filed in April 2019.

The **consolidated net profit** for the first half of 2020 amounted to 438 thousand euro (0.5% of consolidated revenues) compared to a net profit of 9,140 thousand euro for the first half of 2019 (10.3% of consolidated revenues). In addition to the above-mentioned extraordinary items⁹, the decrease is mainly due to the decrease in fair value of the securities in the portfolio.

Note that the negative effect on the value of securities (mainly due to the net loss of the first quarter of 2020) was partly reabsorbed in the second quarter and this allowed the half year to close with a slight profit.

Financial position – Investments – Other information

A breakdown of the items making up the consolidated net financial position is provided below.

⁹ Costs for COVID-19 donations of 689 thousand euro in the first half of 2020 and the capital gain from a related party for 2,267 thousand euro in the corresponding period of 2019.

(thousands of euro)

	June 30, 2020	March 31, 2020	December 31, 2019
Cash on hands	11	10	11
Cash equivalents	31,212	45,941	48,623
Cash and cash equivalents	31,223	45,951	48,634
Related parties current financial assets	1	0	1
Securities - short term	70,125	67,767	70,779
Current financial assets	70,126	67,767	70,780
Bank overdraft	(27,066)	(27,282)	(27,195)
Current portion of long term debt	(5,237)	(5,629)	(5,365)
Derivative instruments evaluated at fair value	(40)	(47)	(50)
Other current financial liabilities	(1,679)	(1,889)	(900)
Current financial liabilities for leases	(1,771)	(1,882)	(1,876)
Current financial liabilities	(35,793)	(36,729)	(35,386)
Current net financial position	65,556	76,989	84,028
Related parties non current financial assets	49	49	49
Securities - long term	130,236	128,129	134,673
Non current financial assets	130,285	128,178	134,722
Long term debt, net of current portion	(98,125)	(99,933)	(100,724)
Non current financial liabilities for leases	(2,072)	(2,436)	(2,710)
Non current financial liabilities	(100,197)	(102,369)	(103,434)
Non current net financial position	30,088	25,809	31,288
Net financial position	95,644	102,798	115,316

The **consolidated net financial position** at June 30, 2020 was a positive amount of 95,644 thousand euro (cash equal to 31,223 thousand euro, securities portfolio of 200,361 thousand euro and net financial liabilities of -135,940 thousand euro) compared to a net financial position of +115,316 thousand euro as at December 31, 2019 (cash equal to 48,634 thousand euro, securities of 205,452 thousand euro and net financial liabilities of -138,770 thousand euro).

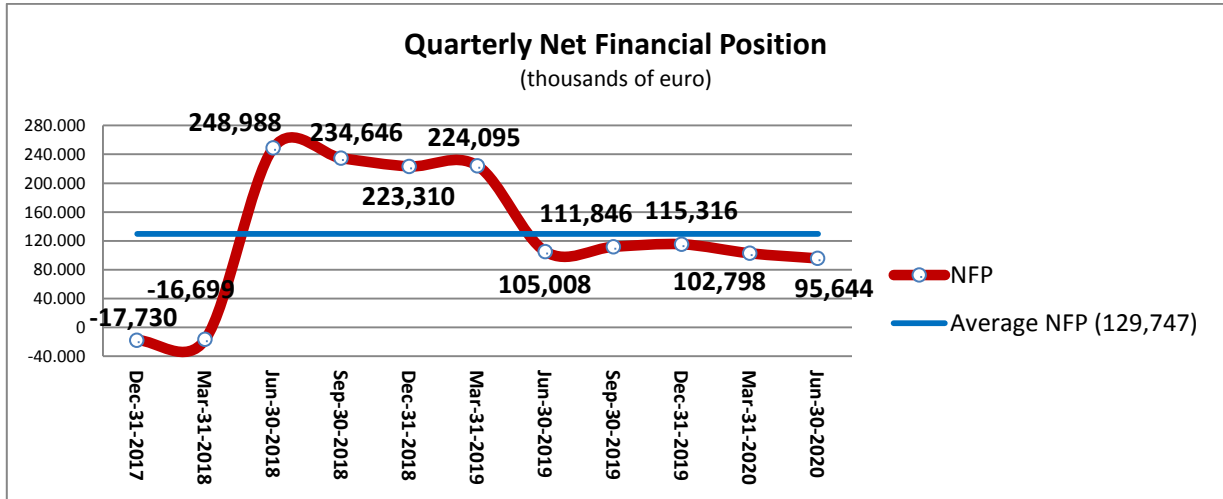
Compared to December 31, 2019, the decrease in the net financial position (-19,672 thousand euro) was attributable to the previously mentioned write-down of securities in the portfolio (-6,476 thousand euro), investments in intangible assets, property, plant and equipment (-6,933 thousand euro) and to the outlay for dividends paid at the end of April 2020 (-9,198 thousand euro).

Self-financing in the first half of the year was almost completely absorbed by the increase in net working capital. In particular, note the **increase in inventory** in the Nitinol segment, due to the effect of inventories associated with completion of the new tubes department at Memry Corporation's Bethel (CT) facility and to advance purchase orders of raw materials and semi-finished goods to avoid potential supply delays caused by COVID-19. Similar fluctuations were also seen in procurement for the security and defense sector, with higher stocks of palladium. Lastly, note the increase in inventory also in the Specialty Chemicals Division, ready for orders in the second half of the year. As regards net working capital, in addition to the increase in inventory, also note the **decrease in trade payables** of the Parent Company and Memry Corporation, which at December 31, 2019, included amounts due for investments in new production lines (lacquering systems and other machinery for the packaging department, as well as drawing equipment for SMA wires).

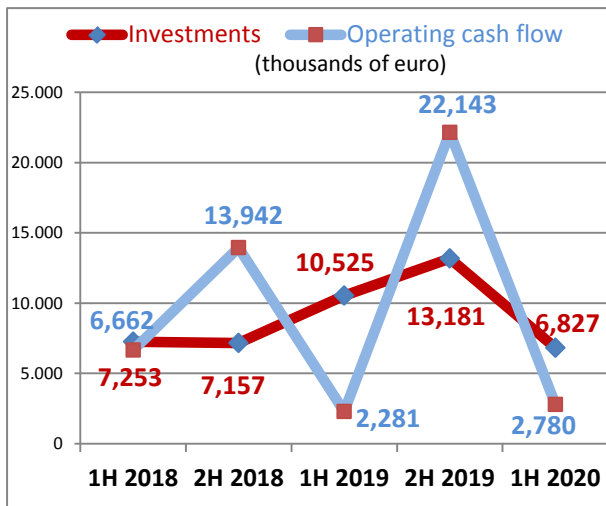
Lastly, note under investment activities the gains from securities (+1,292 thousand euro), net of management fees paid during the first half of the year (-122 thousand euro) and, among financing activities, financial debt for new leases signed in the period (including accrued interest) amounting to -371 thousand euro.

The exchange rate impact was immaterial (-77 thousand euro, mainly due to the effect of the lower value of the renminbi as at June 30, 2020, compared to the end of 2019, on cash and cash equivalents in this currency held by the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd.).

The chart below shows the **quarterly trend of the net financial position** during the last three years.



The worsening net financial position in the first quarter of 2020 (-12,518 thousand euro) is mainly due to the above-mentioned write-down of securities in the portfolio (-10,302 thousand euro). In the second quarter, despite the partial recovery in the fair value of securities (+3,826 thousand euro), the decrease in net cash (-7,154 thousand euro) is a consequence of the payment of dividends at the end of April 2020 (-9,198 thousand euro).

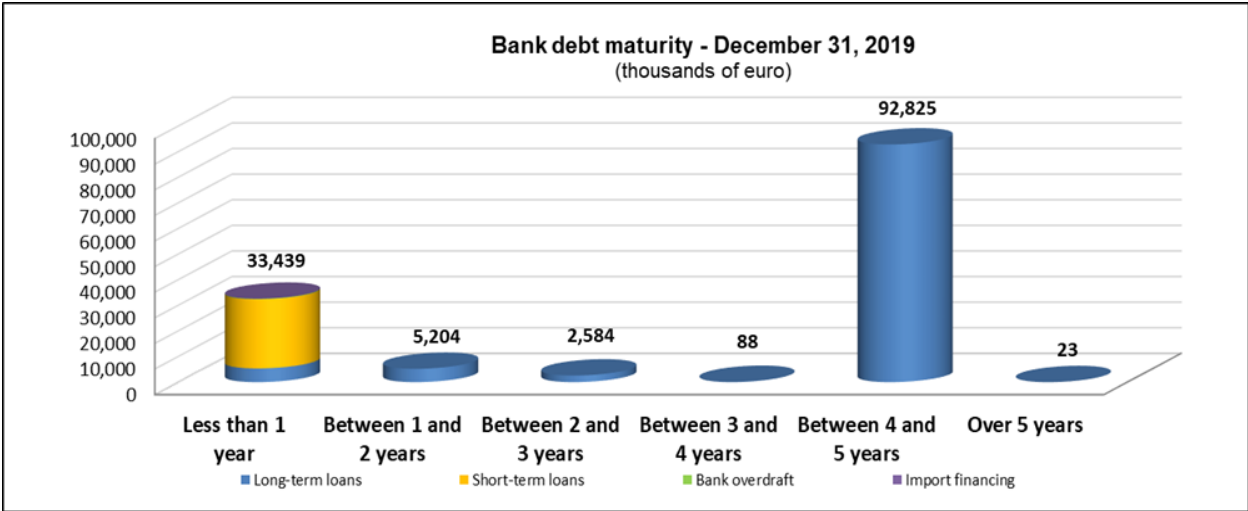
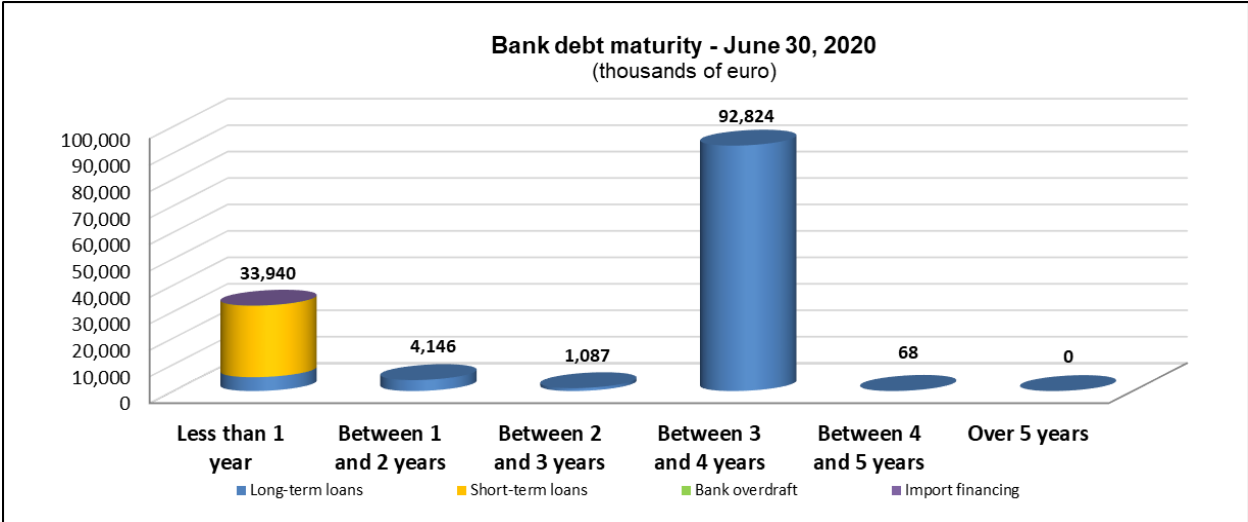


The **cash flow from operating activities** was a positive +2,780 thousand euro in the first half of 2020, in line with the corresponding period of the previous year (+2,281 thousand euro). As with self-financing, the highest increase in net working capital (particularly the previously mentioned increase in inventory, especially in the Nitinol and Specialty Chemicals segments) was offset by lower taxes paid due to the deferral of payments in the USA as part of the business support measures implemented to overcome the COVID-19 emergency.

In the first half of 2020 the cash outlay for **investments in property, plant and equipment** was equal to 6,827 thousand euro (10,525 thousand euro in the corresponding period of 2019); instead, the investments in intangible assets were not significant (106 thousand euro compared to 433 thousand euro as at June 30, 2019). Capex in the first half of 2020 includes investments related with the construction of a new department to manufacture pipes in Nitinol at the Bethel plant of Memry Corporation (a project started last year), as well as investments in expansion of the production capacity of a number of existing lines, again in the Nitinol business. Lastly, note that the Parent Company capex in the Avezzano plant to adapt the line for the production of advanced getters for the consumer electronics market, as well as for the purchase of new machines at the Lainate plant especially dedicated to the electronic devices business (a new sputtering machine), in the industrial SMA sector (a new SMA extruder) and in the vacuum systems sector (NEG coatings department). The higher value for investments in the first half of 2019 was mainly due to the purchase of the property, located in Bethel, where the Memry Corporation has its manufacturing headquarters (4,938 thousand euro, net of the deposit of 258 thousand euro paid at the end of 2018). Please refer to Notes no. 14 and no. 15 for further details on the capex.

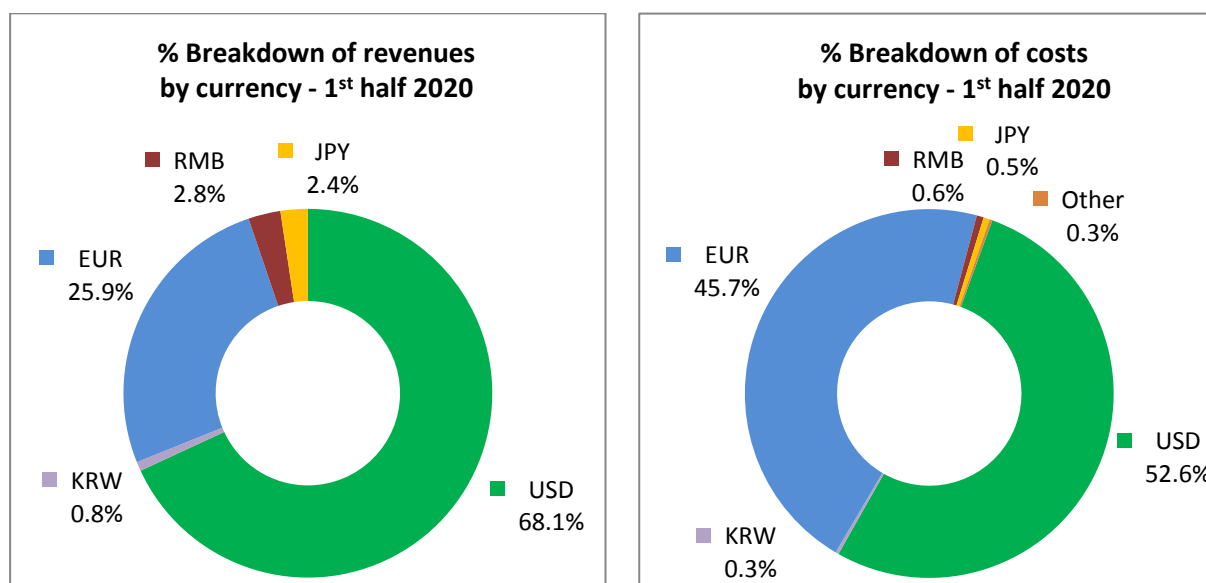
There were no **sales of fixed assets** in the first half of 2020. In the corresponding period of 2019, however, note the payment collected for the **sale to the joint venture Flexterra, Inc.** of the **OLET intellectual property** developed by E.T.C. S.r.l. in liquidation (2,291 thousand euro) and other collections on asset disposals for 5 thousand euro.

The following chart shows the **maturity profile** at June 30, 2020 of the **consolidated bank debt** compared with December 31, 2019.



The debt maturing in 3 to 4 years (4 to 5 years as at December 31, 2019) refers mainly to the long-term loan signed in April 2019 with Mediobanca - Banca di Credito Finanziario S.p.A. to cover the outlay for the purchase of treasury shares (voluntary partial public tender offer finalized at the end of May 2019). This five-year loan is scheduled to be repaid on a lump-sum basis on the due date.

The breakdown of **sales revenues and costs** (cost of sales and operating expenses) **by currency** is provided below.



Performance of the Parent Company and its subsidiaries in the first half of 2020

SAES GETTERS S.p.A. – Lainate, MI & Avezzano, AQ (Italy)

In the first half of 2020, the Parent Company reported revenues of 31,500 thousand euro, up by 3,176 thousand euro (+11.2%) compared to the corresponding period of the previous year (28,325 thousand euro), driven by Security & Defense Business and by the higher sales of advanced getters for the consumer electronics market (Functional Dispensable Products Business) and only partly offset by lower SMA Industrial sales which were more strongly affected by the COVID-19 crisis.

The Parent Company closed the first half of the current year with net profit of 4,522 thousand euro, compared to 12,497 thousand euro in the corresponding period of the previous year. Despite the increase in sales and lower operating expenses (general reduction on the different cost types following the COVID-19 restrictions to protect public health, and lower commissions on sales of trained wire SMAs as a result of the above-mentioned decline in industrial SMA business, as well as zero severance¹⁰, only partly offset by higher consulting costs for corporate projects), net profit declined due to lower dividends received from affiliates and higher financial expenses (particularly expenses associated with the fair value measurement of the securities portfolio and higher bank charges and interest expense on long-term loans). Lastly, during the current half year, note the extraordinary expenses of 689 thousand euro in donations to front-line research organizations and hospitals battling against COVID.

SAES GETTERS/U.S.A., Inc., Colorado Springs, CO (USA)

SAES Getters/U.S.A., Inc. was established in mid-May 2018 as part of the legal and corporate reorganization project aimed at selling the purification business, which was completed at the end of June 2018. On June 15, 2018, SAES Getters/USA, Inc. acquired all the assets (including the 100% stake in **Spectra-Mat, Inc.**) and the liabilities of **SAES Getters USA, Inc.**, not including the

¹⁰ 0.3 million euro in severance costs in the first half of 2019, related to completion of the downsizing process of the Parent Company staff that began at the end of 2018 following the sale of the purification business.

investment in **SAES Pure Gas, Inc.** Following that transfer, SAES Getters USA, Inc. and its subsidiary SAES Pure Gas, Inc. were sold to Entegris, Inc. on June 25, 2018.

The company reported consolidated revenues equal to 14,710 thousand USD (13,348 thousand euro) in the first half of 2020, compared to 16,036 thousand USD (14,193 thousand euro) in the corresponding period of the previous year, and consolidated net profit of 2,640 thousand USD (2,396 thousand euro) compared to consolidated net profit of 3,208 thousand USD in the first half of 2019 (2,839 thousand euro).

Further notes are provided below.

The US parent company **SAES Getters/U.S.A., Inc.**, which operates primarily in the Metallurgy Division, particularly in security and defense, recorded revenues of 10,596 thousand USD (9,615 thousand euro) compared to 10,905 thousand USD (9,652 thousand euro) in the first half of the previous year: this increase in the defense business in the USA was fully offset by the structural decline in the lamps segment.

The company ended the half year with a net profit of 2,640 thousand USD (2,396 thousand euro) compared to a net profit of 3,208 thousand USD (2,839 thousand euro) in the corresponding period of the previous year: the decrease, despite revenues remaining stable, was due to the lower gain from the measurement at equity of the investment in Spectra-Mat, Inc. and the fact that in the first half of 2019 the US parent company had received an insurance refund of around 0.2 million USD.

The subsidiary **Spectra-Mat, Inc.**, Watsonville, CA (USA), operating in the Sintered Components for Electronic Devices & Lasers Business, achieved revenues of 4,114 thousand USD (3,733 thousand euro) in the first half of 2020, compared to the 5,131 thousand USD (4,542 thousand euro) in the corresponding period of the previous year, due to reduced sales of thermal dissipation devices in the semiconductor lasers sector (defense-related applications) which in the first half of 2019 benefited from stock adjustments.

The company ended the half year with a net profit of 545 thousand USD (495 thousand euro) compared to 929 thousand USD (822 thousand euro) at June 30, 2019, mainly due to the above-mentioned decrease in revenues and the related narrower economies of scale.

SAES GETTERS EXPORT Corp., Wilmington, DE (USA)

The company, which is owned directly by SAES Getters S.p.A., operates with the objective of managing the exports of all the US Group's companies.

In the first half of 2020, it achieved a net profit of 2,526 thousand USD (2,292 thousand euro), up by 16.8% when compared to the corresponding period of 2019 (2,162 thousand USD, equal to 1,914 thousand euro) due to the higher commissions received by all the US companies, particularly by the affiliate Memry Corporation, which recorded a drop in revenues in North America but a slight increase in sales in Asia, especially in Japan.

SAES GETTERS (NANJING) Co., Ltd., Nanjing (P.R. of China)

The company manages the commercial activities of the Group in the People's Republic of China. SAES Getters (Nanjing) Co., Ltd. closed the first half of 2020 with revenues equal to 21,283 thousand RMB (2,746 thousand euro), compared to 21,845 thousand RMB (2,849 thousand euro) at June 30, 2019. The decline in the Electronic Devices sector, penalized the heaviest by the COVID-19 pandemic, was only partly offset by the growth in almost all the other business segments.

The drop in sales was offset by higher gross profit due to the different sales mix, but the lower dividends received by SAES Getters International Luxembourg S.A. (in which SAES Getters (Nanjing) Co., Ltd. owns a 10% stake) caused the decrease in net profit (from 7,057 thousand RMB, or 920 thousand euro, to 2,830 thousand RMB, i.e. 365 thousand euro).

MEMRY GmbH in liquidation, Weil am Rhein (Germany)

The company, which manufactures and sells shape memory alloy components for medical and industrial applications in the European market, in October 2017, after transferring all the manufacturing and sales activities to other companies of the Group¹¹, started the liquidation process, which is expected to be finalized by the end of the current financial period.

Memry GmbH closed the first half of 2020 with a loss of -22 thousand euro (-37 thousand euro at June 30, 2019) due to certain residual costs - mainly consulting - in preparation for the liquidation.

SAES NITINOL S.r.l., Lainate, MI (Italy)

The company, 100% owned by SAES Getters S.p.A., has as its business purpose the design, production and sale of shape memory alloy instruments and actuators, getters and any other equipment for the creation of high vacuum, either directly or by means of interests and investments in other companies. In order to achieve its corporate purpose, on July 5, 2011, the company established the joint venture Actuator Solutions GmbH, together with the German group Alfmeier Präzision (for further details on the joint venture, please refer to the Notes no. 8 and no. 17 of the Interim condensed consolidated financial statements).

SAES Nitinol S.r.l. ended the first half of 2020 with a loss of -73 thousand euro, essentially in line with the -112 thousand euro loss at June 30, 2019, following the write-down in both years of the receivable corresponding to interest income accrued in the period on loans granted to Actuator Solutions GmbH (a write-off of -239 thousand euro in the first half of 2020 and -238 thousand euro as at June 30, 2019), fully written-off because it is considered to be non-recoverable (for further details on the loans granted to the joint venture, please refer to Note no. 21).

Lastly, note that on March 12, 2020, SAES Getters S.p.A. resolved a capital payment of 800 thousand euro in favour of SAES Nitinol S.r.l., aimed at covering the losses recognized during 2019 and establishing a cash reserve of 21 thousand euro.

E.T.C. S.r.l. in liquidation, Lainate, MI (Italy)

The company, a spin-off supported by the National Research Council (CNR), operated between 2010 and 2017 exclusively as a research centre to develop functional materials for applications in the Organic Electronics and in the Organic Photonics, as well as in the development of integrated organic photonic devices for niche applications. Following a review of the company's growth prospects and the suspension of the OLET (Organic Light Emitting Diodes) research project, on November 16, 2017, the Shareholders' Meeting of E.T.C. S.r.l. resolved to wind up the company in advance and place it in liquidation.

E.T.C. S.r.l. ended the first half of 2020 with a net profit of 12 thousand euro, compared to profit of 2,163 thousand euro in the corresponding period of the previous year. The decrease is due to the fact that as at June 30, 2019, the result mainly comprised the capital gain generated by the sale of the intellectual property developed in the OLET area to the joint venture Flexterra, Inc. (as no patents were included among balance sheet assets, the gain coincided with the sale price).

As reported in the paragraph "Subsequent events", note that on July 12, 2020 the cancellation of the liquidation status of E.T.C. S.r.l. became effective, as resolved by the Shareholders' Meeting of April 15, 2020. On that date, the company name was changed from E.T.C. S.r.l. into SAES Innovative Packaging S.r.l. and its corporate purpose modified to allow the company to directly or indirectly take on investments or shareholdings in the packaging sector and to scout for new technologies in that sector.

SAES COATED FILMS S.p.A. (formerly Metalvuoto S.p.A.) – Roncello, MB & Lainate¹², MI (Italy)

¹¹ Memry Corporation, SAES Smart Materials, Inc. and SAES Getters S.p.A. (Avezzano plant).

¹² On June 1, 2018, SAES Coated Films S.p.A. opened a unit at Lainate, at the premises of the Parent Company.

SAES Coated Films S.p.A. (formerly Metalvuoto S.p.A.), based in the province of Monza Brianza, is a well-established player in the field of advanced packaging, producing metallised and innovative plastic films for food preservation. SAES Coated Films S.p.A. intends to compete in the “smart” food packaging sector, entering the market with a complete and innovative range of high-performance plastics, that are characterized by transparency, recyclability or compostability, and therefore with a low environmental impact.

In the first half of 2020, SAES Coated Films S.p.A. achieved revenues of 5,032 thousand euro compared to 5,015 thousand euro in the corresponding period of 2019. Though with a different breakdown including a prevalence of lacquered products rather than metallized, the revenues were essentially in line, confirming the repositioning strategy for the higher added value product mix.

The current half year closed with a loss of -748 thousand euro, more limited than the -1,250 thousand euro as at June 30, 2019. The increase in the gross profit margin, aided by the stronger impact from sales of lacquered products, and lower costs for services provided by the Parent Company and charged back to SAES Coated Films S.p.A. allowed the half year to close with a loss that was almost halved (-40.2%).

SAES INVESTMENTS S.A., Luxembourg (Luxembourg)

SAES Investments S.A., with registered office in Luxembourg, fully controlled by SAES Getters S.p.A., was established on October 23, 2018, and its purpose is to manage Group cash from the sale of the purification business with the goal of maintaining the capital in view of potential future commitments.

The company closed the first half of 2020 with a loss of -3,725 thousand, compared to profit of +2,310 thousand euro in the corresponding period of 2019. The decrease is mainly due to the reduction in fair value of SAES Investments S.A. securities caused by the COVID-19 financial crisis.

SAES GETTERS INTERNATIONAL LUXEMBOURG S.A., Luxembourg (Luxembourg)

The main objectives of SAES Getters International Luxembourg S.A. are the management and the acquisition of investments, the optimal cash management, the grant of intra-group loans and the coordination of the Group services.

At June 30, 2020, the company recorded a net loss of -82 thousand euro, compared with the net loss of -27 thousand euro in the corresponding period of the previous year. The smaller loss at June 30, 2019 was the result of interest income on the interest-bearing intercompany loan granted to SAES Getters S.p.A., which was repaid by the Parent Company in April 2019 to provide SAES Getters International Luxembourg S.A. the funds necessary to distribute dividends.

Some notes on the performance of the subsidiaries of SAES Getters International Luxembourg S.A. are provided below.

SAES Getters Korea Corporation, Seoul (South Korea) is 62.52% owned by SAES Getters International Luxembourg S.A., while the remainder of share capital is held directly by the Parent Company SAES Getters S.p.A. The company sold its production activities during 2011 and operates as the Korean distributor of products made by other Group companies.

In the first half of 2020 the company recorded revenues equal to 957 million KRW (720 thousand euro), up (+55%) compared to 617 million KRW (477 thousand euro) in the corresponding period of 2019, due to the higher sales in the field of security and defense. The period ended with a loss of -177 million KRW (-133 thousand euro) in line with the loss of -192 million KRW (-148 thousand euro) at June 30, 2019. The increase in sales, in fact, was completely offset by the different sales mix, with a penalizing effect on gross margins.

SAES Smart Materials, Inc., based in New Hartford, NY (USA), active in the development, production and sale of Nitinol semi-finished products, recorded revenues equal to 12,372 thousand USD (11,227 thousand euro) in the half-year period, up 11.1% on the figure of 11,134 thousand USD (9,854 thousand euro) in the corresponding period of the previous year, mainly for the medical

market. Thanks to the increase in sales and their more favourable mix, despite higher export commissions paid to the affiliate SAES Getters Export, Corp. and increased development costs, the period ended with a net profit of 3,216 thousand USD (2,918 thousand euro), up by 3.5% compared to 3,106 thousand USD (2,749 thousand euro) in the first half of 2019.

Memry Corporation, Bethel, CT (USA), is a technological leader in the new generation medical devices with high engineering value sector, made of Nitinol shape memory alloy.

The company achieved sales equal to 38,233 thousand USD (34,694 thousand euro) in the first half of 2020, compared to 41,940 thousand USD (37,121 thousand euro) in the corresponding period of the previous year: the decline (-8.8%) was mainly concentrated on one major US customer due to its high stock levels from prior to the pandemic. Note also that from the second half of the period, the demand slowed for medical devices due to hospitals' suspension of elective surgeries in order to focus resources on COVID-19 cases.

As a result of declining sales and a reduced gross profit margin, also penalized by production costs for the project, still in progress, to construct a new tubes department in Bethel, the net profit was 4,691 thousand USD (4,257 thousand euro), compared to profit of 6,233 thousand USD (5,517 thousand euro) in the first half of 2019.

Performance of the joint ventures in the first half of 2020

ACTUATOR SOLUTIONS GmbH, Gunzenhausen (Germany)

Actuator Solutions GmbH is based in Gunzenhausen (Germany) and is 50% jointly owned by SAES and Alfmeier Präzision, a German group operating in the fields of electronics and advanced plastic materials. This joint venture, which in turn consolidates its wholly owned subsidiaries Actuator Solutions Taiwan Co., Ltd. and Actuator Solutions (Shenzhen) Co., Ltd., both already in liquidation at the end of 2019, is focused on the development, production and commercialization of actuators using shape memory alloys in place of the engine. For both the Asian subsidiaries, the liquidation procedure is expected to be completed by the end of 2020.

Actuator Solutions recorded net revenues of 7,880 thousand euro in the first half of 2020, down by 28.2% compared to 10,976 thousand euro in the first half of 2019. The slowdown in the automotive sector that began last year slowed further in the first half of 2020 due to the COVID-19 crisis, which had a negative impact on end market sales and caused uncertainty in the supply chain, especially in China.

Note, however, that the pandemic has also opened an opportunity for Actuator Solutions in the medical market. Against a development, assembly and sales contract for rapid COVID-19 diagnostic test devices, revenues were recorded for a total of around 1 million euro in the first half of 2020.

The net profit for the first half of the year was 717 thousand euro, compared to a loss of 750 thousand in the first half of 2019. Despite the decline in sales, profit margins improved strongly, mainly thanks to income on engineering contracts signed with third parties, characterized by higher margins, and the decrease in operating expenses after the two Asian subsidiaries were placed in liquidation. Lastly, note that the loss as at June 30, 2019 included the extraordinary charges of around 0.4 million euro for a computer fraud suffered in the first part of the year by the German parent company.

(thousands of euro)

Actuator Solutions	1 st Half 2020	1 st Half 2019
	100%	100%
Total net sales	7,880	10,976
Cost of sales	(5,725)	(8,944)
Gross profit	2,155	2,032
<i>% on net sales</i>	27.3%	18.5%
Total operating expenses	(1,290)	(2,094)
Other income (expenses), net	164	(342)
Operating income (loss)	1,029	(404)
<i>% on net sales</i>	13.1%	-3.7%
Interests and other financial income, net	(304)	(294)
Foreign exchange gains (losses), net	(23)	(50)
Income taxes	15	(2)
Net income (loss)	717	(750)

The SAES Group's share of the joint venture's result for the first half of 2020 was +358 thousand euro (-375 thousand euro in the first half of 2019), but was not recorded by the Group as the equity of the joint venture is still negative for around 2.6 million euro¹³, against a SAES equity interest in Actuator Solutions that has already been full written off. It should also be remembered that, as at December 31, 2019, a provision for risks of 600 thousand euro was allocated, equal to the pro-rata financial resources necessary for Actuator Solutions to continue its operations over the next twenty-four months, in light of the update to the five-year plan of February 18, 2020.

Lastly, note that in the first half of 2020 the financial receivable related to the interest accrued in the period on interest-bearing loans granted by SAES Nitinol S.r.l. to the joint venture in previous years, amounting to 239 thousand euro, was written down as it was considered unlikely to be recovered.

SAES RIAL VACUUM S.r.l., Parma, PR (Italy)

SAES RIAL Vacuum S.r.l., established at the end of 2015, is jointly controlled by SAES Getters S.p.A. (49%) and Rodofil S.r.l. (51%). The company is specialized in the design and manufacture of vacuum chambers for accelerators, synchrotrons and colliders and combines at the highest level the competences of SAES in the field of materials, vacuum applications and innovation, with the experience of Rodofil in the design, assembling and fine mechanical productions, with the aim of offering absolutely excellent quality solutions and of successfully competing in the international markets.

SAES RIAL Vacuum S.r.l. ended the first half of 2020 with revenues of 1,772 thousand euro, up by 50.3% compared to 1,179 thousand euro in the corresponding period of 2019. After a first quarter strongly penalized by delays in certain major research projects, also due to the COVID-19 pandemic, in recent months revenues increased, returning to the ongoing levels originally forecast. Despite the increase in revenues, the half year recorded a gross profit margin and operating profit in line with the previous year, closing with a slight net profit of +48 thousand euro compared to +29 thousand euro at June 30, 2019.

¹³ Consolidated pro rata at 50%.

(thousands of euro)

SAES RIAL Vacuum S.r.l.	1 st Half 2020	1 st Half 2019
	100%	100%
Total net sales	1,772	1,179
Cost of sales	(1,459)	(972)
Gross profit	313	207
<i>% on net sales</i>	<i>17.7%</i>	<i>17.6%</i>
Total operating expenses	(260)	(193)
Other income (expenses), net	23	38
Operating income (loss)	76	52
<i>% on net sales</i>	<i>4.3%</i>	<i>4.4%</i>
Interests and other financial income, net	(14)	(14)
Foreign exchange gains (losses), net	0	0
Income taxes	(14)	(9)
Net income (loss)	48	29

The share of the SAES Group in the joint venture's results in the first half of 2020 amounted to +23 thousand euro (+15 thousand euro in the first half of 2019).

FLEXTERRA, Inc., Skokie, IL (USA)

Flexterra, Inc. based in Skokie (close to Chicago, Illinois, USA), was established at the end of 2016 as a start up with the purpose of the design, manufacturing and sale of materials and components for the manufacture of flexible displays.

Flexterra, Inc. owns 100% of Flexterra Taiwan Co., Ltd.

SAES holds 46.73% of the capital stock of the joint venture Flexterra, Inc.

In 2019 the Flexterra project had made strong progress, although with some delays compared to initial forecasts. In particular, the joint venture continued to develop its organic materials and its formulations were qualified by an important Taiwanese producer of OTFT (Organic Thin Film Transistors). The activities to industrialize OTFTs is at an advanced stage and, although it has taken longer than initial estimates, also because of the recent COVID-19 crisis, it should be completed after summer 2020, while the start of actual production and sales activities by Flexterra is expected by the end of the year.

Flexterra, which is classified as a joint venture, ended the first half of 2020 with a net loss of -2,022 thousand euro, essentially in line with a net loss of -2,266 thousand euro in the corresponding period of 2019 (mainly costs for employees engaged in research and general and administrative activities, costs related to the management of patents and the amortization of intangible assets, including intellectual property).

(thousands of euro)

Flexterra	1 st Half 2020	1 st Half 2019
	100%	100%
Total net sales	50	12
Cost of sales	(27)	(3)
Gross profit	23	9
<i>% on net sales</i>	<i>46.0%</i>	<i>75.0%</i>
Total operating expenses	(2,132)	(2,257)
Other income (expenses), net	1	(1)
Operating income (loss)	(2,108)	(2,249)
<i>% on net sales</i>	<i>n.a.</i>	<i>n.a.</i>
Interests and other financial income, net	(9)	2
Foreign exchange gains (losses), net	74	(42)
Income taxes	21	23
Net income (loss)	(2,022)	(2,266)

The SAES Group's share in the result of the joint venture in the first half of 2020 amounted to a loss of -945 thousand euro (a loss of -1,058 thousand euro at June 30, 2019).

The following table shows the **total Group's profit (loss)**, obtained by incorporating the Group's joint ventures¹⁴ with the proportional method instead of the equity method.

1 st half 2020								
(thousands of euro)	Consolidated profit or loss	50% Actuator Solutions	Intercoy eliminations & other adjustments	49% SAES RIAL Vacuum S.r.l.	Intercoy eliminations & other adjustments	46,73% Flexterra	Intercoy eliminations & other adjustments	Total profit or loss of the Group
Total net sales	89,099	3,940	(144)	868	(264)	23		93,522
Cost of sales	(50,876)	(2,863)	144	(715)	264	(13)		(54,059)
Gross profit	38,223	1,077	0	153	0	10		39,463
<i>% on net sales</i>	<i>42.9%</i>							<i>42.2%</i>
Total operating expenses	(26,326)	(645)	0	(127)	0	(996)	38	(28,056)
Other income (expenses), net	(754)	82	0	11	0	0		(661)
Operating income (loss)	11,143	514	0	37	0	(986)	38	10,746
<i>% on net sales</i>	<i>12.5%</i>							<i>11.5%</i>
Interest and other financial income, net	(6,460)	(152)	120	(7)	0	(4)	0	(6,504)
Income (loss) from equity method evaluated companies	(884)		0		(23)		907	0
Write-downs of investments from equity method evaluated companies	0		0				0	0
Foreign exchange gains (losses), net	(29)	(12)		0		35		(6)
Income (loss) before taxes	3,770	350	120	30	(23)	(955)	945	4,237
Income taxes	(3,332)	8		(7)		10		(3,321)
Net income (loss) from continued operations	438	358	120	23	(23)	(945)	945	916
Income (loss) from discontinued operations	0	0	0	0	0	0		0
Net income (loss) of the period	438	358	120	23	(23)	(945)	945	916
Net income (loss) pertaining to minority interest	0							0
Net income (loss) pertaining to the Group	438	358	120	23	(23)	(945)	945	916

Research, Development and Innovation activity

Research and development expenses amounted to a total of 5,283 thousand euro (5.9% of consolidated net revenues) in the first half of 2020 and they were substantially aligned in absolute and percentage of revenues terms to those of the corresponding period of 2019 (5,524 thousand euro, 6.2% of consolidated revenues).

The Group Research Labs activities continued the development of innovative systems to support the continuous growth of SAES Group technology platforms. The **COVID-19** emergency has slowed a number of development projects, mainly due to delays in the supply of laboratory materials and

¹⁴ Actuator Solutions (50%), SAES RIAL Vacuum S.r.l. (49%) and Flexterra (46.73%).

components, but the use of digital platforms and smart working methods, together with the focus on high priority activities, have in any event allowed major results to be achieved in line with predefined timelines.

For the **chemical (organic) materials**, the scale-up was defined of a new chemical process for producing **organic capsules** and **spheres** that use materials of a different nature, prevalently 'bio'. This facility will sustain the development of core-shell structures able to introduce new functions to various industrial applications and to replace materials with a high environmental impact. The construction of this facility will be completed in September 2020 at the corporate research laboratories in Lainate, and will allow pre-production of spheres with barriers against oxygen, fundamental to the industrialization of new coatings. As regards the other innovative capsules, functional tests have been completed to verify the efficacy of anti-oxidant systems in food packaging applications and the significant power to block oxidation mechanisms has been confirmed. Action continues for the filing of a new patent claim to guarantee the use of these capsules in different flexible packaging applications and, in parallel, a scale-up plan is being defined to allow use of these systems in the development of new coatings at the SAES Coated Films S.p.A. production facilities.

Again in the area of innovative coatings, development is in progress of **functional materials**, to be applied directly on paper substrates, capable of imparting new barrier properties and, at the same time, maintaining the paper's recyclable characteristics. Active partnership activity has been finalized in the production of paper substrates, to guarantee the availability of support means with suitable characteristics for the direct application of functional coatings.

With regard to new functional materials, development continues of **innovative zeolites** capable of ensuring different functions, from controlled release to the ability to coordinate/interact with different active molecules and block specific processes. This platform ensures extensive development flexibility and integration options in various packaging structures in operation.

In parallel with the development of new organic systems, the development of new **dispensable getters** also continued, based on integrating functional materials into organic polymer matrices with a new internal formulation. A new dispensable product, able to guarantee the absorption of hydrogen and water vapour, is currently at qualification stage for application in optoelectronic devices, whilst systems with new functions are being finalized for photonic device packaging, in order to ensure protection against various contaminants (volatile substances, damp, hydrogen).

Lastly, note that installation is almost complete of a **roll-to-roll pilot line**, delayed in recent months by the COVID-19 emergency due to restricted movement from other European countries. This line will allow the adoption of various wet deposition technologies for the construction of innovative flexible structures based on a combination of new SAES functional lacquers and different types of polymeric substrates, operating under the same operating conditions as an industrial line, but on a smaller scale. The line is one of the most advanced tools available in Europe for prototyping in the flexible packaging sector.

Product development activities of **SAES Coated Films S.p.A.** focus on consolidation of the Coathink[®] technology, able to transfer oxygen and damp barrier properties to compostable packaging, making them usable for long-life food products. Coathink is a water-based coating technology that enables the creation of active packaging and/or barrier, designed for the circular economy.

It is in this field that the new compostable packaging adopted by Colussi was fine-tuned for a new *Misura* product range, obtained through a pioneer innovation process that saw SAES Coated Films S.p.A. in active partnership with other Italian experts in this sphere, such as Novamont, TicinoPlast, Sacchital and IMA.

The **Flexterra** joint venture continued to develop its semiconductor and dielectric organic materials, and its formulations based on specific instructions from a major Taiwanese producer of OTFTs (Organic Thin Film Transistors) are nearing completion of the optimization process. Activities to industrialize these devices began a few months ago and should be completed by the end of 2020, and which will be followed by marketing activities.

In the **metallurgy business**, development activities continued on the **new high-temperature shape memory alloys**. This feature will allow the adopted of SAES alloys in new application areas, particularly the industrial sector (4G-5G signal boosters). The recently developed skills have allowed successful hot-drawn testing (outsourced) and subsequent cold-drawn testing, obtaining wires of a different diameter (<300 microns). These systems are currently at functional characterization stage.

In parallel, new compositions have been identified for **zero-hysteresis alloys** in order to replace elements that can no longer be adopted for safety regulations. Today, development activities focus on two quaternary alloy systems capable of guaranteeing very low level hysteresis.

The activities carried out on SMA film confirmed the possibility of achieving **shape memory-effect thin film systems**. As regards the potential applications for these films as micro-actuators, in-depth study is in progress to verify the capacity of these systems to guarantee adequate functional targets compared to alternative technologies.

In the field of **bio-absorbable materials**, activity is nearing completion which has allowed the development of know-how on a new class of metallic systems and led to two new patent claims being filed. Biodegradability tests are currently in progress with support from external partners.

Finally, all the basic research costs incurred by the Group are charged directly to the income statement in the period in which they are incurred, as they do not qualify for capitalization.

Impact of the COVID-19 pandemic on results as at June 30, 2020

The COVID-19 crisis that began in China at the beginning of the year and spread to Northern Italy from the second half of February, later extending to almost all corners of the globe, had an impact on SAES Group in several areas: economic, organizational, financial. This paragraph provides details of the impact, highlighting the main sectors of the SAES market where such effects were felt and the decisions adopted by the company.

In particular, after a first quarter that saw a limited impact from the COVID-19 crisis and was even aided by moving inventory associated with the emergency, the second quarter saw the gradual reabsorption of these changes in inventory, added to which was the slowing in certain sectors, particularly **medical devices in Nitinol** and **Industrial SMAs**: the first penalized by hospitals' suspension of elective surgeries in order to concentrate resources on COVID-19 cases; the second impacted by the negative effect of the pandemic on demand for high-end smartphone and in the automotive sector. Other segments where sales were negatively impacted by COVID-19 were **vacuum pumps** (lower sales to research centers and universities, which slowed their operations during the lockdown) and **thermal insulation** (in particular the slowing demand for vacuum bottles and insulated pipes for oil industry applications).

Vice versa, COVID-19 aided the growth in revenues in the segments for **electronic devices** (sales driven by demand for thermoscanners) and **medical diagnostics** (increase in demand in the image diagnostics sector).

As precautionary containment of the COVID-19 epidemic, **the Lainate offices of the Parent Company and the Roncello facility of SAES Coated Films S.p.A. were closed from the afternoon of February 24 to February 28, 2020**, also in order to arrange the necessary risk containment measures and to draw up the COVID-19 operations protocol. Later, the two facilities returned to operations, whereas the other Group production plants in Italy and abroad had remained operative, complying with all regulatory provisions in force to guarantee workplace safety and, where possible, encouraging recourse to smart working.

Also note that, on March 26, 2020, the Group reached an agreement with the trade union representatives regarding the use, for nine weeks from March 30, 2020, of the social shock absorbers envisaged in the

“Cura Italia” Decree, DPCM of March 17, 2020 (**CIGO furlough scheme**) for a number of employees at the Lainate facility, with salary integration 40% supported by the company.

Lastly, on May 14, 2020, an understanding was reached with the trade unions for the **gradual return to work of employees** at the Lainate operating unit (150 presences per day at Lainate in June and July, alternating shifts with smart working). **All employees returned to work**, however, from the beginning of August, unless other emergency regulations are issued and in a matter compatible with the pandemic situation.

Due to the pandemic, the Group incurred **extraordinary expenses** of around 310 thousand euro. In particular, these were costs for sanitization and adaptation of access points and work spaces to ensure employee safety, as well as healthcare and prevention expenses and consulting and training costs. Vice versa, the **saving** resulting from recourse to the **CIGO furlough scheme** at the Lainate facility was 55 thousand euro, whilst for the US affiliates the **support measures implemented by the US Government** for businesses and households, partial reimbursement of missed working days caused by COVID-19, allowed a **decrease in labour costs** amounting to 167 thousand euro.

(thousands of euro)	1 st half 2020					Total
	Direct labour	Manufacturing overhead	Research & development expenses	Selling expenses	General & administrative expenses	
One-off Covid-19						
Personnel cost	(101)	(53)	(44)	(11)	47	(162) (*)
Maintenance and repairs					30	30
Various materials					103	103
Transports					3	3
Consultant fees and legal expenses					73	73
General services (canteen, cleaning, vigilance, etc.)					38	38
Training					3	3
Total cost of sales & operating expenses one-off Covid-19	(101)	(53)	(44)	(11)	297	88

(*) The amount is composed by:

- CIGO savings in the Lainate plant of the Parent Company, equal to -55 thousands of euro;
- savings for the US governmental measures to support companies and families, equal to -167 thousands of euro;
- additional personnel costs, equal to +60 thousands of euro.

Lastly, note that in the first half of the year the SAES Group made **donations** for a total of 689 thousand euro to research organizations and hospitals operating on the front line in the battle against COVID-19, as well as to the Italian Civil Defense (the related costs are classified under “Other expenses”).

(thousands of euro)	1 st half 2020
One-off Covid-19	
Other income	0
Other expenses	(689)
Total other income (expenses) one-off Covid-19	(689)

The impact of COVID-19 on the financial markets has led to a strong reduction in the **fair value of securities** held by the Group for investment in liquidity. The negative impact in the first quarter was partly reabsorbed in the second quarter, returning the value of securities as at June 30, 2020 to a level corresponding to the initial investment (i.e. around 200 million euro).

As regards the calculation of any **impairment losses on non-current assets**, normally only conducted in complete form for preparation of the annual report, pursuant to paragraphs 9 and 12 of IAS 36 the Directors have assessed the effects of the COVID-19 pandemic as an impairment indicator and, therefore, property, plant and equipment, intangible assets (including goodwill) and rights of use on leased assets, as well as investments accounted for using the equity method were **impairment tested as at June 30, 2020**. For details of the tests conducted please refer to Notes no. 15 and no. 17. These tests did not reveal any need for write-downs.

As a result of the global economic and financial crisis caused by the COVID-19 pandemic, Management also considered it appropriate to carry out additional tests for potential impairment of inventories of **raw materials, semi-finished goods and finished products**, as well as **trade receivables** considered no

longer recoverable due to solvency problems of end customers. These tests did not reveal significant adjustments to either the net value of closing inventory or of the trade receivables (please refer to Notes no. 23 and no. 24 for further details).

Subsequent events

On June 22, 2020, the Parent Company signed a seven-year **lease**, effective from July 1, 2020, and renewable for a further seven years under the same terms, for the use of **a property for office use in Milan**, at Piazza Castello 13, to house the Corporate and Management functions. When fully operative, the annual lease payable is set at 350 thousand euro, reduced for the first two years of the lease to facilitate start up.

On July 12, 2020 the **cancellation of the liquidation status of E.T.C. S.r.l.** became effective, as resolved by the Shareholders' Meeting of April 15, 2020. On that same date, the company name was changed from E.T.C. S.r.l. into **SAES Innovative Packaging S.r.l.** and its **corporate purpose modified** to allow the company to directly or indirectly take on investments or shareholdings in the packaging sector and to scout for new technologies in that sector.

With reference to the **investment** finalized on June 23, 2020, **in the EUREKA! venture capital fund** (for further details of the investment, please refer to the paragraph "Main events in the half-year period"), on July 14, 2020, the sum of 118 thousand euro was paid as subscription fees and to cover set-up costs and management fees for the period July 1 - September 30, 2020. The initial investment, with related call for funds of around 164 million euro by SAES, is scheduled for the second half of September 2020.

On July 16, 2020, SAES Getters International Luxembourg S.A. signed a **convertible loan with a value of 3 million US Dollars in favour of the joint venture Flexterra, Inc.**, to be repaid in cash at the end of a predefined one-year maturity or earlier, if certain significant events occur, including the liquidation of Flexterra and change of control. The loan will accrue interest at 8% per year. As well as by cash, the repayment can be in the form of equity if Flexterra should arrange a qualified capital stock increase for a value of at least 6 million USD before the maturity date. In this case, SAES Getters International Luxembourg S.A. will receive a number of new shares equal to the quota obtained by dividing the balance of the loan at the conversion date by a value of 80% of the price per share paid by other shareholders at the time of the capital increase.

On August 10, 2020, the relative majority shareholder S.G.G. Holding S.p.A. acquired 35,000 ordinary shares of SAES Getters S.p.A. on the market. As a result of this purchase, S.G.G. Holding S.p.A. now holds 34.44% of the total ordinary shares, against voting rights of 45.01%.

Note that the **fair value of the Group's securities portfolio**, consisting primarily of "Buy & Hold" assets, at today's date has increased by around 0.7% compared to the value at June 30, 2020.

Business outlook

In the next few months, we can expect to see a gradual recovery of the medical market towards the end of the year and a slower recovery of the SMA Industrial segment, with particular attention on the EUR-USD exchange rate trend. For the remaining part of the year, we expect to have two quarters similar to each other and in line with the second quarter of 2020, at average exchange rates equal to those of the first half.

Group's main risks and uncertainties

For the analysis of the Group's main risks and uncertainties and the priority mitigation actions to overcome these risks and uncertainties please refer to the 2019 Consolidated Financial Statements.

In particular, with reference to the financial risks, the main financial risks for the SAES Group are the following ones:

- *Interest-rate risk*, associated with the volatility of interest rates, which may influence the cost of the use of debt financing and the return of investments in cash and cash equivalents and the securities portfolio;
- *Exchange rate risk*, associated with the volatility of exchange rates, which may influence the related value of the Group's costs and revenues denominated in currencies different from the euro and may thus have an impact on the Group's net income or loss; also the amount of financial receivables/payables denominated in currencies other than the euro depends on the value of exchange rates, with potential effects both on the net income and on the net financial position;
- *Commodity price risk*, which may affect the Group's product margins if these changes are not charged to the price agreed upon with customers;
- *Credit risk*, associated with the solvency of customers and, in general, the ability to collect and measure financial receivables;
- *Liquidity risk*, associated with the Group's ability to raise funds to finance its operating activities, or with the capacity of the sources of funding if the Group were to adopt strategic decisions involving some extraordinary expenditure (such as merger & acquisition transactions or organizational rationalization and restructuring activities).

Added to these risks are those brought about by the spread of COVID-19, which can result in a drop in revenues, higher inventory to offset potential supply interruptions and a slowing in credit collection times, with subsequent need to finance a stronger working capital.

Interest rate risk

The Group's financial debts, both short- and long-term ones, are mainly structured on a variable interest rate basis, therefore they are subject to the risk of interest rate fluctuations.

With regard to long-term financial debt, the exposure to interest rate fluctuation is handled by entering into Interest Rate Swap or Interest Rate Cap agreements, with a view to guaranteeing a level of financial expenditure which is sustainable by the SAES Group's financial structure. For details of the contracts as at June 30, 2020 please refer to Note no. 36.

The Group also constantly controls the interest rate trend for the possible signing of further contracts to hedge the risk linked to interest rate fluctuations on the variable interest loans for which no hedging contracts have been signed.

The funding for the working capital is managed through short-term financing transactions and, as a consequence, the Group does not hedge against the interest rate risk.

Exchange rate risk

The Group is exposed to the exchange rate risk on foreign commercial transactions.

Such exposure is mainly generated by sales in currencies other than the reference currency: during the first half of 2020 around 74.1% of the Group's sales and only around 54.3% of the Group's operating costs were denominated in a currency other than the euro.

In order to manage the economic impact generated by the fluctuations in exchange rates versus the euro, primarily of the US dollar and of the Japanese yen, the Group can sign hedging contracts, whose values are determined by the Board of Directors at the start of the year according to the net currency cash flows expected to be generated by SAES Getters S.p.A. The maturities of any hedging derivatives tend to coincide with the scheduled date of collection of the hedged transactions.

Moreover, the Group can occasionally hedge specific transactions in a currency other than the reference currency, to mitigate the effect on profits and losses of the exchange rate volatility, with reference to

financial receivables/payables, also inter-company ones, denominated in a currency different from the one used in the financial statements, including those relating to the cash pooling (executed by foreign subsidiaries, but denominated in euro).

Finally, the Group constantly monitors exchange rate trends in order to decide whether to enter into further risk hedging contracts linked to exchange rate fluctuations in the foreign currency takings from extraordinary company transactions or for funding needed to purchase in other currencies besides the euro.

As explained in greater detail in Note no. 36, no forward sales contracts on the US dollar or yen were signed in the first half of 2020.

Commodity price risk

The Group's exposure to commodity price risks is usually moderate. The procurement procedure requires the Group to have more than one supplier for each commodity deemed to be critical. In order to reduce its exposure to the risk of price variations, it enters into specific supply agreements aimed at controlling the commodity price volatility. The Group monitors the price trends of the main commodities subject to the greatest price volatility and does not exclude the possibility of undertaking hedging transactions using derivative instruments with the aim of neutralizing the price volatility of its commodities.

Credit risk

The Group deals predominantly with well-known and reliable customers. The Sales and Marketing Department assesses new customers' solvency and periodically checks to ensure that credit limit conditions are met. The balance of receivables is constantly monitored so as to minimize the risk of potential losses, particularly given the current difficult macroeconomic situation caused by the COVID-19 epidemic.

The credit risk associated with other financial assets, including cash and cash equivalents and securities in the portfolio, is not significant due to the nature of the counterparties. The bank deposits are held with leading Italian and international financial institutions. Also with reference to the securities portfolio, investments are never made directly, but instead with leading specialist financial operators, mainly with the aim of maintaining capital in view of potential future loans. In addition, the Administration Finance and Control Division carefully and constantly monitors investments and the value of resources invested, periodically reporting on these monitoring activities to the Board of Directors.

Liquidity risk

This risk can arise from the incapacity to obtain the necessary financial resources to grant the continuity of the Group's operations.

In order to minimize such risk, the Administration Finance and Control Division acts as follows:

- constantly monitors the Group's financial requirements in order to obtain credit lines necessary to meet such requirements;
- optimizes the liquidity management through a centralized management system of available liquidity (cash pooling) in euro which involves nearly all of the Group's companies;
- manages the correct balance between short-term financing and medium/long-term financing depending on the expected generation of operating cash flows.

For further information about the Group's financial debt as at June 30, 2020 and about the maturity date of these debts please refer to Note no. 28.

As at June 30, 2020, the Group was not significantly exposed to liquidity risk, also considering the availability of bank deposits and liquid securities, as well as taking account of the unused credit lines to which it has access.

The liquidity risks, heightened by the COVID-19 pandemic, were mitigated through two new credit lines obtained in the current half year for an additional 60 million euro. For more details please see the "Main events in the half-year period" and Note no. 26.

Equity management

The objective pursued by the Group is to maintain a solid credit rating and adequate capital ratios in order to support operations and maximise the value for shareholders.

No changes were made to equity management objectives or policies during the first half of 2020. Some performance indicators, such as the debt-to-equity ratio, defined as net debt over equity, are periodically monitored with the aim of keeping them at low levels, and in any case lower than what is required by the contracts signed with the financial institutions.

Business continuity

The financial statements are prepared on going concern assumptions given that, despite a difficult economic and financial environment caused by the Covid-19 epidemic, there are no significant uncertainties (as defined in paragraph no. 25 of IAS 1 - Presentation of Financial Statements) regarding business continuity.

In the light of the performance in the first half of the year and the outlook for sales in the second half of 2020, the Group has lowered its year-end forecasts but does not consider it necessary to change the business plans to bring forward the normal year-end maturities, also in view of the difficulties in existing forecasts. The duration and extent of the **future spread of the COVID-19 pandemic** and its related economic and financial effects remain difficult to forecast and are subject to constant ongoing monitoring by the Group. However, it should also be noted that SAES' global presence, in terms of both manufacturing and sales, and its positioning in businesses considered essential, most importantly medical devices and food packaging, reduce the risk. In addition, the positive Net Financial Position as at June 30, 2020, along with the availability of unused credit lines, constitute a further guarantee of business continuity.

Related party transactions

With regard to the Group's related party transactions, please note that they fall within ordinary operations and are settled at market or standard conditions.

Complete disclosure on related party transactions incurred during the half year is provided in Note no. 41 of the interim condensed consolidated financial statements.

Consob regulatory simplification process

On November 13, 2012, the Board of Directors approved, pursuant to article 3 of Consob Resolution no. 18079/2012, to adhere to the opt-out provisions as envisaged by article 70, paragraph 8, and article 71, paragraph 1-*bis* of the Consob Regulation related to Issuer Companies, and it therefore avails itself of the right of making exceptions to the obligations to publish information documents required in connection with significant mergers, spin-offs and capital increases by contributions in kind, acquisitions and disposals.

**Interim Condensed Consolidated Financial Statements
at June 30, 2020**

Consolidated statement of profit or loss			
(thousands of euro)	Notes	1 st Half 2020	1 st Half 2019 (*)
Total net sales	3	89,099	88,487
Cost of sales	4	(50,876)	(50,667)
Gross profit		38,223	37,820
Research & development expenses	5	(5,283)	(5,524)
Selling expenses	5	(5,656)	(6,277)
General & administrative expenses	5	(15,368)	(14,976)
Write-down of trade receivables	5	(19)	25
Total operating expenses		(26,326)	(26,752)
Other income (expenses), net	6	(754)	2,344
Operating income (loss)		11,143	13,412
Interests and other financial income	7	1,604	3,587
Interests and other financial expenses	7	(7,877)	(571)
Write-down of financial receivables and other financial assets	7	(187)	(158)
Share of result of investments accounted for using the equity method	8	(884)	(1,043)
Foreign exchange gains (losses), net	9	(29)	(31)
Income (loss) before taxes		3,770	15,196
Income taxes	10	(3,332)	(6,232)
Net income (loss) from continued operations		438	8,964
Net income (loss) from discontinued operations	11	0	176
Net income (loss) for the period		438	9,140
Minority interests in consolidated subsidiaries		0	0
Group net income (loss) for the period		438	9,140
Net income (loss) per ordinary share	12	0.00000	0.42137
- from continued operations		0.00000	0.41315
- from discontinued operations		0.00000	0.00000
Net income (loss) per savings share	12	0.05936	0.43800
- from continued operations		0.05936	0.42978
- from discontinued operations		0.00000	0.02385

Consolidated statement of other comprehensive income			
(thousands of euro)	Notes	1 st Half 2020	1 st Half 2019
Net income (loss) for the period from continued operations		438	8,964
Exchange differences on translation of foreign operations	28	205	520
Exchange differences on equity method evaluated companies	28	13	79
Total exchange differences		218	599
Total components that will be reclassified to the profit (loss) in the future		218	599
Other comprehensive income (loss), net of taxes - continued operations		218	599
Total comprehensive income (loss), net of taxes - continued operations		656	9,563
Net income (loss) for the period from discontinued operations		0	176
Other comprehensive income (loss), net of taxes - discontinued operations		0	0
Total comprehensive income (loss), net of taxes - discontinued operations		0	176
Total comprehensive income (loss), net of taxes		656	9,739
attributable to:			
- Equity holders of the Parent Company		656	9,739
- Minority interests		0	0

(*) Some amounts shown in the column do not correspond to the 2019 Interim consolidated financial statements because they reflect the reclassifications to give evidence in the Consolidated statement of profit or loss of the write-downs of the financial assets, in accordance with IAS 1.

Consolidated statement of financial position

(thousands of euro)	Notes	June 30, 2020	December 31, 2019
<u>ASSETS</u>			
Non current assets			
Property, plant and equipment	14	74,141	70,893
Intangible assets	15	44,814	45,216
Right of use	16	3,880	4,617
Investments accounted for using the equity method	17	3,929	4,800
Securities in the portfolio	18	130,236	134,673
Deferred tax assets	19	8,911	9,126
Tax consolidation receivables from the Controlling Company	20	128	272
Financial receivables from related parties	21	49	49
Other long term assets	22	1,466	1,528
Total non current assets		267,554	271,174
Current assets			
Inventory	23	31,845	25,547
Trade receivables	24	22,873	21,755
Other receivables, accrued income and prepaid expenses	25	4,418	4,677
Cash and cash equivalents	26	31,223	48,634
Financial receivables from related parties	21	1	1
Securities in the portfolio	18	70,125	70,779
Total current assets		160,485	171,393
Total assets		428,039	442,567

<u>EQUITY AND LIABILITIES</u>			
Capital stock		12,220	12,220
Share issue premium		25,724	25,724
Treasury shares		(93,382)	(93,382)
Legal reserve		2,444	2,444
Other reserves and retained earnings		284,238	273,599
Other components of equity		12,306	12,088
Net income (loss) of the period		438	19,837
Group shareholders' equity	27	243,988	252,530
Other reserves and retained earnings of third parties		0	0
Minority interests in consolidated subsidiaries	27	0	0
Total equity		243,988	252,530
Non current liabilities			
Financial debts	28	98,125	100,724
Financial liabilities for leases	29	2,072	2,710
Deferred tax liabilities	19	8,848	8,670
Staff leaving indemnities and other employee benefits	31	10,480	9,516
Provisions for risks and charges	32	849	1,001
Total non current liabilities		120,374	122,621
Current liabilities			
Trade payables	33	11,896	15,694
Other payables	34	10,017	9,868
Accrued income taxes	35	1,531	602
Provisions for risks and charges	32	3,457	5,368
Derivative financial instruments measured at fair value	36	40	50
Current portion of medium/long term financial debts	28	5,237	5,365
Financial liabilities for leases	29	1,771	1,876
Other financial debts to third parties	30	1,679	900
Bank overdrafts	37	27,066	27,195
Accrued expenses and deferred income	38	983	498
Total current liabilities		63,677	67,416
Total equity and liabilities		428,039	442,567

Consolidated statement of financial position		
(thousands of euro)	1st Half 2020	1st Half 2019
Cash flows from operating activities		
Net income (loss) from continued operations	438	8,964
Net income (loss) from discontinued operations	0	176
Current income taxes	2,921	4,626
Changes in deferred income taxes	411	1,550
Depreciation of financial leased assets	1,035	662
Depreciation	3,525	3,298
Write-down (revaluation) of property, plant and equipment	115	1
Amortization	636	604
Write-down (revaluation) of intangible assets	0	0
Net loss (gain) on disposal of fixed assets	0	(2,272)
Net gain on purification business disposal	0	(176)
Interest and other financial (income) expenses, net	7,344	(1,815)
Write-down of trade receivables	19	(25)
Other non-monetary costs (revenues)	1	0
Accrual for termination indemnities and similar obligations	1,294	1,304
Accrual for investment provision for risks	(2,087)	(1,798)
	15,652	15,099
Working capital adjustments		
<i>Cash increase (decrease)</i>		
Account receivables and other receivables	(1,541)	(2,987)
Inventory	(6,321)	(434)
Account payables	(3,798)	(1,659)
Other current payables	632	(1,895)
	(11,028)	(6,975)
Payment of termination indemnities and similar obligations	(335)	(248)
Interests and other financial payments	(477)	(122)
Interests and other financial receipts	62	62
Taxes paid	(1,094)	(5,535)
Net cash flows from operating activities	2,780	2,281
Cash flows from investing activities		
Disbursements for acquisition of tangible assets	(6,827)	(10,525)
Proceeds from sale of tangible and intangible assets	0	5
Disbursements for acquisition of intangible assets	(106)	(433)
Sale of intellectual property to related parties	0	2,291
Purchase of securities, net of disinvestments	(1,431)	(100,466)
Income from securities, net of management fees	1,170	877
Consideration for the acquisition of minority interests in subsidiaries		
Price paid for the acquisition of businesses		
Advances paid for the purchase of investments	0	(1,100)
Consideration for the purification business disposal, net of the disposed cash		
Ancillary monetary charges for the purification business disposal		
Adjustment on the consideration for the purification business disposal	0	(383)
Net cash flows from investing activities	(7,194)	(109,734)
Cash flows from financing activities		
Proceeds from long term financial liabilities, current portion included	0	92,735
Proceeds from short term financial liabilities	758	(470)
Dividends payment	(9,198)	(16,580)
Repayment of financial liabilities	(2,739)	(2,732)
Interests paid on long term financial liabilities	(618)	(84)
Interests paid on short term financial liabilities	(21)	(15)
Other costs paid	(15)	(16)
Financial receivables repaid (granted) from related parties	0	0
Interests receipts on financial receivables from related parties	1	1
Other financial payables	21	17
Repayment of financial liabilities for leased assets	(1,042)	(676)
Interests paid on leased assets	(88)	(24)
Purchase of treasury shares and related accessory costs	0	(93,382)
Net cash flows from financing activities	(12,941)	(21,226)
Net foreign exchange differences	23	150
Net (decrease) increase in cash and cash equivalents	(17,332)	(128,529)
Cash and cash equivalents at the beginning of the period	48,521	170,395
Cash and cash equivalents at the end of the period	31,189	41,866

Consolidated statement of changes in equity as at June 30, 2020

(thousands of euro)	Capital stock	Share issue premium	Treasury shares	Legal reserve	Other components of equity		Other reserves and retained earnings	Net income (loss)	Group shareholders' equity	Minority interests	Total equity
					Currency conversion reserve	Currency conversion reserve from discontinued operations					
December 31, 2019	12,220	25,724	(93,382)	2,444	12,088	0	273,599	19,837	252,530	0	252,530
Distribution of 2019 result							19,837	(19,837)	0		0
Dividends paid							(9,198)		(9,198)		(9,198)
Net income (loss)								438	438	0	438
Other comprehensive income (loss)					218				218		218
Total comprehensive income (loss)					218	0	0	438	656	0	656
June 30, 2020	12,220	25,724	(93,382)	2,444	12,306	0	284,238	438	243,988	0	243,988

Consolidated statement of changes in equity as at June 30, 2019

(thousands of euro)	Capital stock	Share issue premium	Treasury shares	Legal reserve	Other components of equity		Other reserves and retained earnings	Net income (loss)	Group shareholders' equity	Minority interests	Total equity
					Currency conversion reserve	Currency conversion reserve from discontinued operations					
December 31, 2018	12,220	25,724	0	2,444	10,289	0	58,210	232,333	341,220	0	341,220
Distribution of 2018 result							232,333	(232,333)	0		0
Dividends paid							(16,580)		(16,580)		(16,580)
Purchase of treasury shares			(89,700)						(89,700)		(89,700)
Accessory costs on the purchase of treasury shares			(3,682)						(3,682)		(3,682)
Net income (loss)								9,140	9,140	0	9,140
Other comprehensive income (loss)					599				599		599
Total comprehensive income (loss)					599	0	0	9,140	9,739	0	9,739
June 30, 2019	12,220	25,724	(93,382)	2,444	10,888	0	273,963	9,140	240,997	0	240,997

1. BASIS OF PREPARATION AND ACCOUNTING POLICIES

Basis of preparation

SAES Getters S.p.A., the Parent Company with headquarters in Lainate, and its subsidiaries (hereinafter “SAES Group”) operate both in Italy and abroad in the development, manufacturing and marketing of getters and other components for applications where stringent vacuum conditions are required (electronic devices, lamps, vacuum systems and thermal insulation solutions). The Group also operates in the field of advanced materials, particularly in the business of shape memory alloys for both medical and industrial applications. Finally, SAES has recently developed a technological platform that integrates getter materials in a polymeric matrix that spans numerous fields of application (advanced packaging, OLED displays, implantable medical devices and new diagnostics for solid state images).

The preparation of the financial statements is in compliance with the historical cost criterion, except when specifically required by the applicable standards, as well as on the going concern assumption, given that, despite a difficult economic and financial environment caused by the COVID-19 pandemic, there aren't any significant uncertainties (as defined in paragraph no. 25 of IAS 1 - Presentation of Financial Statements) regarding the business continuity.

S.G.G. Holding S.p.A.¹⁵ is a relative majority shareholder¹⁶ and does not exercise any management and coordination activity towards SAES Getters S.p.A. pursuant to article 2497 of the Italian Civil Code (as specified in the 2019 Report of corporate governance and ownership).

The Board of Directors approved and authorized the publication of the 2020 interim condensed consolidated financial statements with the resolution passed on September 10, 2020.

The interim condensed consolidated financial statements of the SAES Group are presented in euro (rounded to the nearest thousand), which is the Group's functional currency.

Foreign subsidiaries are included in the consolidated financial statements according to the standards described in Note no. 2 “Accounting standards”.

Accounting schedules

The presentation adopted is compliant with the provisions of Revised IAS 1, that provides for the consolidated statement of profit (loss) and of other comprehensive income (the Group elected to present two different statements) and a statement of consolidated financial position that includes only the details of operations on the Group's shareholders' equity, while changes in the minority interests are presented in a separate line.

Moreover, we report that:

- the consolidated statement of financial position has been prepared by classifying assets and liabilities as current or non-current and by stating “Assets held for sale” and “Liabilities held for sale” in two separate items, as required by IFRS 5;
- the consolidated statement of profit or loss has been prepared by classifying operating expenses by allocation, inasmuch this form of disclosure is considered more suitable to represent the Group's specific business, is compliant with the internal reporting procedures and in line with the standard industry practice;
- the consolidated cash flow statement has been prepared by stating cash flows provided by operating activities according to the “indirect method” as allowed by IAS 7.

¹⁵ Based in Milan at Via Vittor Pisani, 27.

¹⁶ As at June 30, 2020, S.G.G. Holding S.p.A. held 34.21% of the ordinary shares of SAES Getters S.p.A. and, taking account of the shares with increased voting rights, has 44.81% of the total voting rights that can be exercised on that date (including the voting rights of the treasury stock held by SAES Getters S.p.A. in the calculation).

In addition, as required by Consob resolution no. 15519 of July 27, 2006, income and expenses arising from non-recurring transactions or from events that do not recur frequently during the normal conduct of operations are specifically identified in the consolidated statement of profit or loss pursuant to allocation and the related details are provided in the consolidated explanatory notes.

Non-recurring events and transactions are identified primarily on the basis of the nature of the transactions. In particular, non-recurring income/expenses include cases that by their nature do not occur consistently in the course of normal operating activities. In further detail:

- income/expenses arising from the sale of real property;
- income/expenses arising from the sale of business divisions and equity investments;
- income/expenses arising from reorganization processes associated with extraordinary corporate transactions (mergers, de-mergers, acquisitions and other corporate transactions);
- income/expenses arising from discontinued businesses.

On the basis of Consob resolution no. 15519 of July 27, 2006, the amounts of positions or transactions with related parties have been highlighted separately from the related items in the Explanatory Notes to the consolidated interim financial statements.

Reclassification of the financial values at June 30, 2019

Some **reclassifications** were made for not significant amounts, without any effects on the net profits or equity, to highlight the write-downs of financial receivables and other financial assets in application of IAS 1 in the consolidated Statement of Profit or Loss.

Segment information

The Group's financial reporting is broken down into the following business segments:

- Metallurgy;
- Vacuum Technology;
- Medical;
- Specialty Chemicals;
- Advanced Packaging.

Starting from January 1, 2020, the Group is organized in the following technological competency areas (or "Divisions"):

- Metallurgy Division (which coincides with the previous Industrial operating sector, excluding Solutions for Vacuum Systems, Functional Chemical Systems and advanced getters for the consumer electronics market, the latter previously classified within the Electronic Devices Business);
- Vacuum Technology Division (which coincides with the Solutions for Vacuum Systems Business, included in the Industrial operating segment);
- Medical Division (unchanged);
- Specialty Chemicals Division (i.e. advanced getters for the consumer electronics market, classified within the Electronic Devices Business in the previous year, in addition to the Functional Chemical Systems segment and Flexterra business, the latter previously unallocated);
- Advanced Packaging Division (unchanged).

The amounts for the first half of 2019 were **reclassified** according to the new operating structure (see the table below), so they are comparable with the 2020 figures.

(thousands of euro)

Consolidated statement of profit or loss	Metallurgy (ex Industrial)		Vacuum Technology		Medical		Specialty Chemicals		Advanced Packaging		Not Allocated Costs		Total									
	1 st half 2019	Reclass.	1 st half 2019 reclassified	1 st half 2019	Reclass.	1 st half 2019 reclassified	1 st half 2019	Reclass.	1 st half 2019 reclassified	1 st half 2019	Reclass.	1 st half 2019 reclassified	1 st half 2019	Reclass.	1 st half 2019 reclassified							
	Total net sales	42,200	(8,983)	33,217	0	5,522	5,522	41,272	0	41,272	0	3,461	3,461	5,015	0	5,015	0	0	0	88,487	0	88,487
Cost of sales	(21,382)	5,371	(16,011)	0	(2,669)	(2,669)	(24,730)	0	(24,730)	0	(2,702)	(2,702)	(4,555)	0	(4,555)	0	0	0	(50,667)	0	(50,667)	
Gross profit	20,818	(3,612)	17,206	0	2,853	2,853	16,542	0	16,542	0	759	759	460	0	460	0	0	0	37,820	0	37,820	
% on net sales	49.3%		51.8%	n.a.		51.7%	40.1%	n.a.	40.1%	n.a.	21.9%	21.9%	9.2%	n.a.	9.2%	n.a.	n.a.	n.a.	42.7%	0	42.7%	
Total operating expenses	(8,374)	2,673	(5,701)	0	(1,997)	(1,997)	(4,556)	0	(4,556)	0	(668)	(668)	(1,709)	0	(1,709)	(12,113)	(8)	(12,121)	0	(26,752)	0	(26,752)
Other income (expenses), net	270	(105)	167	0	102	102	0	0	0	0	2,268	2,268	(30)	0	(30)	2,104	(2,267)	(163)	2,344	0	2,344	
Operating income (loss)	12,714	(1,042)	11,672	0	958	958	11,986	0	11,986	0	2,359	2,359	(1,279)	0	(1,279)	(10,009)	(2,275)	(12,284)	13,412	0	13,412	
% on net sales	30.1%		35.1%	n.a.		17.3%	29.0%	n.a.	29.0%	n.a.	68.2%	68.2%	-25.5%	n.a.	-25.5%	n.a.	n.a.	n.a.	15.2%	0	15.2%	
Interest and other financial income (expenses), net																			3,016	0	3,016	
Write-down of financial assets																			(158)	0	(158)	
Gains (losses) from equity method evaluated companies																			(1,045)	0	(1,045)	
Foreign exchange gains (losses), net																			(31)	0	(31)	
Income (loss) before taxes																			15,196	0	15,196	
Income taxes																			(6,232)	0	(6,232)	
Net income (loss) from continued operations																			8,964	0	8,964	
Net income (loss) from discontinued operations																			176	0	176	
Net income (loss)																			9,140	0	9,140	
Minority interests in consolidated subsidiaries																			0	0	0	
Group net income (loss)																			9,140	0	9,140	

Seasonality of revenues

Based on historical trends, the revenues of the different businesses are not characterized by significant seasonal circumstances.

Scope of consolidation

The following table shows the companies included in the scope of consolidation according to the full consolidation method as at June 30, 2020.

Company	Currency	Capital Stock	% of Ownership	
			Direct	Indirect
Directly-controlled subsidiaries:				
SAES Getters USA, Inc. Colorado Springs, CO (USA)	USD	33,000,000	100.00	-
SAES Getters (Nanjing) Co., Ltd. Nanjing (P.R. of China)	USD	6,570,000	100.00	-
SAES Getters International Luxembourg S.A. Luxembourg (Luxembourg)	EUR	34,791,813	90.00	10.00*
SAES Getters Export, Corp. Wilmington, DE (USA)	USD	2,500	100.00	-
Memry GmbH in liquidation Weil am Rhein (Germany)	EUR	330,000	100.00	-
E.T.C. S.r.l. in liquidation Lainate, MI (Italy)	EUR	75,000	100.00	-
SAES Nitinol S.r.l. Lainate, MI (Italy)	EUR	10,000	100.00	-
SAES Coated Films S.p.A. Roncello, MB & Lainate, MI (Italy)	EUR	50,000	100.00	-
SAES Investments S.A. Luxembourg (Luxembourg)	EUR	30,000,000	100.00	-
Indirectly-controlled subsidiaries:				
<i>Through SAES Getters/U.S.A., Inc.:</i>				
Spectra-Mat, Inc. Watsonville, CA (USA)	USD	204,308	-	100.00
<i>Through SAES Getters International Luxembourg S.A.:</i>				
SAES Getters Korea Corporation Seoul (South Korea)	KRW	524,895,000	37.48	62.52
SAES Smart Materials, Inc. New Hartford, NY (USA)	USD	17,500,000	-	100.00
Memry Corporation Bethel, CT (USA) & Freiburg (Germany)	USD	30,000,000	-	100.00

* % of indirect ownership held by SAES Getters (Nanjing) Co., Ltd.

The following table shows the companies included in the scope of consolidation according to the equity method as at June 30, 2020.

Company	Currency	Capital Stock	% of Ownership	
			Direct	Indirect
Actuator Solutions GmbH Gunzenhausen (Germany)	EUR	2,000,000	-	50.00*
Actuator Solutions Taiwan Co., Ltd. in liquidation Taoyuan (Taiwan)	TWD	5,850,000	-	50.00**
Actuator Solutions (Shenzhen) Co., Ltd. in liquidation Shenzhen (P.R. of China)	EUR	760,000	-	50.00***
SAES RIAL Vacuum S.r.l. Parma, PR (Italy)	EUR	200,000	49.00	-
Flexterra, Inc. Skokie, IL (USA)	USD	33,382,842	-	46.73****
Flexterra Taiwan Co., Ltd. Zhubei City (Taiwan)	TWD	5,000,000	-	46.73*****

* % of indirect ownership held through SAES Nitinol S.r.l.

** % of indirect ownership held through the joint venture Actuator Solutions GmbH (which holds a 100% interest in Actuator Solutions Taiwan Co., Ltd. in liquidation).

*** % indirect ownership held through the joint venture Actuator Solutions GmbH (which holds a 100% interest in Actuator Solutions (Shenzhen) Co., Ltd. in liquidation).

**** % of indirect ownership held through SAES Getters International Luxembourg S.A.

***** % indirect ownership held through the joint venture Flexterra, Inc. (which holds a 100% interest in Flexterra Taiwan Co., Ltd.).

There were no changes in the scope of consolidation in the first half of 2020.

2. ACCOUNTING STANDARDS

Consolidation principles

Following the entry into force of the European Regulation no. 1606/2002, the SAES Group adopted the IAS/IFRS accounting standards starting from January 1, 2005.

The interim condensed consolidated financial statements for the six months ending June 30, 2020 have been prepared in accordance with the IFRSs issued by the International Accounting Standards Board (“IASB”) and approved by the European Union (“IFRS”), CONSOB resolutions no. 15519 and no. 15520 of July 27, 2006, CONSOB communication no. DEM/6064293 of July 28, 2006 and article 149-*duodecies* of the Issuers’ Regulation. The abbreviation “IFRS” includes all revised International Accounting Standards (“IAS”) and all interpretations issued by the International Financial Reporting Interpretations Committee (“IFRIC”), included those previously issued by the Standing Interpretations Committee (“SIC”).

The interim condensed consolidated financial statements as at June 30, 2020 were prepared according to IAS 34 revised - Interim financial reporting, applicable to interim reporting and therefore has to be read jointly with the consolidated financial statements as at December 31, 2019, since they do not include all the disclosures required for the annual financial statements prepared according to IAS/IFRS.

For comparison purposes 2019 comparative figures have also been presented, in application of IAS 1 - Presentation of Financial Statements.

IFRS accounting standards, amendments and interpretations applicable from January 1, 2020

The accounting standards, amendments and interpretations which were applied for the first time starting from January 1, 2020 are set out below.

Definition of Material (amendments to IAS 1 and IAS 8)

On October 31, 2018, the IASB published the document “Definition of Material (Amendments to IAS 1 and IAS 8)”. The document introduced an amendment to the definition of “material” contained in standards IAS 1 – Presentation of Financial Statements and IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors. The aim of this amendment is to make the definition of “material” more specific and introduced the concept of “obscured information” as being close to the concepts of omitted or erroneous information already in the two standards being amended. The amendment clarifies that information is “obscured” if it was described in a way that produces an effect on the main readers of financial statements similar to the effect that would be produced if that information had been omitted or erroneous.

The adoption of the amendment did not have any effects on the Group’s consolidated financial statements.

References to the Conceptual Framework in IFRS Standards (amendment)

On March 29, 2018, IASB published an amendment to “References to the Conceptual Framework in IFRS Standards”. The conceptual framework defines the key concepts for financial disclosure and guides the Council in developing IFRS standards. The document helps to ensure that the standards are conceptually consistent and that similar transactions are handled in the same way, in order to provide useful information to investors, lenders and other creditors. The conceptual framework supports companies in developing accounting principles when no IFRS standard is applicable to a particular transaction and, more generally, helps the relevant parties to understand and interpret the standards.

The adoption of the amendment did not have any effects on the Group’s consolidated financial statements.

Amendments to IFRS 9, IAS 39 and IFRS 7: Interest Rate Benchmark Reform

On September 26, 2019, IASB published “Amendments to IFRS 9, IAS 39 and IFRS 7: Interest Rate Benchmark Reform”. This amendment modifies IFRS 9 - Financial Instruments and IAS 39 - Financial Instruments: Recognition and Measurement as well as IFRS 7 - Financial Instruments: Disclosures. In particular, the amendment modifies some of the requirements for applying hedge accounting, envisaging temporary waivers to these requirements in order to mitigate the impact deriving from uncertainty regarding the IBOR reform (still ongoing) on future cash flows in the period preceding its completion. Moreover, the amendment imposes that companies provide additional information in financial statements regarding their hedge relationships that are directly affected by the uncertainties generated by the reform and to which the aforementioned waivers apply.

The adoption of the amendment did not have any effects on the Group’s consolidated financial statements.

Definition of a Business (amendments to IFRS 3)

On October 22, 2018, the IASB published the document “Definition of a Business (Amendments to IFRS 3)”. The document provides some clarifications on the definition of business in order to correctly apply the standard IFRS 3. More specifically, the amendment clarifies that while a business usually produces output, the presence of output is not strictly necessary to identify a business if there is an integrated set of activities/processes and assets. However, in order to meet the definition of business, an integrated set of activities/processes and assets must include, as a minimum, an input and a substantial process that together significantly contribute towards the capacity to create output. To that end, the IASB replaced the term “capacity to create output” with “capacity to contribute towards the creation of output” to clarify that a business may also exist without the presence of all the inputs and processes needed to create output.

The amendment also introduced an optional test (“concentration test”) for the entity to decide whether or not a set of activities/processes and assets acquired is a business. If the test gives a positive result, the set of activities/processes and assets acquired do not constitute a business and the standard does not require further checks. If the test provides a negative result, the entity will have to carry out further analyses on the activities/processes and assets acquired to identify the presence of a business. To that end, the amendment added numerous examples of the standard IFRS 3 in order to make the practical application of the new definition of business understood in certain cases.

The adoption of the amendment did not have any effects on the Group’s consolidated financial statements.

IFRS accounting standards, IFRIC interpretations and amendments endorsed by the European Union, but whose application is not yet mandatory and were not adopted in advance by the Group

As at June 30, 2020 there were no IFRS accounting standards, IFRIC interpretations and amendments approved by the European Union but not yet mandatorily applicable at that date.

IFRS accounting standards, amendments and interpretations not yet endorsed by the European Union

At the date of these consolidated financial statements, the competent bodies of the European Union have not yet completed the endorsement process necessary for the adoption of the amendments and the principles described below.

IFRS 17 – Insurance Contracts

On May 18, 2017, IASB issued IFRS 17 – Insurance Contracts that will replace IFRS 4 – Insurance Contracts.

The objective of the new standard is to ensure that an entity provides relevant information that faithfully represents rights and obligations deriving from the insurance contracts it issues. The IASB developed this standard to eliminate inconsistencies and weaknesses in existing accounting practices, by providing a single principle-based framework to account for all types of insurance contracts, including reinsurance contracts that an insurer holds.

The new standard also envisages some submission and reporting requirements to improve the comparability between the entities of this sector.

The new standard measures an insurance contract based on a General Model or a simplified version of it, called Premium Allocation Approach (“PAA”).

The main features of the General Model are as follows:

- estimates and assumptions of future cash flows are always the current ones;
- the measurement reflects the time value of money;
- estimates provide for an extensive use of information available in the market;
- there is a current and explicit risk measurement;
- the expected profit is deferred and aggregated in groups of insurance contracts at the time of their initial recognition;
- the expected profit is recognized in the hedging period taking into account the adjustments resulting from variations in the assumptions related to the cash flows of each group of contracts.

The PAA envisages measurement of the liability for the residual coverage of a group of insurance contracts provided that, on initial recognition, the entity provides that such a liability represents a reasonable approximation of the General Model. Contracts with a coverage period of one year or less are automatically eligible for the PAA. The simplifications arising from application of the PAA method do not apply to the assessment of liabilities for existing claims that are measured using the General Model. However, it is not necessary to discount those cash flows if the balance to be paid or settled is expected to take place within one year from the date in which the claim was filed.

The new standard must be applied to insurance contracts issued, including reinsurance contracts issued, reinsurance contracts held and also to investment contracts with a discretionary participation feature (DPF).

This standard applies starting from January 1, 2023, but early application is allowed only for entities applying IFRS 9 - Financial Instruments and IFRS 15 - Revenue from Contracts with Customers. The adoption of this standard is not expected to have any significant impact on the consolidated financial statements of SAES as there are no insurance companies in the Group.

Amendment to IAS 1 - Presentation of Financial Statements: Classification of Liabilities as Current or Non-current

On January 23, 2020 the IASB published the document “Amendments to IAS 1 - Presentation of Financial Statements: Classification of Liabilities as Current or Non-Current”. The aim of the document is to clarify how to classify current or non-current payables and other liabilities. The amendments will

become effective from January 1, 2022 but the IASB has issued an exposure draft postponing the effective date to January 1, 2023. However, early application is still permitted. The adoption of this amendment is not expected to have any significant impact on the consolidated financial statements of the Group.

Amendments to IFRS 3 - Business Combinations, IAS 16 - Property, Plant and Equipment and IAS 37 - Provisions, Contingent Liabilities and Contingent Assets; Annual Improvements 2018-2020

On May 14, 2020, the IASB published the following amendments:

- **Amendments to IFRS 3 - Business Combinations:** the amendments update the reference in IFRS 3 to the revised version of the Conceptual Framework, without changing the provisions of IFRS 3.
- **Amendments to IAS 16 - Property, Plant and Equipment:** the amendments do not allow the amount received from goods produced in an asset's trial phase to be deducted from the cost of property, plant and equipment. Such revenues from sales and the related costs are therefore recognized in the statement of profit or loss.
- **Amendments to IAS 37 - Provisions, Contingent Liabilities and Contingent Assets:** the amendment clarifies that all costs directly attributable to the contract must be considered when estimating any contract liabilities. Consequently, the measurement of any contract liability includes not only the incremental costs (e.g., the cost of material directly used in processing), but also all costs that the company cannot avoid in that it signed the contract (e.g., the percentage cost of personnel costs and depreciation of machinery used to fulfil the contract).
- **Annual Improvements 2018-2020:** the amendments were made to IFRS 1 - First-time Adoption of International Financial Reporting Standards, IFRS 9 - Financial Instruments, IAS 41 - Agriculture and the Illustrative Examples in IFRS 16 - Leases.

All these amendments will become effective from January 1, 2022. The adoption of these amendments is not expected to have any significant impact on the consolidated financial statements of the Group.

COVID-19-related Rent Concessions (Amendment to IFRS 16)

On May 28, 2020, the IASB published "COVID-19-related Rent Concessions (Amendment to IFRS 16)". For tenants, the document allows the option of accounting for decreases in lease payables related to COVID-19 without assessing, by analysing the contracts, whether the IFRS 16 definition of 'lease modification' is satisfied. Therefore, tenants applying this option will be able to account for the effects of decreases in rent instalments directly in the statement of profit or loss as at the effective date of the decrease.

This amendment, though applying to financial statements starting June 1, 2020, with the option of early application by companies in financial statements starting January 1, 2020, has not yet been endorsed by the European Union and therefore was not applied by the Group as at June 30, 2020. The adoption of this amendment is not expected to have any significant impact on the consolidated financial statements of the Group as, to date, there have been no significant changes to leases in relation to COVID-19.

Extension of the Temporary Exemption from Applying IFRS 9 (Amendments to IFRS 4)

On May 28, 2020, the IASB published "Extension of the Temporary Exemption from Applying IFRS 9 (Amendments to IFRS 4)". The amendments allow the temporary exemption from applying IFRS 9 to be extended to January 1, 2023.

These amendments will become effective from January 1, 2021. The adoption of these amendments is not expected to have any significant impact on the consolidated financial statements of the Group as IFRS 9 was already adopted without temporary exemptions with effect from 2018.

Use of estimates and subjective valuations

The preparation of the interim condensed consolidated financial statements and of the relative notes in application of IFRSs, requires the use of estimates and assumptions from management that have an effect on the values of assets and liabilities, as well as the disclosure of contingent assets and liabilities on the reporting date. If such estimates and assumptions, which are based on the best evaluation currently available, should differ from the actual circumstances in the future, they will be modified accordingly during the period in which said circumstances change.

In particular, estimates and subjective valuations are used to recognize provisions for credit risk, obsolete and slow-rotation inventory, depreciation and amortization, employee benefits, taxes, restructuring provisions as well as other accruals and provisions. The estimates are also used to define the duration and interest rate of the transactions that related to lease contracts. Estimates and assumptions are reviewed periodically and the effects of all changes are immediately reflected in the statement of profit or loss.

Note that some evaluation processes are generally conducted in complete form solely for the preparation of the annual report, when all the required information is available. For example, the actuarial valuations required to determine the provisions for employee benefits are normally conducted for the preparation of the annual report.

However, as regards the calculation of any impairment losses on non-current assets, normally only conducted in complete form for preparation of the annual report, pursuant to paragraphs 9 and 12 of IAS 36 the Directors have assessed the effects of the COVID-19 pandemic as an impairment indicator and, therefore, property, plant and equipment, intangible assets and rights of use on leased assets, as well as investments accounted for using the equity method were impairment tested as at June 30, 2020.

Please refer to the relative paragraphs of the Explanatory Notes for the main assumptions adopted and the sources used for making the estimates.

Criteria for translating items expressed in foreign currencies

The consolidated financial statements are presented in euro, which is the functional currency of the Group.

Each Group company defines the functional currency for its financial statements. Transactions in foreign currencies are initially recorded at the exchange rate (related to the functional currency) at the date of the transaction.

All of the assets and liabilities of foreign companies in currencies other than the euro that fall within the scope of consolidation are translated using the exchange rates in force as of the balance sheet data (current exchange rate method), whereas the associated revenues and costs are converted at the average exchange rates for the period. Translation differences resulting from the application of this method are classified as a shareholders' equity item until the equity investment is sold. In preparing the consolidated cash flow statement, the cash flows of consolidated foreign companies expressed in currencies other than the euro are translated using the average exchange rates for the period.

Non-current items measured at historical cost in a foreign currency (including goodwill and adjustments to the fair value generated during the purchase price allocation of a foreign company) are translated at the exchange rates at the date of their initial recording. At a later stage, these figures are translated at the exchange rate at period end.

The following table shows the exchange rates used for the translation of foreign financial statements.

expressed in foreign currency (per 1 euro)

Currency	June 30, 2020		December 31, 2019		June 30, 2019	
	Average rate	Final rate	Average rate	Final rate	Average rate	Final rate
US dollar	1.1020	1.1198	1.1195	1.1234	1.1298	1.1380
Japanese yen	119.2668	120.6600	122.0058	121.9400	124.2836	122.6000
South Korean won	1,329.5321	1,345.8300	1,305.3173	1,296.2800	1,295.1984	1,315.3500
Renminbi (P.R. of China)	7.7509	7.9219	7.7355	7.8205	7.6678	7.8185
Taiwan dollar	33.0702	33.0076	34.6057	33.7156	34.9981	35.2965

When the IFRS were first adopted, the combined translation differences generated by the consolidation of foreign companies outside the Eurozone were set at zero, as allowed by IFRS 1 (First-time Adoption of International Financial Reporting Standards) and therefore only the translation differences accumulated and recognized after January 1, 2004 contribute to determining capital gains and losses generated by their transfer, if any.

3. NET REVENUES

In the first half of 2020, consolidated net revenues were equal to 89,099 thousand euro, up by 0.7% compared to 88,487 thousand euro in the first half of 2019. Excluding the positive effect of exchange gains, equal to +1.7%, associated with appreciation of the US Dollar against the Euro and concentrated in the first few months of the current year, the overall change was slightly negative, at -1%. The segments that recorded the strongest increases in the first half of the year were security and defence (higher sales of getters for infrared sensors and night-vision systems for defence applications) and advanced getters for the consumer electronics market (Functional Dispensable Products business). These increases were offset by the decline in other business which was more affected by the COVID-19 crisis (medical devices in Nitinol and industrial SMAs for automotive and consumer applications).

The following table shows a breakdown of revenues by business sector.

(thousands of euro)

Businesses (*)	1 st half 2020	1 st half 2019	Total difference	Total difference %	Exchange rate effect %	Organic change %
Security & Defense	9,524	6,365	3,159	49.6%	1.9%	47.7%
Electronic Devices	7,702	7,507	195	2.6%	1.0%	1.6%
Healthcare Diagnostics	2,752	2,450	302	12.3%	1.2%	11.1%
Lamps	1,946	2,274	(328)	-14.4%	1.2%	-15.6%
Thermal Insulated Devices	1,674	1,833	(159)	-8.7%	2.4%	-11.1%
Sintered Components for Electronic Devices & Lasers	3,733	4,542	(809)	-17.8%	2.0%	-19.8%
SMA Industrial	6,208	8,246	(2,038)	-24.7%	1.0%	-25.7%
Metallurgy Division	33,539	33,217	322	1.0%	1.4%	-0.4%
Solutions for Vacuum Systems	5,359	5,522	(163)	-3.0%	1.3%	-4.3%
Vacuum Technology Division	5,359	5,522	(163)	-3.0%	1.3%	-4.3%
Nitinol for Medical Devices	40,145	41,272	(1,127)	-2.7%	2.4%	-5.1%
Medical Division	40,145	41,272	(1,127)	-2.7%	2.4%	-5.1%
Functional Dispensable Products	5,024	3,461	1,563	45.2%	0.5%	44.7%
Specialty Chemicals Division	5,024	3,461	1,563	45.2%	0.5%	44.7%
Advanced Coatings	5,032	5,015	17	0.3%	0.0%	0.3%
Advanced Packaging Division	5,032	5,015	17	0.3%	0.0%	0.3%
Total consolidated net revenues	89,099	88,487	612	0.7%	1.7%	-1.0%

(*) Starting from January 1, 2020, the Group is organized in the following technological competency areas (or "Divisions"):

- Metallurgy Division (which coincides with the previous Industrial operating sector, excluding Solutions for Vacuum Systems, Functional Chemical Systems and advanced getters for the consumer electronics market, the latter previously classified within the Electronic Devices Business);
- Vacuum Technology Division (which coincides with the Solutions for Vacuum Systems Business, included in the Industrial operating segment);
- Medical Division (unchanged);
- Specialty Chemicals Division (i.e. advanced getters for the consumer electronics market, classified within the Electronic Devices Business as at December 31, 2019, in addition to the Functional Chemical Systems segment and Flexterra business, the latter previously unallocated);
- Advanced Packaging Division (unchanged).

Please refer to the Interim Report on operations for further details and comments.

4. COST OF SALES

The cost of sales amounted to 50,876 thousand euro in the first half of 2020, compared to 50,667 thousand euro in the corresponding period of the previous year.

A breakdown of the cost of sales by category is provided below, compared with the actual figure of the first half of 2019.

(thousands of euro)

Cost of sales	1st half 2020	1st half 2019	Difference
Raw materials	16,854	15,767	1,087
Direct labour	14,452	14,426	26
Manufacturing overhead	23,019	21,224	1,795
Increase (decrease) in work in progress and finished goods	(3,449)	(750)	(2,699)
Total cost of sales	50,876	50,667	209

Excluding the increase due to exchange rates performance (+827 thousand euro), the percentage change in the cost of sales (-1.2%) was substantially in line with the overall decrease in revenues (-1%).

In detail, while the overall change in the **cost of direct labour** was essentially in line with revenue (-1.5%), the **cost of materials** recorded a stronger decrease (overall change of -12.1%, including the change in inventory of semi-finished goods and finished products, as well as raw materials) compared to the overall change in revenues, due to the different and more favourable sales mix (particularly in the vacuum pumps and advanced packaging businesses). **Indirect production costs** instead saw a change in the opposite direction (overall increase of +6.7%) as they were penalized by a number of temporary production inefficiencies in the medical sector (in particular, increased personnel costs associated with the project, still ongoing, to construct a new tubes department at the Bethel plant) and the write-down of the residual value of an SMA furnace decommissioned during the first half of the year (-110 thousand euro).

5. OPERATING EXPENSES

Operating expenses amounted to 26,326 thousand euro in the first half of 2020, compared to 26,752 thousand euro in the same period of the previous year.

A breakdown by function of operating expenses, compared with the previous year, is given below.

(thousands of euro)

Operating expenses	1st half 2020	1st half 2019	Difference
Research & development expenses	5,283	5,524	(241)
Selling expenses	5,675	6,253	(578)
General & administrative expenses	15,368	14,975	393
Total operating expenses	26,326	26,752	(426)

Excluding the penalizing effect of the exchange rates (+179 thousand euro), operating expenses decreased by -605 thousand (-2.3%): the decrease is main concentrated in the **cost of sales** (-10.2% due to lower travel expenses and reduced marketing costs caused by the COVID-19 pandemic, as well as the reduced commissions to third parties as a result of lower SMA trained wire sales). Also down slightly (-5%) were the **research and development costs**, due to reduced consulting and lower patent management costs. Vice versa, **general and administrative expenses** increased slightly (by +2.1% overall) due to extraordinary expenses of around 0.3 million euro incurred to manage to COVID-19 emergency (in particular, costs for sanitization and adaptation of access points and work spaces to ensure employee safety, as well as healthcare and prevention expenses and consulting and training costs). Excluding the latter, the general and administrative expenses would be in line with the corresponding period of 2019. The higher consulting costs, for special projects and for the IT system development, were in fact offset by

lower severance costs¹⁷, as well as by the lower travel expenses and savings related to the reduced physical presence of staff as a result of recourse to smart working brought about by COVID-19.

A breakdown of **costs by nature** included in the cost of sales and operating expenses, compared with June 30, 2019, is given below.

(thousands of euro)

Total costs by nature	1st half 2020	1st half 2019	Difference
Raw materials	16,854	15,767	1,087
Personnel costs	39,681	38,932	749
Corporate bodies	2,445	2,498	(53)
Travel expenses	238	718	(480)
Maintenance and repairs	1,804	1,809	(5)
Various materials	4,355	4,285	70
Transports	976	960	16
Commissions	183	317	(134)
Licenses and patents	348	389	(41)
Consultant fees and legal expenses	3,464	2,825	639
Audit fees	306	307	(1)
Rent and operating leases	227	459	(232)
Insurances	565	559	6
Advertising costs	119	214	(95)
Utilities	1,919	1,812	107
Telephones and faxes	151	166	(15)
General services (canteen, cleaning, vigilance, etc.)	906	906	0
Training costs	53	131	(78)
Depreciation	3,525	3,298	227
Amortization	636	604	32
Right of use depreciation	1,035	662	373
Write-down of non current assets	115	1	114
Provision (release) for bad debts	19	(25)	44
Other	727	575	152
Total costs by nature	80,651	78,169	2,482
Increase (decrease) in work in progress and finished goods	(3,449)	(750)	(2,699)
Total cost of sales and operating expenses	77,202	77,419	(217)

All the expense types were in line with the previous year. The main changes are commented below.

The increase in the item “Raw materials” was offset by the decrease in “Increase (decrease) in work in progress and finished goods”, the latter due to temporary stock increases in the Nitinol business and in the Specialty Chemicals Division.

The increase in the item “Personnel costs” is primarily attributable to the penalizing effect of exchange rates (+543 thousand euro) and the increase in the average number of employees at the US subsidiaries, the latter partly offset by reduced recourse to temporary work. It should also be remembered that the first half of 2019 was penalized by the above-mentioned severance costs, amounting to 0.3 million euro, related to completion of the downsizing process of Parent Company staff that began at the end of 2018 following the sale of the purification business.

¹⁷ 0.3 million euro in the first half of 2019, related to completion of the downsizing process of the Parent Company staff that began at the end of 2018 following the sale of the purification business, versus zero costs in the first half of 2020.

Lastly, note that the Parent Company's use of the COVID furloughing scheme at the Lainate plant, along with support measures implemented by the US Government as part-reimbursement of non-working days by employees as a result of the pandemic, led to a saving of -222 thousand euro in the cost of labour.

The decrease in the items "Travel expenses", "Advertising costs" and "Training costs" is a direct consequence of COVID-19 restrictions imposed for health reasons and as employee health protection and, in more general terms, to protect society as a whole.

The decrease in "Commissions" is also related to COVID-19. In the first half of 2020 less commissions were paid on the sales of SMA trained wire for consumer electronics applications, the business worst hit by the pandemic.

The item "Consultant fees and legal expenses" went up due to special projects in the packaging sector and to activities launched by the Parent Company in the first half of this year for corporate IT system development.

The change in the item "Rent and operating leases" is associated with the purchase on May 1, 2019 of the property used as production plant in Bethel (CT) of the US subsidiary Memry Corporation. The building was rented prior to purchase, but the related contract had been excluded from the scope of first-time adoption of IFRS 16 as at January 1, 2019, since the residual duration was less than 12 months. The rental cost from January 1-April 30, 2019 was therefore included under rent.

The increase in the item "Right of use depreciation" relates mainly to the additional production floorspace, again in Bethel, leased to Memry Corporation with effect from July 1, 2019.

The item "Write-down of non-current assets" as at June 30, 2020, primarily includes the write-down of the residual value of an SMA furnace decommissioned during the first half by the affiliate SAES Smart Materials, Inc.

The breakdown by nature of **extraordinary items related to the COVID-19 pandemic**, included in the cost of sales and in operating expenses for the first half of 2020, is provided below.

(thousands of euro)	1 st half 2020						
	One-off Covid-19	Direct labour	Manufacturing overhead	Research & development expenses	Selling expenses	General & administrative expenses	Total
Personnel costs		(101)	(53)	(44)	(11)	47	(162) (*)
Maintenance and repairs						30	30
Various materials						103	103
Transports						3	3
Consultant fees and legal expenses						73	73
General services (canteen, cleaning, vigilance, etc.)						38	38
Training costs						3	3
Total cost of sales & operating expenses one-off Covid-19		(101)	(53)	(44)	(11)	297	88

(*) The amount is composed by:

- CIGO savings in the Lainate plant of the Parent Company, equal to -55 thousand euro;
- savings for the US governmental measures to support companies and families, equal to -167 thousand euro;
- additional personnel costs, equal to +60 thousand euro.

The extraordinary expenses of around 310 thousand euro refer mainly to costs for sanitization and adaptation of access points and work spaces to ensure employee safety, as well as healthcare and prevention expenses and consulting and training costs. Also note the above-mentioned decrease in the cost of labour, in total -222 thousand euro, made possible by recourse to the government furlough scheme at the Parent Company's Lainate plant and the support measures implemented by the US Government that benefited all the US operating subsidiaries of the Group.

6. OTHER INCOME (EXPENSES)

The item “Other income (expenses)” as at June 30, 2020 recorded a negative balance of 754 thousand euro compared to a positive 2,344 thousand euro in the corresponding period of the previous year.

A breakdown of both half-year periods is provided below.

(thousands of euro)				of which:
	1 st Half 2020	1 st Half 2019	Difference	Covid-19 Donations
Other income	226	2,604	(2,378)	0
Other expenses	(980)	(260)	(720)	(689)
Total other income (expenses)	(754)	2,344	(3,098)	(689)

The item "Other income" includes all the revenue that does not fall within the ordinary operations of the Group, such as, for example, the proceeds from the sale of scrap materials. The change compared to June 30, 2019 is related to the income from a related party, equal to 2,267 thousand euro, recorded in the first half of 2019 following the sale of the OLET-related patents owned by E.T.C. S.r.l. in liquidation to the joint venture Flexterra, Inc., as well as other extraordinary revenue for 248 thousand euro for insurance reimbursements and a favourable settlement of legal disputes that were still pending in the previous year. In the first half of this year, the item instead includes extraordinary revenue of 100 thousand euro for the release of a risk provision for a legal dispute, following the court’s pronouncement in favour of the SAES Group (for further details please refer to Note no. 32).

The item “Other expenses”, however, mainly includes the property taxes and other taxes, other than income taxes, mostly paid by the Group’s Italian companies. The change compared to June 30, 2019, is attributable to donations amounting to 689 thousand euro made by the Parent Company in the first half of this year to research and hospital facilities working on the front line to overcome the COVID-19 emergency, as well as to the Italian Civil Defense.

7. FINANCIAL INCOME (EXPENSES) AND WRITE-DOWN OF FINANCIAL ASSETS

The following tables show the financial income (expenses) breakdown in the first half of 2020, compared to the corresponding period of the previous year.

(thousands of euro)			
Financial income	1 st Half 2020	1 st Half 2019	Difference
Bank interest income	58	39	19
Other financial income	244	262	(18)
Gains from securities evaluated at fair value	0	2,316	(2,316)
Other income and coupons collected on securities	1,292	970	322
Gains from derivative instruments evaluated at fair value	10	0	10
Total financial income	1,604	3,587	(1,983)

(thousands of euro)

Financial expenses	1st Half 2020	1st Half 2019	Difference
Bank interests and other bank expenses	1,035	331	704
Other financial expenses	95	1	94
Losses from securities evaluated at fair value	6,476	0	6,476
Commissions and other securities costs	168	164	4
Interest on lease financial liabilities	88	24	64
Realized losses on derivative instruments	15	17	(2)
Losses from derivative instruments evaluated at fair value	0	34	(34)
Total financial expenses	7,877	571	7,306
Write-down of financial receivables and other financial assets	187	158	29
Total financial expenses & write-down of financial assets	8,064	729	7,335

The item “Other financial income” is mainly composed by interest income accrued on interest-bearing loans granted by the Group to the joint ventures Actuator Solutions GmbH and SAES RIAL Vacuum S.r.l., and as at June 30, 2020, was in line with the corresponding period of 2019.

The items “Gains/Losses from securities evaluated at fair value” are associated with the measurement at fair value of the securities subscribed¹⁸ at the end of 2018 and beginning of 2019 to invest the cash resulting from the extraordinary sale of the purification business completed at the end of June 2018. Whereas in the first half of 2019 there was an increase in the fair value of securities of +2,316 thousand euro, the decrease as at June 30, 2020, is an effect of the COVID-19 crisis on the financial markets. In particular, the negative effect recorded in the first quarter (-10,302 thousand euro) was partially reabsorbed in the second quarter (+3,826 thousand euro), allowing closure of the first half of this year with a decline in fair value of -6,476 thousand euro.

Again in relation to the securities portfolio, income from the collection of coupons (“Other income and coupons collected on securities”) amounted to 1,292 thousand euro, up on the 970 thousand euro of June 30, 2019.

Lastly, “Commissions and other securities costs” include the management commissions on the above-mentioned securities portfolio (168 thousand euro as at June 30, 2020, compared to 164 thousand euro as at June 30, 2019, the latter including the 1 thousand euro net capital loss on securities sold).

Please refer to Note no. 18 for further details on the securities subscribed.

The item “Bank interests and other bank expenses” included interest expenses on both short term and long term loans granted to the Parent Company, SAES Coated Films S.p.A. and the US subsidiary Memry Corporation, as well as the bank fees related to the credit lines held by the Italian companies of the Group. The increase compared to the previous year is linked to upfront fees on the new revolving credit lines signed by the Parent Company in the first half of this year (for further details please refer to the paragraph “Main events in the half-year period”), as well as interest expense on the long-term loan signed in April 2019 with Mediobanca to cover outlay for the partial voluntary public tender offer finalised at the end of May in the previous year by SAES Getters S.p.A.

The items “Income/Losses from derivative instruments evaluated at fair value” represent the effect on the statement of profit or loss of the fair value measurement of the hedge contracts, including those embedded, on the long-term variable rate loans held by the Parent Company and SAES Coated Films S.p.A.

The items “Realized gains/losses on derivative instruments” instead include the interest spreads actually paid to banks for those contracts during the period.

¹⁸ Securities subscribed by the Parent Company and SAES Investments S.A.

The item “Write-down of financial receivables and other financial assets” in both half years is mainly made up of the write-down of the financial receivable that the Group granted to Actuator Solutions GmbH, for interest accrued in the period on interest-bearing loans that SAES Nitinol S.r.l. granted to the joint venture during previous years (from 2014 to 2018). The financial receivable, amounting to 239 thousand euro as at June 30, 2020 and 238 thousand euro as at June 30, 2019, was fully written-down as its recovery was deemed improbable.

The item “Write-down of financial receivables and other financial assets” includes the write-downs of financial assets, in particular cash and cash equivalents, in application of IFRS 9. The expected losses were calculated in accordance with a default percentage associated with each bank where the cash and cash equivalents are deposited, obtained on the basis of each bank’s rating. Compared to December 31, 2019, given the riskiness associated with some of the banks with which the Group has essentially unchanged relationships, this calculation led to a reduction in the expected losses on cash and cash equivalents of 52 thousand euro, due to the reduced cash held by the Group (31.2 million euro at June 30, 2020 compared to 48.6 million euro at December 31, 2019). The decrease in expected losses as at June 30, 2019, was instead 80 thousand euro.

8. INCOME (LOSS) FROM EQUITY METHOD EVALUATED COMPANIES

The item “Income (loss) from equity method evaluated companies” includes the Group’s share in the result of the joint ventures Actuator Solutions GmbH¹⁹, SAES RIAL Vacuum S.r.l. and Flexterra, Inc.²⁰, consolidated with the equity method.

(thousands of euro)

	1 st Half 2020	1 st Half 2019	Difference
Actuator Solutions	0	0	0
SAES RIAL Vacuum S.r.l.	23	15	8
Flexterra	(907)	(1,058)	151
Total income (loss) from equity method evaluated companies	(884)	(1,043)	159

In the first half of 2020, the net loss deriving from measurement using the equity method amounted to - 884 thousand euro, and in accordance with the corresponding period of the previous financial period, was mainly attributable to **Flexterra** (-907 thousand euro). The company was established as a technological start-up and has made notable progress in the development of its proprietary chemical formulas over the last two years; in the first half of 2020 it recorded revenue that was still immaterial (50 thousand euro) mainly attributable to an initial purchase order received from a leading Taiwanese manufacturer of display panels, against operating expense of over 2.1 million euro (mainly research and development costs and, lower in absolute terms, to general and administrative expenses).

After a first quarter heavily penalized by the COVID-19 pandemic, **SAES RIAL Vacuum S.r.l.** recorded excellent results during the second quarter, closing the half year with a slight profit (+48 thousand euro), allowing the recognition of a gain from measurement at equity for 23 thousand euro.

Though **Actuator Solutions** closed the first half of 2020 in profit (+717 thousand euro), SAES’ share (+358 thousand euro) was not recorded by the Group as the equity of the joint venture is still negative for

¹⁹ Actuator Solutions GmbH consolidates its wholly owned subsidiaries Actuator Solutions Taiwan Co., Ltd. in liquidation (established in June 2013) and Actuator Solutions (Shenzhen) Co., Ltd., in liquidation (established in September 2016).

²⁰ Flexterra, Inc., in turn, consolidated the wholly owned subsidiary Flexterra Taiwan Co., Ltd. (established in January 2017).

around 2.6 million euro²¹, against a SAES equity interest in Actuator Solutions that had already been full written off.

For further details on the performance of the joint ventures please refer to the Interim Report on operations, paragraph “Performance of the joint ventures in the first half of 2020” and to Note no 17.

9. FOREIGN EXCHANGE GAINS (LOSSES), NET

In the first half of 2020, the exchange rate management recorded a balance that essentially broke even (a negative 29 thousand euro), in line with the corresponding period of the previous year (negative 31 thousand euro). The exchange rate result which was close to zero confirms the overall effectiveness of the hedging policies put in place by the Group, adopted in order to limit the impact of currency fluctuations.

Details of the foreign exchange gains and losses as at June 30, 2020 compared to the same period of the previous year are set out in the table below.

(thousands of euro)

Foreign exchange gains and losses	1 st Half 2020	1 st Half 2019	Difference
Foreign exchange gains	340	232	108
Foreign exchange losses	(369)	(263)	(106)
Foreign exchange gains (losses), net	(29)	(31)	2
Realized exchange gains on forward contracts	0	0	0
Realized exchange losses on forward contracts	0	0	0
Gains (losses) from forward contracts evaluated at fair value	0	0	0
Gains (losses) on forward contracts	0	0	0
Total foreign exchange gains (losses), net	(29)	(31)	2

In both financial periods, the exchange differences on commercial type transactions, intercompany included, generated in the first quarter were offset by opposite sign exchange differences in the second quarter. In particular, in 2020 the exchange gains for the first quarter were offset by losses as a result of the gradual depreciation of the US Dollar in the second quarter.

As in the previous year, as at June 30, 2020, the Group did not have any forward sales contracts in place and no derivative contracts on currencies were closed in the current half-year period.

²¹ Consolidated pro rata at 50%.

10. INCOME TAXES

As at June 30, 2020, income taxes amounted to 3,332 thousand euro, compared to 6,232 thousand euro in the corresponding period of the previous year.

The related details are provided below.

(thousands of euro)

	1 st Half 2020	1 st Half 2019	Difference
Current taxes	2,921	4,682 (*)	(1,761)
Deferred taxes	411	1,550	(1,139)
Total	3,332	6,232	(2,900)

(*) The current taxes of the 1st half 2019 do not correspond to the amounts shown in the Consolidated cash flow statement because they do not include the revenues for current taxes on adjustment on the consideration for the purification business disposal, classified under the item "Result from discontinued operations".

In the first half of the year, the item mainly includes the taxes of US companies. The decrease compared to the previous year is largely attributable to the reduction in US taxes against lower taxable amounts and the decrease in taxes of the subsidiary SAES Investments S.A., which closed the first half with a fiscal loss due to losses on securities resulting from the COVID-19 crisis.

The Group's tax rate was 88.4%, compared to 41% in the first half of 2019. This high tax rate is due to the fact that the Parent Company, SAES Coated Films S.p.A. and SAES Investments S.A. ended the first half of the year with a negative taxable income, not recorded as deferred tax assets.

As in the first half of 2019, no Group company recognized deferred tax assets on the fiscal losses realized at June 30, 2020. These fiscal losses totaled 6,813 thousand euro compared to fiscal losses equal to 5,641 thousand euro in the first half of 2019. The increase is mainly linked to the negative taxable amount of SAES Investments S.A., which closed the first half with a fiscal loss due to losses on securities associated with the COVID-19 financial crisis, and to the higher negative taxable amounts of the Parent Company, only partly offset by the decrease in fiscal losses of SAES Coated Films S.p.A.

11. INCOME (LOSS) FROM DISCONTINUED OPERATIONS

In the first half of 2019, the profit from discontinued operations amounted to 176 thousand euro, mainly comprising the positive adjustment to the sale price for the purification business due to the settlement of the effective value of the tax credit of the companies that were sold - SAES Getters USA, Inc. and SAES Pure Gas, Inc. - resulting from the tax return for the period January 1 – June 24, 2018, filed in April 2019.

The result for discontinued operations in the first half of 2020, however, was zero.

12. EARNINGS (LOSS) PER SHARE

As indicated in Note no. 27, SAES Getters S.p.A.'s capital stock is represented by two different types of shares (ordinary shares and savings shares) which bear different rights with regard to the distribution of dividends.

The pro-quota earning attributable to each type of shares is determined on the basis of the respective rights to receive dividends. Therefore, in order to calculate the earnings per share, the value of the preferred dividends contractually assigned to savings shares has been deducted from the net income of the period, assuming the theoretical distribution of the latter. The value obtained is divided by the average number of outstanding shares in the semester.

If the period ended with a loss, the latter would be instead allocated equally to each type of shares.

The following table shows the result per share in the first half of 2020, compared with the figure of the first half of 2019.

Earning (loss) per share	1 st half 2020			1 st half 2019		
	Ordinary shares	Savings shares	Total	Ordinary shares	Savings shares	Total
Profit (loss) attributable to shareholders (thousands of euro)			438			9,140
Theoretical preference dividends (thousands of euro)		438	438		1,022	1,022
Profit (loss) attributable to the different categories of shares (thousands of euro)	0	0	0	5,908	2,210	8,118
Total profit (loss) attributable to the different categories of shares (thousands of euro)	0	438	438	5,908	3,232	9,140
Average number of outstanding shares	10,771,350	7,378,619	18,149,969	14,021,350	7,378,619	21,399,969
Basic earning (loss) per share (euro)	0.00000	0.05936		0.42137	0.43800	
- from continued operations (euro)	0.00000	0.05936		0.41315	0.42978	(*)
- from discontinued operations (euro)	0.00000	0.00000		0.00000	0.02385	
Diluted earning (loss) per share (euro)	0.00000	0.05936		0.42137	0.43800	
- from continued operations (euro)	0.00000	0.05936		0.41315	0.42978	(*)
- from discontinued operations (euro)	0.00000	0.00000		0.00000	0.02385	

(*) The sum of the earning per share from continued operations and that from discontinued operations differs from the basic earning per share because the net income from continued operations and the income from discontinued operations have been attributed considering both the preference dividend to savings shares and the higher dividend due to the latter (in accordance with article no. 26 of the By-laws).

The reduction in the average number of ordinary shares in issue in the first half of 2020 compared to the corresponding period of 2019 (10,771,350 compared to 14,021,350) is due to the voluntary partial public tender offer finalized by SAES Getters S.p.A. at the end of May 2019, the details of which can be found in the Consolidated Financial Statements as at December 31, 2019.

The table below illustrates the earnings per share for the first half of 2020, compared with that of the corresponding period in 2019, calculated on the assumption that the treasury stock was acquired at the beginning of the year and therefore with the average number of ordinary shares in issue in the current half year corresponding to what was actually in issue at June 30, 2019.

Earning (loss) per share	1 st half 2020			1 st half 2019		
	Ordinary shares	Savings shares	Total	Ordinary shares	Savings shares	Total
Profit (loss) attributable to shareholders (thousands of euro)			438			9,140
Theoretical preference dividends (thousands of euro)		438	438		1,022	1,022
Profit (loss) attributable to the different categories of shares (thousands of euro)	0	0	0	5,351	2,766	8,118
Total profit (loss) attributable to the different categories of shares (thousands of euro)	0	438	438	5,351	3,789	9,140
Average number of outstanding shares	10,771,350	7,378,619	18,149,969	10,771,350	7,378,619	18,149,969 (**)
Basic earning (loss) per share (euro)	0.00000	0.05936		0.49682	0.51345	
- from continued operations (euro)	0.00000	0.05936		0.48712	0.50375 (*)	
- from discontinued operations (euro)	0.00000	0.00000		0.00000	0.02385 (*)	
Diluted earning (loss) per share (euro)	0.00000	0.05936		0.49682	0.51345	
- from continued operations (euro)	0.00000	0.05936		0.48712	0.50375 (*)	
- from discontinued operations (euro)	0.00000	0.00000		0.00000	0.02385 (*)	

(*) The sum of the earning per share from continued operations and that from discontinued operations differs from the basic earning per share because the net income from continued operations and the income from discontinued operations have been attributed considering both the preference dividend to savings shares and the higher dividend due to the latter (in accordance with article no. 26 of the By-laws).

(**) Average number of ordinary shares outstanding in the first half of 2019, it is calculated assuming that the purchase of treasury shares took place at the beginning of the year, rather than at the end of May 2019.

13. SEGMENT INFORMATION

For management purposes, the Group is organised into five Divisions based on the reference technological area for products and services provided:

- **Metallurgy** – metallic-based getter and metal dispenser components used in a wide range of industrial applications (electronic vacuum devices, MEMS, image diagnostic systems, thermal insulation systems and lamps) and shape memory alloy components and devices for industrial applications (home automation, white goods industry, consumer electronics, the automotive sector and luxury goods);
- **Vacuum Technology** – actual devices based on getter materials for vacuum systems with applications in the industrial sector, in research and in particle accelerators;
- **Medical** – raw materials, semi-finished products and super-elastic components in Nitinol alloy for medical applications, mainly in the non-invasive surgical sector;
- **Specialty Chemicals** – getter materials integrated into polymeric matrices for organic and hybrid electronic applications, photonics and implantable medical devices;
- **Advanced Packaging** – advanced coating solutions for packaging, metallized films and innovative plastic films for the food packaging market, and more generally, for the sustainable packaging sector, also fully recyclable and biodegradable.

For changes in the operating structure compared to the previous year, please refer to Note no. 1, paragraph “Segment information”.

The Top Management separately monitors the results of the various Divisions in order to make decisions concerning the allocation of resources and investments and to determine the Group’s performance. Each sector is evaluated according to its operating result; financial income and expenses, foreign exchange performance and income taxes are measured at the overall Group level and thus they are not allocated to the operating segments.

Internal reports are prepared in accordance with IFRSs and no reconciliation with the carrying amounts is therefore necessary.

The “Not Allocated” column includes the corporate costs, i.e. those expenses that cannot be directly attributed or allocated in a reasonable way to the business units, but which refer to the Group as a whole, and the costs related to the basic research projects or aimed to diversify into innovative businesses.

The following table shows the breakdown of the main statement of profit or loss figures by operating segment.

(thousands of euro)

Consolidated statement of profit or loss	Metallurgy		Vacuum Technology		Medical		Specialty Chemicals		Advanced Packaging		Not Allocated Costs		Total	
	1 st half 2020	1 st half 2019 (*)	1 st half 2020	1 st half 2019 (*)	1 st half 2020	1 st half 2019 (*)	1 st half 2020	1 st half 2019 (*)	1 st half 2020	1 st half 2019 (*)	1 st half 2020	1 st half 2019 (*)	1 st half 2020	1 st half 2019 (*)
Total net sales	33,539	33,217	5,359	5,522	40,145	41,272	5,024	3,461	5,032	5,015	0	0	89,099	88,487
Cost of sales	(16,454)	(16,011)	(2,074)	(2,669)	(24,294)	(24,730)	(3,628)	(2,702)	(4,423)	(4,555)	(3)	0	(50,876)	(50,667)
Gross profit	17,085	17,206	3,285	2,853	15,851	16,542	1,396	759	609	460	(3)	0	38,223	37,820
% on net sales	50.9%	51.8%	61.3%	51.7%	39.5%	40.1%	27.8%	21.9%	12.1%	9.2%	n.a.	n.a.	42.9%	42.7%
Total operating expenses	(5,908)	(5,701)	(1,882)	(1,997)	(4,309)	(4,556)	(800)	(668)	(1,740)	(1,709)	(11,687)	(12,121)	(26,326)	(26,752)
Other income (expenses), net	44	167	14	102	16	0	(41)	2,268	6	(30)	(793)	(163)	(754)	2,344
Operating income (loss)	11,221	11,672	1,417	958	11,558	11,986	555	2,359	(1,125)	(1,279)	(12,483)	(12,284)	11,143	13,412
% on net sales	33.5%	35.1%	26.4%	17.3%	28.8%	29.0%	11.0%	68.2%	-22.4%	-25.5%	n.a.	n.a.	12.5%	15.2%
Interest and other financial income (expenses), net													(6,273)	3,016
Write-down of financial assets													(187)	(158)
Gains (losses) from equity method evaluated companies													(884)	(1,043)
Foreign exchange gains (losses), net													(29)	(31)
Income (loss) before taxes													3,770	15,196
Income taxes													(3,332)	(6,232)
Net income (loss) from continued operations													438	8,964
Net income (loss) from discontinued operations													0	176
Net income (loss)													438	9,140
Minority interests in consolidated subsidiaries													0	0
Group net income (loss)													438	9,140

(*) Starting from January 1, 2020, the Group is organized in the following technological competency areas (or "Divisions"):

- Metallurgy Division (which coincides with the previous Industrial operating sector, excluding Solutions for Vacuum Systems, Functional Chemical Systems and advanced getters for the consumer electronics market, the latter previously classified within the Electronic Devices Business);
- Vacuum Technology Division (which coincides with the Solutions for Vacuum Systems Business, included in the Industrial operating segment);
- Medical Division (unchanged);
- Specialty Chemicals Division (i.e. advanced getters for the consumer electronics market, classified within the Electronic Devices Business as at December 31, 2019, in addition to the Functional Chemical Systems segment and Flexterra business, the latter previously unallocated);
- Advanced Packaging Division (unchanged).

Information on geographical areas

Please refer to the table and the comments in the Interim Report on Operations for the breakdown of revenues by customer location.

The split of consolidated net sales based on the countries where the Group's companies that generated the revenue are based, is provided below.

(thousands of euro)

Country in which the Group's entity is located	1 st half 2020	%	1 st half 2019	%	Total difference
Italy	31,699	35.6%	28,564	32.3%	3,135
Europe	0	0.0%	0	0.0%	0
North America	54,101	60.7%	56,779	64.2%	(2,678)
South Korea	713	0.8%	472	0.5%	241
China	2,518	2.8%	2,632	3.0%	(114)
Other Asian countries	68	0.1%	40	0.0%	28
Others	0	0.0%	0	0.0%	0
Total net sales	89,099	100%	88,487	100%	612

14. PROPERTY, PLANT AND EQUIPMENT

Net property, plant and equipment amounted to 74,141 thousand euro as at June 30, 2020, an increase of 3,248 thousand euro compared to December 31, 2019.

The changes that occurred during the half-year period are shown below.

(thousands of euro)

Property, plant and equipment	Land	Building	Plant and machinery	Assets under construction and advances	Total
December 31, 2019	4,851	24,147	28,987	12,908	70,893
Acquisitions	0	162	1,212	5,453	6,827
Disposals	0	0	0	0	0
Reclassifications	0	1,761	5,088	(6,849)	0
Depreciation	0	(785)	(2,740)	0	(3,525)
Write-downs	0	0	(115)	0	(115)
Revaluations	0	0	0	0	0
Translation differences	11	10	(11)	51	61
June 30, 2020	4,862	25,295	32,421	11,563	74,141
December 31, 2019					
Historical cost	4,909	48,760	139,034	13,280	205,983
Accumulated depreciation and write-downs	(58)	(24,613)	(110,047)	(372)	(135,090)
Net book value	4,851	24,147	28,987	12,908	70,893
June 30, 2020					
Historical cost	4,920	50,302	144,645	11,935	211,802
Accumulated depreciation and write-downs	(58)	(25,007)	(112,224)	(372)	(137,661)
Net book value	4,862	25,295	32,421	11,563	74,141

As at June 30, 2020 land and buildings were not burdened by mortgages or other guarantees.

In the first half of 2020, investments in property, plant and equipment amounted to 6,827 thousand euro and mainly include the construction of a new department to manufacture pipes in Nitinol at the Bethel plant of Memry Corporation (a project started last year), as well as investments in expansion of the production capacity of a number of existing lines, again in the Nitinol business. The item "Acquisitions" also includes Parent Company investments in the Avezzano plant to adapt the line for the production of advanced getters for the consumer electronics market, as well as those in the Lainate plant for the purchase of new machines dedicated to the electronic devices business (a new sputtering machine), in the sector of shape memory alloys for industrial applications (a new SMA extruder) and in the vacuum systems sector (NEG coatings department).

The depreciation for the period, equal to 3,525 thousand euro, is up compared to the first half of 2019 (3,298 thousand euro), in addition to the effect of exchange rates (+36 thousand euro) mainly due to the higher depreciation accounted for by the US affiliate SAES Getters U.S.A., Inc., by the Parent Company and by SAES Coated Films S.p.A. on investments made in the previous year.

The write-downs, amounting to 115 thousand euro, mainly refer to the residual value of an SMA furnace decommissioned during the first half by the US affiliate SAES Smart Materials, Inc.

The translation differences (gains of 61 thousand euro) relate to assets owned by the US companies and result from the revaluation of the US dollar as at June 30, 2020 compared to the exchange rate of December 31, 2019.

The item "Assets under construction and advances" mainly includes assets still under construction or for which the final testing process is not yet complete. As at June 30, 2020, this item includes the metallization system, the pilot line (advanced packaging business), testing for which is scheduled in the second half of 2020, as well as investments in the Nitinol segment for the above-mentioned new tubes department in Bethel and expansion of the existing production capacity.

All the property, plant and equipment described in this paragraph is owned by the SAES Group. Please refer to Note no. 16 for more details on the leased assets as at June 30, 2020, where the right of use was recognised under capital assets in application of IFRS 16 - Leases.

15. INTANGIBLE ASSETS

The net intangible assets amounted to 44,814 thousand euro as at June 30, 2020 and recorded an increase of 402 thousand euro compared to December 31, 2019.

The changes that occurred during the half-year period are shown below.

(thousands of euro)

Intangible assets	Goodwill	Research and development expenses	Industrial and other patent rights	Concessions, licenses, trademarks and similar rights	Other intangible assets	Assets under construction and advances	Total
December 31, 2019	38,416	0	4,549	686	1,404	161	45,216
Additions	0	0	7	46	4	49	106
Disposals	0	0	0	0	0	0	0
Reclassifications	0	0	0	19	0	(19)	0
Amortization	0	0	(251)	(190)	(195)	0	(636)
Write-downs	0	0	0	0	0	0	0
Revaluations	0	0	0	0	0	0	0
Translation differences	117	0	1	2	9	(1)	128
June 30, 2020	38,533	0	4,306	563	1,222	190	44,814
December 31, 2019							
Historical cost	46,102	183	10,382	11,295	22,659	900	91,521
Accumulated depreciation and write-downs	(7,686)	(183)	(5,833)	(10,609)	(21,255)	(739)	(46,305)
Net book value	38,416	0	4,549	686	1,404	161	45,216
June 30, 2020							
Historical cost	46,219	183	10,399	11,301	20,181	929	89,212
Accumulated depreciation and write-downs	(7,686)	(183)	(6,093)	(10,738)	(18,959)	(739)	(44,398)
Net book value	38,533	0	4,306	563	1,222	190	44,814

Investments of the period amounted to 106 thousand euro and mainly refer to the purchase of new software licenses by the Parent Company and by the US affiliate Memry Corporation.

The amortization for the period, equal to 636 thousand euro, is essentially in line with the first half of 2019 (604 thousand euro), net of the effect of exchange rates (+9 thousand euro).

The translation differences (gains of 128 thousand euro) relate to the intangible assets owned by the US companies and result from the revaluation of the US dollar as at June 30, 2020 compared to the exchange rate of December 31, 2019.

All intangible assets, except for goodwill, are considered to have finite useful lives and are systematically amortized to account for their expected residual use.

Goodwill is not amortized, rather, on an annual basis or more frequently if there are impairment loss indicators, its recoverable value is reviewed based on the expected cash flows of the related Cash Generating Unit - CGU (impairment test).

Goodwill

The changes in the item "Goodwill" and the Cash Generating Unit to which the goodwill is allocated are highlighted below.

(thousands of euro)

Divisions	December 31, 2019	Change in consolidation area	Write-downs	Other movements	Translation differences	June 30, 2020
Metallurgy	945	0	0	0	0	945
Vacuum Technology	0	0	0	0	0	0
Medical	37,471	0	0	0	117	37,588
Specialty Chemicals	0	0	0	0	0	0
Advanced Packaging	0	0	0	0	0	0
Not allocated	0	0	0	0	0	0
Total goodwill	38,416	0	0	0	117	38,533

The increase for the first half of the year is exclusively due to the effect of exchange rates (especially related to the revaluation of the US Dollar at June 30, 2020 compared to the end of the previous year) on goodwill in currencies other than euro.

The following table shows the gross book values of goodwill and their accumulated write-downs for impairment from January 1, 2004 to June 30, 2020 and as at December 31, 2019.

(thousands of euro)

Divisions	June 30, 2020			December 31, 2019		
	Gross value	Write-downs	Net book value	Gross value	Write-downs	Net book value
Metallurgy	1,008	(63)	945	1,008	(63)	945
Vacuum Technology	0	0	0	0	0	0
Medical (*)	40,988	(3,400)	37,588	40,871	(3,400)	37,471
Specialty Chemicals	0	0	0	0	0	0
Advanced Packaging	2,409	(2,409)	0	2,409	(2,409)	0
Not allocated	358	(358)	0	358	(358)	0
Total goodwill	44,763	(6,230)	38,533	44,646	(6,230)	38,416

(*) The difference between the gross value as at June 30, 2020 and the gross value as at December 31, 2019 is due to the translation differences on goodwill amounts denominated in currencies other than euro.

Impairment testing of non-current assets

Pursuant to IAS 36, impairment testing of **non-current assets (property, plant and equipment, intangible assets, goodwill included, and rights of use of leased assets)** is normally carried out in full only when preparing the annual report, or more frequently if specific events or circumstances occur that could be assumed to cause impairment.

As at June 30, 2020, though there were no particular indicators to suggest impairment losses in relation to goodwill or other assets recognized in the financial statements, whether property, plant and equipment or intangible, in line with paragraphs 9 and 12 of IAS 36, impairment testing was carried out in the light of specific assessments by the Directors of economic impact deriving from the global spread of COVID-19.

Investments accounted for using the equity method, whose recoverability is normally assessed when preparing the annual report, were also impairment tested as at June 30, 2020 because of the COVID-19 epidemic. For details, please refer to Note no. 17.

For the purpose of impairment testing, non-current assets are allocated to Cash Generating Units (CGUs) or groups of CGUs, in accordance with the maximum aggregation limits established by IFRS 8, according to which the latter may not be larger than the operating segment identified. More specifically, the CGUs identified by the SAES Group for impairment testing coincide with the following operating segments (as indicated in Note no. 13):

- Metallurgy;
- Vacuum Technology;
- Medical;
- Specialty Chemicals;
- Advanced Packaging.

The operating structure is unchanged with respect to that used for impairment testing purposes as at December 31, 2019.

The impairment testing, whose assumptions and procedures were approved by the Board of Directors on July 16, 2020 and whose results were approved by the same Board on September 10, 2020, involves estimating the recoverable value of each Cash Generating Unit (CGU) and comparing it with the net book value of the property, plant and equipment and intangible assets allocated to that CGU, including goodwill.

The recoverable amount is verified by calculating the value in use, which corresponds to the present value of future cash flows which are expected to be associated to each Cash Generating Unit on the basis of the plans drawn up by top management for the period July 1, 2020-December 31, 2022 and approved by the Board of Directors on July 16, 2020, and on the terminal value.

Specifically, in reference to explicit period forecasts, for the Metallurgy, Vacuum Technology and Specialty Chemicals CGUs the 2020-2022 estimates already approved by the Board of Directors on February 13, 2020 were confirmed, whilst for the Medical and Advanced Packaging divisions the forecasts were updated to take into account, respectively, the negative effects of the COVID-19 pandemic and business development in the first half of the year.

When preparing these forecasts, Management made use of numerous assumptions based on the following key variables:

- developments in the macroeconomic variables;
- estimated future sales volumes by business / product category / customer;
- price and profit margin trends;
- cost of materials and of sales by product category;
- production costs, operating expenses and investments plan;
- inflation rates estimated by Management.

The expected growth in sales is based on Management forecasts, whilst the profit margins and operating expenses for the various businesses were estimated on the basis of time series, adjusted according to expected results and on the basis of expected market price changes. The value of investments and working capital were determined according to different factors, such as the forecast levels of future growth and the product development plan. These assumptions were influenced by future expectations and market conditions.

The discounting rate used to discount the cash flows represents an estimate of the rate of return expected for each Cash Generating Unit on the market. To select an adequate discount rate to apply to future cash flows, an indicative interest rate was considered to calculate indebtedness, which would be applied to the Group in event that it requested new medium-long term loans and, to calculate the cost of own capital, the yield curve of long-term government bonds, both US and Italian, weighted by the geographical area that generating Group income was adopted. The capital structure was instead established by identifying specific comparable players for each business. The Weighted Average Cost of Capital (WACC) applied to future cash flows was estimated at 6.8% and is considered representative of all Group CGUs. The WACC used is net of taxes, consistent with the cash flows used.

In the discounting model of future cash flows, a terminal value is considered to reflect the residual value that each Cash Generating Unit should generate beyond the end of the plans (December 31, 2022); this value has been estimated prudentially at a growth rate (g-rate) of zero and a time horizon considered representative of the estimated duration of the various businesses, as indicated in the following table.

	Metallurgy	Vacuum Technology	Medical	Specialty Chemicals
Years estimated after December 31, 2022	10,5 (*)	12,5	12,5	12,5

(*) Calculated as a weighted average of the years assumed for each business on the estimated forward sales in the second half 2020:

- 12,5 years for *SMA Industrial Business*;
- 10,5 years for *Security & Defense, Electronic Devices, Healthcare Diagnostics e Sintered Components for Electronic Devices & Lasers Business*;
- 6,5 years for *Thermal Insulated Devices Business*;
- 2,5 years for *Lamps Business*.

For the Advanced Packaging operating segment, more recently introduced with respect to the others, an explicit forecasting period covered by a more extended plan was used, i.e. until December 31, 2024, and a time horizon estimated after that date of 10.5 years.

	Advanced Packaging
Years estimated after December 31, 2024	10.5

No further potential impairment of assets was detected from this first level of testing. Furthermore, conducting a sensitivity analysis by increasing the WACC by up to 2 percentage points over the Group's reference value, no critical issues were found in relation to the net asset value recognized in the financial statements as at June 30, 2020.

Lastly, second-level testing was conducted, including on the assets not allocated to any operating segment and, in the recoverable amount, the costs relating to corporate functions, as well as the economic values that cannot be uniquely allocated or allocated through reliable drivers to primary sectors, which include some of particular importance, such as the basic research costs, sustained by the Group to identify innovative solutions. No further potential impairment of assets emerged at this level.

The estimated recoverable amount of the various Cash Generating Units and of investments measured using the equity method required discretion and the use of estimates by management. The Group cannot therefore ensure that no impairment losses will emerge in the future. In fact, a number of different factors, also related to changes in the market and in demand, could require the value of the assets in future periods to be redetermined.

In particular, in relation to the COVID-19 epidemic, note that forecasts regarding the potential effects of this phenomenon on performance of the various sectors and, consequently, on estimates of the Group's future cash flows, are highly uncertain and will be constantly monitored over the coming months, also to identify any future impairment of Group assets.

16. RIGHT OF USE

The right of use assets, resulting from lease, rental or use of third-party asset contracts, were recognized separately, and amounted to 3,880 thousand euro at June 30, 2020, decreasing by 737 thousand euro compared to December 31, 2019.

The changes that occurred during the half-year period are shown below.

(thousands of euro)

Right of use	Building	Plant and machinery	Cars	Total
December 31, 2019	3,878	126	613	4,617
New leases agreements subscribed in the	0	37	247	284
Early termination of leases agreements	0	0	(10)	(10)
Reclassifications	0	0	0	0
Amortization	(798)	(69)	(168)	(1,035)
Translation differences	22	1	1	24
June 30, 2020	3,102	95	683	3,880
December 31, 2019				
Historical cost	4,965	304	881	6,150
Accumulated depreciation and write-downs	(1,087)	(178)	(268)	(1,533)
Net book value	3,878	126	613	4,617
June 30, 2020				
Historical cost	4,974	341	1,076	6,391
Accumulated depreciation and write-downs	(1,872)	(246)	(393)	(2,511)
Net book value	3,102	95	683	3,880

The new contracts entered into in the period, that fall within the scope of application of the accounting standard IFRS 16, mainly refer to the car fleet of the Parent Company.

The amortization for the period, equal to 1,035 thousand euro, is up compared to the first half of 2019 (662 thousand euro) in addition to the effect of exchange rates (+18 thousand euro), mainly due to the higher amortization accounted for by US affiliate Memry Corporation on the new lease signed in the second half of 2019 for additional 60,000 square feet of production floorspace (around 5,600 square metres) in Bethel (CT).

The translation differences (gains of 24 thousand euro) relate to rights of use owned by the US companies.

17. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

As at June 30, 2020 the item includes the share of equity attributable to the Group in the joint venture Actuator Solutions GmbH²², SAES RIAL Vacuum S.r.l. and Flexterra, Inc.²³

The following table shows the changes in this item during the first half of 2020.

(thousands of euro)

Investments accounted for using the equity method	December 31, 2019	Additions	Capital payments	Share of the net result	Share of other comprehensive income (loss)	Dividends paid	Write-downs	Other variations	June 30, 2020
Actuator Solutions	0	0	0	0	0	0	0	0	0
SAES RIAL Vacuum S.r.l.	1,844	0	0	23	0	0	0	0	1,867
Flexterra	2,956	0	0	(945)	13	0	0	38	2,062
Total	4,800	0	0	(922)	13	0	0	38	3,929

The change in the period is mainly due to the adjustment of the value of each investment to SAES's share of the result and other comprehensive income (loss) achieved by the joint ventures in the first half of 2020 (-909 thousand euro). Furthermore, in the column "Other variations", the reversal (+38 thousand euro) of the unrealized pro-rata share of the Group's gain in the previous year from the

²² Please note that Actuator Solutions GmbH, consolidates its wholly-owned subsidiaries Actuator Solutions Taiwan Co., Ltd. in liquidation and Actuator Solutions (Shenzhen) Co., Ltd. in liquidation.

²³ Flexterra, Inc. (USA), in turn, consolidates its wholly owned subsidiary Flexterra Taiwan Co., Ltd.

sale of some patents owned by E.T.C. S.r.l. in liquidation to Flexterra, Inc., derecognized from the consolidated financial statements (in accordance with IAS 28, the income from the related party was recognized only for the portion pertaining to third parties in the joint venture).

With reference to Actuator Solutions, note that, in compliance with the provisions of IAS 28, SAES' share of the total profit for the first half of 2020 (+360 thousand euro²⁴) was not recorded by the Group as the equity of the joint venture is still negative for around 2.6 million euro²⁵, against a SAES equity interest in Actuator Solutions already fully written off.

Actuator Solutions

Actuator Solutions GmbH is based in Gunzenhausen (Germany) and is 50% jointly owned by SAES and Alfmeier Präzision, a German group operating in the fields of electronics and advanced plastic materials. This joint venture, which consolidates its wholly owned subsidiaries Actuator Solutions Taiwan Co., Ltd. in liquidation²⁶ and Actuator Solutions (Shenzhen) Co., Ltd. in liquidation²⁷, is focused on the development, production and commercialization of actuators using shape memory alloys in place of the engine.

The table below shows the SAES Group interest in Actuator Solutions' assets, liabilities, revenues and costs.

(thousands of euro)

Actuator Solutions	June 30, 2020	December 31, 2019
Statement of financial position	50%	50%
Non current assets	3,246	3,488
Current assets	1,698	1,343
Total assets	4,944	4,831
Non current liabilities	4,444	4,625
Current liabilities	3,110	3,176
Total liabilities	7,554	7,801
Capital stock, reserves and retained earnings	(2,970)	(1,553)
Net income (loss) for the period	358	(1,408)
Other comprehensive income (loss) for the period (*)	2	(9)
Total equity	(2,610)	(2,970)

(*) Currency translation difference reserve arising from the conversion in euro of the financial statements of the subsidiary Actuator Solutions Taiwan Co., Ltd. in liquidation and Actuator Solutions (Shenzhen) Co., Ltd. in liquidation.

²⁴ In the first half of 2019, the share of the total loss not recognized, because it exceeded the investment (already fully written off), was -365 thousand euro.

²⁵ Consolidated pro rata at 50%.

²⁶ The liquidation process of the Taiwanese subsidiary was launched at the beginning of October 2019 and is expected to be completed by the end of 2020.

²⁷ The liquidation process of the Chinese subsidiary began in March 2019 and is expected to be completed in the second half of 2020.

(thousands of euro)

Actuator Solutions	1 st Half 2020	1 st Half 2019
Statement of profit or loss and of other comprehensive income	50%	50%
Net sales	3,940	5,488
Cost of sales	(2,863)	(4,472)
Gross profit	1,077	1,016
Total operating expenses	(645)	(1,047)
Other income (expenses), net	82	(171)
Operating income (loss)	514	(202)
Interest and other financial income, net	(152)	(147)
Foreign exchange gains (losses), net	(12)	(25)
Income taxes	8	(1)
Net income (loss)	358	(375)
Exchange differences	2	10
Total comprehensive income (loss)	360	(365)

Overall²⁸, Actuator Solutions recorded net revenues of 7,880 thousand euro in the first half of 2020, down by 28.2% compared to 10,976 thousand euro in the first half of 2019. The slowdown in the automotive sector that began last year slowed further in the first half of 2020 due to the COVID-19 crisis, which had a negative impact on end market sales and caused uncertainty in the supply chain, especially in China.

Note, however, that the pandemic has also opened an opportunity for Actuator Solutions in the medical market: against a development, assembly and sales contract for rapid COVID-19 diagnostic test devices, revenues were recorded for a total of around 1 million euro in the first half of 2020.

The net profit for the first half of the year was 717 thousand euro, compared to a loss of -750 thousand in the first six months of the previous year. Despite the decline in sales, profit margins improved strongly, mainly thanks to income on engineering contracts signed with third parties, characterized by higher margins, and the decrease in operating expenses after the two Asian subsidiaries were placed in liquidation. Lastly, note that the loss as at June 30, 2019 included the extraordinary charges of around 0.4 thousand euro for a computer fraud suffered in the first part of the year by the German parent company.

For further details on the developments in Actuator Solutions, please refer to the paragraph dedicated to the joint venture in the Interim Report on Operations of the SAES Group.

The share of the SAES Group (equal to 50%) in the result of the joint venture in the first half of 2020 amounted to 358 thousand euro (-375 thousand euro in the first half of 2019), to be added to the other positive components of the comprehensive income statement for 2 thousand euro (+10 thousand euro at June 30, 2019), consisting of the translation differences generated by the consolidation of Actuator Solutions Taiwan Co., Ltd. and Actuator Solutions (Shenzhen) Co., Ltd. in liquidation into Actuator Solutions GmbH.

As reported previously, SAES' share of the total profit for the first half of 2020 (+360 thousand euro) was not recorded by the Group as the equity of the joint venture is still negative, against a SAES equity interest in Actuator Solutions that has already been fully written off.

As the investment in Actuator Solutions GmbH had already been completely written off, no specific impairment test was performed as at June 30, 2020.

Given the joint venture's difficult financial situation, a provision for risks on the equity investment of 600 thousand euro was allocated, equal to the pro-rata funding necessary for the company to continue its operating activities over the next twenty-four months, according to the revised

²⁸ Values at 100%.

version²⁹ of the five-year plan presented to shareholders during the Extraordinary Shareholders' Meeting on February 18, 2020. This provision is still considered sufficient and, therefore, no additional allocation was recognized as at June 30, 2020 (for further details on the risk provision, see Note no. 32).

Please refer to Note no. 21 for information on the recoverability of the financial receivable owed to the Group by the joint venture.

The following table provides the number of employees of the joint venture Actuator Solutions as at June 30, 2020 split by category, based on the percentage of ownership held by the Group (equal to 50%).

Actuator Solutions	June 30, 2020	December 31, 2019
	50%	50%
Managers	1	1
Employees and middle	12	14
Workers	8	10
Total (*)	21	25

(*) The figure excludes the personnel employed with contract other than salaried employment, equal to 1 unit as at June 30, 2020 and equal to 1 unit at December 31, 2019 (according to the percentage held by the Group).

The number of employees is down compared to the end of 2019, principally due to the German joint venture's focus on product development activities and the subsequent suspension of production activities in the automotive sector.

SAES RIAL Vacuum S.r.l.

SAES RIAL Vacuum S.r.l., established at the end of 2015, is jointly controlled by SAES Getters S.p.A. (49%) and Rodofil S.r.l. (51%). The company specializes in the design and manufacture of vacuum chambers for accelerators, synchrotrons and colliders and combines the expertise of SAES in the field of materials, vacuum applications and innovation, with the experience of Rodofil in the design, assembling and fine mechanical productions, with the aim of offering absolutely excellent quality products and of successfully competing in the international markets.

The Group's equity investment is accounted for using the equity method since the transaction qualifies as a joint control arrangement and, specifically, as a joint venture. In this regard, please note that a key factor in qualifying the agreement is the signing of shareholders' agreements that envisage that the decisions on some significant activities are taken with the unanimous consent of the parties, irrespective of their ownership percentage in the capital stock.

There is a put & call option in place between the shareholders SAES Getters S.p.A. and Rodofil S.r.l. for which, on September 20, 2019, the terms for exercise were redefined, delaying it by one year (from mid-2020 to mid-2021) and, solely for the put option, the calculation methodologies for the exercise price were also redefined with respect to the agreement signed by both parties upon establishing the company (at the end of 2015).

In particular, in the period between May 1, 2021 and May 31, 2021, Rodofil S.r.l. will be able to sell its shares in a single tranche to SAES Getters S.p.A. by exercising the put option for a minimum of 2% up to 51% of the capital stock of SAES RIAL Vacuum S.r.l. at a price relating to

²⁹ The five-year plan was originally developed between October and November 2019 and was approved by the Supervisory Board on November 25, 2019.

the company's performance at the sale date, estimated for any extraordinary costs and non-recurring investments, identified as useful for the future development³⁰ of the company³¹.

If Rodofil S.r.l. does not exercise this put option, SAES Getters S.p.A. has the right to exercise, from June 1 - June 30, 2021, a call option in a single tranche for a percentage of shares equivalent to 30% of the capital stock, at a price calculated with a similar mechanism, but without adjustments for any extraordinary costs or investments.

Please note that as, at June 30, 2020, the Management did not have enough information to perform an accurate fair value measurement of the above options, the latter are not valued in the financial statements.

The table below shows the SAES Group interest in SAES RIAL Vacuum S.r.l.'s assets, liabilities, revenues and costs.

(thousands of euro)

SAES RIAL Vacuum S.r.l.	June 30, 2020	December 31, 2019
Statement of financial position	49%	49%
Non current assets	323	325
Current assets	1,488	983
Total assets	1,811	1,308
Non current liabilities	190	192
Current liabilities	1,147	665
Total liabilities	1,337	857
Capital stock, reserves and retained earnings	451	249
Net income (loss) for the period	23	198
Other comprehensive income (loss) for the period (*)	0	4
Total equity	474	451

(*) Actuarial differences on the employee severance indemnities (TFR), in accordance with the IAS 19.

(thousands of euro)

SAES RIAL Vacuum S.r.l.	1 st Half 2020	1 st Half 2019
Statement of profit or loss and of other comprehensive income	49%	49%
Net sales	868	578
Cost of sales	(715)	(476)
Gross profit	153	102
Total operating expenses	(127)	(95)
Other income (expenses), net	11	19
Operating income (loss)	37	26
Interest and other financial income, net	(7)	(7)
Foreign exchange gains (losses), net	0	0
Income taxes	(7)	(4)
Net income (loss)	23	15
Actuarial gain (loss) on defined benefit plans, net of taxes	0	0
Total comprehensive income (loss)	23	15

Overall³², SAES RIAL Vacuum S.r.l. ended the first half of 2020 with revenue of 1,772 thousand euro, up by 50.3% compared to 1,179 thousand euro in the corresponding period of 2019. After a first quarter strongly penalized by delays in certain major research projects, also due to the COVID-19 pandemic, in recent months revenue increased, returning to the ongoing levels originally forecast. The increase in sales and an essentially stable profit margin, both gross and operating profit, offered a slight increase in net profit from 29 thousand euro to 48 thousand euro.

³⁰ Understood as subsequent to 2020.

³¹ Note that, following the redefinition of the procedures for calculating the exercise price of only the put option, the company's performance indicators (EBITDA and Net Financial Position) will be understood as net of any extraordinary costs and eliminating the effects from the financial realisation of investments (in property, plant and equipment and intangible assets) that SAES RIAL Vacuum S.r.l. will incur during 2020 but referring to future growth.

³² Values at 100%.

The share of the SAES Group (49%) in the joint venture's profit in the first half of 2020 amounted to +23 thousand euro (+15 thousand euro in the first half of 2019).

The difference, equal to 1,393 thousand euro, between the investment recognition value (1,867 thousand euro) and the value of the share of the SAES Group in the company's net assets (474 thousand euro) represents the implicit goodwill included in the carrying value of the investment.

As reported previously, due to the COVID-19 pandemic, the value of the investment in SAES RIAL Vacuum S.r.l. was impairment tested as at June 30, 2020. To this end, the value in use was calculated using the Free Operating Cash Flow method, using a WACC of 6.8% (aligned to that of the Group) and based on the July 1, 2020-December 31, 2022 plan approved by the Board of Directors of SAES Getters S.p.A. on July 16, 2020, which confirmed the estimates previously approved by the Board of Directors of SAES RIAL Vacuum S.r.l. on October 28, 2019, considering them reliable despite the COVID-19 emergency.

In the discounting model of future cash flows, a terminal value was considered to reflect the residual value that the company should generate beyond the period covered by the plans (i.e. beyond December 31, 2022); this value was estimated prudentially at a growth rate (g-rate) of zero and a time horizon of 12.5 years estimated after the period envisaged by the plan (time horizon consistent with that used for the Vacuum Technology CGU).

No potential impairment of assets emerged from the test conducted.

A sensitivity analysis was also conducted, increasing the discounting rate by up to 2 percentage points more than the reference value; no issues were identified from this.

The following table provides the number of employees of the joint venture SAES RIAL Vacuum S.r.l. as at June 30, 2020 split by category, based on the percentage of ownership held by the SAES Group (49%).

SAES RIAL Vacuum S.r.l.	June 30, 2020	December 31, 2019
	49%	49%
Managers	1	1
Employees and middle	6	5
Workers	4	4
Total (*)	11	10

(*) The figure excludes the personnel employed with contract other than salaried employment, equal to 1 unit as at June 30, 2020 and equal to 1 unit at December 31, 2019 (according to the percentage held by the Group).

The number of employees is essentially aligned with the end of 2019.

Flexterra

Flexterra originated from a technological partnership activated in the previous years between SAES and the US company Polyera in the field of flexible thin film transistors for new generation displays. More specifically, Flexterra, Inc. based in Skokie (close to Chicago, Illinois, USA), was established at the end of 2016 as a development start up by SAES (through the subsidiary SAES Getters International Luxembourg S.A.) and the previous shareholders and lenders of Polyera, with the purpose of the design, manufacturing and sale of materials and components for the manufacture of flexible displays.

Flexterra, Inc. owns 100% of Flexterra Taiwan Co., Ltd.

In 2019, the Flexterra project had already made strong progress, although with some delays compared to initial forecasts. In particular, the joint venture continued to develop its organic materials and its formulations were qualified by an important Taiwanese producer of OTFT (Organic Thin Film Transistors). The activities to industrialize OTFTs is at an advanced stage and,

although it has taken longer than initial estimates, also because of the recent COVID-19 crisis, it should be completed after summer 2020, while the start of actual production and sales activities by Flexterra is expected by the end of the year.

SAES currently holds 46.73% of the capital stock of Flexterra, Inc.

The Group's equity investment is accounted for using the equity method since, irrespective of the ownership percentage in the capital stock, the operation is classified as a joint control agreement and, specifically, a joint venture, based on the Board's composition (five members, two of which appointed by SAES) and the shareholder agreements (that provide that the decisions on relevant matters are taken with the consent of at least 4 of the 5 Board members).

The value of the investment as at June 30, 2020 is the initial overall contribution (8,146 thousand euro, equal to 8,500 thousand USD) of SAES Getters International Luxembourg S.A. in the capital stock of Flexterra, Inc., increased by the capital stock increases in the final part of 2018 (for a total value of 6,201 thousand euro, corresponding to 7,100 thousand US dollars), adjusted for the SAES Group's share in the result and in the total other profits (loss) from previous year (2017, 2018 and 2019) and the first half of 2020. The latter includes the expenses related to the issue of equity instruments, as well as the currency translation difference reserve arising from the conversion in euro of the financial statements of Flexterra, Inc. and its subsidiary Flexterra Taiwan Co., Ltd. (respectively expressed in US Dollars and Taiwanese Dollars).

The relative write-downs for impairment are included for purposes of calculating the final value of the equity investment, recognized, respectively, in 2018 (-4,300 thousand euro) and at December 31, 2019 (additional write-down of -555 thousand euro).

Lastly, as in the previous year, the investment value was also adjusted for the unrealized pro-rata share of the Group's gain from the sale of certain patents owned by E.T.C. S.r.l. in liquidation to the Flexterra, Inc. joint venture (-1,059 thousand euro), as well as for reversal of the corresponding portion of amortization of the gain eliminated at consolidated level (+114 thousand euro, of which +76 thousand euro relating to 2019 and +38 thousand euro to the first half of 2020).

The table below shows the SAES Group interest in Flexterra's assets, liabilities, revenues and costs.

(thousands of euro)

Flexterra	June 30, 2020	December 31, 2019
Statement of financial position	46.73%	46.73%
Non current assets	6,503	6,837
Current assets	563	1,261
Total assets	7,066	8,098
Non current liabilities	66	92
Current liabilities	179	255
Total liabilities	245	347
Capital stock, reserves and retained earnings	7,595	9,465
Reserve for stock option plans	158	156
Net income (loss) for the period	(945)	(2,031)
Other comprehensive income (loss) for the period (*)	13	161
Total equity	6,821	7,751

(*) Currency translation difference reserve arising from the conversion in euro of the financial statements of Flexterra, Inc. and of Flexterra Taiwan Co., Ltd.

(thousands of euro)

Flexterra	1 st Half 2020	1 st Half 2019
Statement of profit or loss and of other comprehensive income	46.73%	46.73%
Net sales	23	6
Cost of sales	(13)	(1)
Gross profit	10	5
Total operating expenses	(996)	(1,055)
Other income (expenses), net	0	0
Operating income (loss)	(986)	(1,050)
Interest and other financial income, net	(4)	1
Foreign exchange gains (losses), net	35	(20)
Income taxes	10	11
Net income (loss)	(945)	(1,058)
Exchange differences and capital expenditure costs	13	79
Total comprehensive income (loss)	(932)	(979)

In total³³, Flexterra closed the first half of 2020 with a net loss of -2,022 thousand euro, in line with the -2,266 thousand euro loss in the corresponding period of 2019 (mainly costs for employees engaged in research and general and administrative activities, consulting, costs related to the management of patents and the amortization of intangible assets, including intellectual property).

The SAES Group's share (46.73%) in the result of the joint venture in the first half of 2020 amounted to a loss of -945 thousand euro (a loss of -1,058 thousand euro at June 30, 2019), to which the other components of the statement of comprehensive income have to added, a positive amount of 13 thousand euro from the translation differences generated by the translation into euro of other currency financial statements of Flexterra, Inc. and Flexterra Taiwan Co., Ltd. (+79 thousand euro in the first half of 2019).

As reported previously, due to the COVID-19 pandemic, the value of the investment was impairment tested as at June 30, 2020. To this end, the value in use was calculated using the Free Operating Cash Flow method, starting from the plans for the period July 1, 2020 - December 31, 2024 approved by the Board of Directors of SAES Getters S.p.A. on July 16, 2020. These estimates are included in an updated version of the five-year plans already approved by the Board of Directors of Flexterra, Inc. on February 12, 2020, in the light of business developments during the first half of this year.

The weighted average cost of capital (WACC) applied to future cash flows was 30%, in line with the joint venture's current pilot production phase.

In the discounting model of future cash flows, a terminal value was considered to reflect the residual value that the company should generate beyond the period covered by the plans; this value was estimated prudentially at a growth rate (g-rate) of zero and a time horizon of 10.5 years estimated after the period envisaged by the plans.

No potential further impairment of assets emerged from the test conducted.

The following table provides the number of employees of the joint venture Flexterra broken down by category, based on the percentage of ownership held by the Group at June 30, 2020 (46.73%).

Flexterra	June 30, 2020	December 31, 2019
	46.73%	46.73%
Managers	3	3
Employees and middle	5	6
Workers	0	0
Total	8	9

³³ Values at 100%.

The number of employees was essentially the same as at the end of 2019.

18. SECURITIES IN THE PORTFOLIO

The “Securities in the portfolio” at June 30, 2020, amounted to a total of 200,361 thousand euro compared to 205,452 thousand euro at December 31, 2019.

(thousands of euro)

Securities in the portfolio	June 30, 2020	December 31, 2019	Difference
Securities in the portfolio classified under non current assets	130,236	134,673	(4,437)
Securities in the portfolio classified under current assets	70,125	70,779	(654)
Totale	200,361	205,452	(5,091)

The decrease is mainly due to the reduced fair value of the securities portfolio (-6,476 thousand euro in the first half of this year), caused by the COVID-19 epidemic and the negative effect it has had on the financial markets. In the first half of the year, also note the additional net investments in the “Buy & Hold” bond portfolio for around 1.4 million euro³⁴.

The following table provides the details of securities subscribed and their fair value as at June 30, 2020 compared to December 31, 2019.

Description	Details	Underwriting company	Initial investment	Value as at June 30, 2020 (thousands of euro)	Value as at December 31, 2019 (thousands of euro)
Bond portfolio “Buy & Hold”	portfolio with a conservative investment profile and mainly with high flexibility and liquidity.	SAES Investments S.A.	70.4 million euro	70,125	70,779
Credit Linked Certificates (CLC)	financial instruments linked to the performance of underlying bonds and debt securities issued by leading Italian banks; due to mature at five years from the subscription.	SAES Getters S.p.A.	30 million euro	29,492	30,884
CardifLux Vie Multiramo policy					
- Branch I	minimum guaranteed rate (of 0.5%, net of the management fees, up to the end of 2019) and a return from the policy equal to the net return made by the separately managed General Fund if higher than the minimum guaranteed rate.	SAES Investments S.A.	40 million euro	40,665	40,665
- Branch III	dynamic multi-line mandate, with the goal of conserving the invested capital value through a conservative volatility profile in the construction of the portfolio.		60 million euro	60,079	63,124
Total				200,361	205,452

Apart from the “Buy & Hold” bond portfolio, classified under current assets, all the other financial assets of the Group were classified under non-current assets since they were the subject of a guarantee for the medium/long-term loan obtained by the Parent Company to cover the payment to

³⁴ Investments equal to 4.4 million euro, net of 3 million euro in disinvestments.

acquire the ordinary shares under the partial voluntary tender offer finalized at the end of May 2019 (see Note no. 28 for the details on the loan).

With regard to the fair value measurement of the securities in the portfolio as at June 30, 2020, note that the fair value, calculated by an independent third party, coincides with the market prices on the reporting date for all securities listed in an active market (Level 1 of the fair value hierarchy) and, where there is no active market, the fair value has been calculated by using the most common measurement models and techniques available on the market or by referring to prices of comparable securities (Level 2 of the fair value hierarchy). In particular, the fair value used to measure the bond portfolio and the Credit Linked Certificates was Level 1, whereas that for the Cardif Policy was Level 2.

19. DEFERRED TAX ASSETS AND LIABILITIES

As at June 30, 2020 the net balance of deferred tax assets and deferred tax liabilities was positive and equal to 63 thousand euro, compared to a positive amount of 456 thousand euro at December 31, 2019.

The related details are provided below.

(thousands of euro)

Deferred taxes	June 30, 2020	December 31, 2019	Difference
Deferred tax assets	8,911	9,126	(215)
Deferred tax liabilities	(8,848)	(8,670)	(178)
Total	63	456	(393)

Since deferred tax assets and liabilities have been recognized in the consolidated financial statements in consideration of the offsetting for legal entities, when appropriate, the following table shows deferred tax assets and liabilities before the offsetting process.

(thousands of euro)

Deferred taxes	June 30, 2020	December 31, 2019	Difference
Deferred tax assets	11,457	11,751	(294)
Deferred tax liabilities	(11,394)	(11,295)	(99)
Total	63	456	(393)

The following tables provide a breakdown by nature of the temporary differences that comprise deferred tax assets and liabilities, compared with the figures as at December 31, 2019.

(thousands of euro)

Deferred tax assets	June 30, 2020		December 31, 2019	
	Temporary differences	Fiscal effect	Temporary differences	Fiscal effect
Intercompany profit eliminations	24,463	6,234	25,366	6,438
Differences on depreciation/amortization and write-downs	2,053	488	2,029	481
IAS 19 effect	220	64	220	64
Bad debts and financial assets write-down	481	117	503	125
Inventory provisions	4,872	1,148	4,024	961
Provisions	1,699	404	1,542	382
Cash deductible expenses	8,599	2,059	9,489	2,292
Deferred taxes on recoverable losses	1,673	401	1,673	401
Exchange differences and other	802	542	1,048	607
Totale		11,457		11,751

The decrease in deferred tax assets compared to the end of the previous financial period (-294 thousand euro) is mainly due to the issue of deferred tax assets recorded on the bonuses matured in the 2019 financial period and owed to the Executive Directors and the employees of the Parent Company, paid in the first half of 2020.

As at June 30, 2020 the Group had 150,831 thousand euro in fiscal losses eligible to be carried forward, mainly related to the Parent Company, to the subsidiary SAES Getters International Luxembourg S.A. and to E.T.C. S.r.l. in liquidation (fiscal losses eligible to be carried forward amounted to 145,595 thousand euro as at December 31, 2019).

The fiscal losses eligible to be carried forward that were taken into account when determining deferred tax assets were equal to 1,673 thousand euro (unchanged compared to December 31, 2019) and were exclusively related to SAES Coated Films S.p.A. These assets were recognized on the basis of recoverability tests performed by the Directors, which confirmed that the assumptions in the 2019 Annual Report are still valid.

(thousands of euro)

Deferred tax liabilities	June 30, 2020		December 31, 2019	
	Temporary differences	Fiscal effect	Temporary differences	Fiscal effect
Tax due on distribution of earnings accumulated by the subsidiaries	(51,979)	(4,610)	(52,835)	(4,277)
Differences on depreciation/amortization and assets fair value revaluations	(27,320)	(6,601)	(24,044)	(5,943)
Securities fair value revaluations	(179)	(45)	(3,795)	(947)
IAS 19 effect	(455)	(109)	(455)	(109)
IFRS 16 leasing effect	(51)	(12)	(31)	(8)
Other	(71)	(17)	(48)	(11)
Total		(11,394)		(11,295)

The deferred tax liabilities recorded in the consolidated financial statements as at June 30, 2020 included in addition to the fiscal provision on taxes due in the event of distribution of the net income and the reserves of the subsidiaries for which a distribution is expected in a foreseeable future, also the temporary differences on the gains identified during the purchase price allocation of the US companies acquired in the past years and the more recently acquired company, SAES Coated Films S.p.A.

The increase in deferred tax liabilities compared to December 31, 2019 (+99 thousand euro) is mainly due to temporary differences between fiscal and statutory amortization of the US affiliate Memry Corporation and the provision for taxes due in the case of distribution of profits and reserves of the subsidiaries, only partly offset by the release of deferred tax liabilities recognized in the previous year on the revaluation at fair value of securities in the portfolio held by SAES Investments S.A.

20. TAX CONSOLIDATION RECEIVABLES FROM THE CONTROLLING COMPANY

The item “Tax consolidation receivables from the Controlling Company” (128 thousand euro) refers to the residual receivable, originally due to SAES Advanced Technologies S.p.A. and now due to the Parent Company³⁵, from S.G.G. Holding S.p.A., following a claim for a refund that the latter had presented as consolidating entity of the tax consolidation scheme in place until December 31, 2014.

The decrease compared to December 31, 2019 (-144 thousand euro) is due to the partial reimbursement in May from the Tax Authorities, transferred from S.G.G. Holding S.p.A. to the Parent Company in June.

Starting from January 1, 2015, following the decrease of the stake of S.G.G. Holding S.p.A. in SAES Getters S.p.A. below the threshold of 50%, the prerequisite to access to the tax consolidation scheme with S.G.G. Holding S.p.A. as consolidating company ended, as envisaged by the combined provisions of articles 117 and 120 of the Consolidated Law on Income Tax (“TUIR”). The Italian companies of the Group³⁶ currently participate in a new tax consolidation scheme with the Parent Company as consolidator.

There is no credit or debit balance with SAES Getters S.p.A. since the positive taxable income was offset with the negative income. For more details, please see Note no. 35.

21. FINANCIAL RECEIVABLES FROM RELATED PARTIES

The item “Financial receivables from related parties” amounted to 50 thousand euro as at June 30, 2020, and refers to the interest-bearing loan granted by SAES Group to the joint venture **SAES RIAL Vacuum S.r.l.** The portion expected to be repaid by the joint venture within one year is classified under current assets (1 thousand euro, equal to the interest accrued in the first half of 2020 and not yet collected at June 30, 2020), while the remaining portion was recognized under non-current assets (49 thousand euro, equal to the principal portion).

The financial receivable, equal to a total of 9,858 thousand euro, which arose against the loans granted to the joint venture **Actuator Solutions GmbH**, was entirely written off since it is considered to be irrecoverable.

The related details are given in the tables below.

Actuator Solutions GmbH

³⁵ Please note that SAES Advanced Technologies S.p.A. merged into SAES Getters S.p.A. effective from January 1, 2016 from an accounting point of view.

³⁶ SAES Getters S.p.A., SAES Nitinol S.r.l. and E.T.C. S.r.l. in liquidation. In October 2017, the option to also include Metalvuoto S.p.A. (later renamed SAES Coated Films S.p.A.) within the scope of the national tax consolidation was exercised, effective from January 1, 2017.

Description	Currency	Principal (thousands of euro)	Timing of capital reimbursement	Interest rate	Value as at June 30, 2020 (*) (thousands of euro)	Value as at December 31, 2019 (*) (thousands of euro)
Loan granted in October 2014	EUR	1,200	flexible, with maturity date October 2018 extended to December 2020 (*)	6% annual fixed rate	74	74
Loan granted in April 2016	EUR	1,000	flexible, with maturity date April 2019 extended to December 2020 (*)	6% annual fixed rate	99	99
Loan signed in July 2016: - first <i>tranche</i> granted in July 2016 - second <i>tranche</i> granted in September 2016	EUR	2,000	flexible, with maturity date April 2019 extended to April 2024 (**)	6% annual fixed rate	3,697	3,607
	EUR	1,000				
Loan signed in November 2016: - first <i>tranche</i> granted in November 2016; - second <i>tranche</i> granted in January 2017; - third <i>tranche</i> granted in February 2017; - fourth <i>tranche</i> granted in March 2017; - fifth <i>tranche</i> granted in April 2017; - sixth <i>tranche</i> granted in February 2018.	EUR	1,000	flexible, with maturity date April 2019 extended to April 2024 (**)	6% annual fixed rate	5,988	5,839
	EUR	1,000				
	EUR	1,000				
	EUR	500				
	EUR	500				
Total		10,200			9,858	9,619
Financial receivables from related parties provision					(9,858)	(9,619)
Total net of write-downs					0	0

(*) Interests included: on December 17, 2019 SAES Nitinol S.r.l. and Actuator Solutions GmbH have signed an agreement under which the payment of all interest accrued from 2016 to 2019 has been postponed to December 31, 2020.

(*) The value includes only the portion of interest accrued in the 2016-2018 period.

(**) In January 2019, the duration of the loan was extended by five years, delaying the expiry from April 30, 2019 to April 30, 2024.

(#) On January 15, 2019, SAES Nitinol S.r.l. irrevocably waived the guarantee granted jointly by Allmeier S.E. and SMA Holding GmbH, by means of a letter of patronage, on 50% of the loan.

All financial receivables (both principal and interest) owed to the Group by the joint venture at December 31, 2019 (9,619 thousand euro) had already been fully written off at the end of the previous year, following the letter of postponement issued by SAES Nitinol S.r.l., in order to guarantee business continuity for Actuator Solutions.

The financial receivable corresponding to the interest accrued in the current half-year period was also written-off as at June 30, 2020 (239 thousand euro) since SAES management does not consider it recoverable.

SAES RIAL Vacuum S.r.l.

Description	Currency	Principal (thousands of euro)	Timing of capital reimbursement	Interest rate	Value as at June 30, 2020 (*) (thousands of euro)	Value as at December 31, 2019 (*) (thousands of euro)
Loan granted in January 2016	EUR	49	flexible	Three-months Euribor, plus 2.50% spread	50	50

(*) Interests included.

22. OTHER LONG TERM ASSETS

The “Other long-term assets”, at June 30, 2020, amounted to 1,466 thousand euro compared to 1,528 thousand euro at December 31, 2019.

This item, in addition to the deposits paid by the various Group companies, within the scope of its operating activities, includes the advance, of 1,100 thousand euro, for a potential minority investment still being evaluated. As regards the latter, note that, in the context of general uncertainty caused by the spread of the COVID-19 epidemic, all activities associated with this extraordinary transaction were prudentially suspended until at least mid-September. If the transaction is not successful, the advance paid will be reimbursed to the SAES Group.

23. INVENTORY

The inventory amounted to 31,845 thousand euro as at June 30, 2020, with an increase of +6,298 thousand euro compared to December 31, 2019.

The following table shows the breakdown of inventory as at June 30, 2020 compared with December 31, 2019.

(thousands of euro)

Inventory	June 30, 2020	December 31, 2019	Difference
Raw materials, auxiliary materials and spare parts	11,455	8,639	2,816
Work in progress and semi-finished goods	12,313	10,735	1,578
Finished products and goods	8,077	6,173	1,904
Total	31,845	25,547	6,298

Without the negative effect of exchange rates (-23 thousand euro), inventory would have increased by 6,321 thousand euro. The growing volumes of stocks in the Nitinol segment, associated with completion of the new tubes department of Memry Corporation and in view of early purchases of raw materials and semi-finished goods to avoid potential supply delays caused by COVID-19, should be added to the higher stocks of palladium in the security and defense sector, again linked to COVID risks, as well as the higher inventories in the Specialty Chemicals Division ready for orders in the second half of the year.

Inventory is stated net of any provision for write-down, which in the first half of 2020 recorded the changes shown in the table below.

(thousands of euro)

Inventory provision	
December 31, 2019	2,919
Accrual	631
Release into income statement	(91)
Utilization	(197)
Translation differences	1
June 30, 2020	3,263

The provision (+631 thousand euro) refers mainly to the write-down of raw materials, semi-finished goods and finished products characterized by slow turnover or no longer used in the production process, in particular by the Parent Company and by the US affiliates SAES Smart Materials, Inc. and Memry Corporation.

The release to the income statement (-91 thousand euro) was a consequence of a recall into production of warehouse codes that were written down in the previous year in the Nitinol division and by the affiliate SAES Getters USA, Inc.

The utilization (-197 thousand euro) is related to the scrapping of items that had already been written down in previous years by the Parent Company, particularly in the lamps business.

As a result of the global economic and financial crisis caused by the COVID-19 pandemic, Management considered it appropriate to carry out additional tests for potential impairment of inventories of raw materials, semi-finished goods and finished products no longer sellable due to solvency problems associated with the end customers. This analysis did not bring to light a need to include dedicated and additional adjustments to the net value of inventory.

24. TRADE RECEIVABLES

Trade receivables, net of the bad debt provision, were equal to 22,873 thousand euro as at June 30, 2020 and increased by 1,118 thousand euro compared to December 31, 2019.

If the effect of exchange rate fluctuations is removed (+46 thousand euro), the increase (+1,072 thousand euro) is mainly due to the higher trade receivables of the US affiliate SAES Getters U.S.A., Inc., explained by the strong overall growth recorded in the security and defense business in the second quarter of 2020 compared to the last quarter of 2019, and of the Parent Company (penalized by a slight increase in average collection times in the Specialty Chemicals Division).

The breakdown of the item as at June 30, 2020 and December 31, 2019 is shown in the following table.

(thousands of euro)

Trade receivables	June 30, 2020	December 31, 2019	Difference
Gross value	23,195	22,071	1,124
Bad debt provision	(322)	(316)	(6)
Net book value	22,873	21,755	1,118

Trade receivables are not interest-bearing and generally are due after 30-90 days.

The bad debt provision recorded the following changes during the period.

(thousands of euro)

Bad debt provision	June 30, 2020	December 31, 2019
Opening balance	316	416
Accrual	20	6
Release into income statement	(1)	(32)
Utilization	(12)	(75)
Translation differences	(1)	1
Closing balance	322	316

The accrual to income statement (+20 thousand euro) was mainly related to the write-down of a specific credit position of the affiliate SAES Coated Films S.p.A., estimated by Management as non-recoverable.

This item also includes the generic write-down recognized as at June 30, 2020 (+6 thousand euro), made according to the Expected Credit Loss model envisaged by IFRS 9 and based on the calculation of the expected average non-recoverability using historic and geographical indicators. The same calculation as at December 31, 2019, had resulted in release of the bad debt provision for -6 thousand euro (included in the line "Release into income statement").

Release into income statement (-1 thousand euro) is a result of the partial collection of a receivable fully written down by SAES Coated Films S.p.A. in previous years.

The utilization (-12 thousand euro) refers almost exclusively to the part not collected, and later permanently written off, of the above-mentioned receivable of the affiliate SAES Coated Films S.p.A. and the write-off by the Parent Company of a trade receivable considered non-recoverable and already written down as at December 31, 2019.

The following table provides a breakdown of trade receivables, by those not yet due and past due as at June 30, 2020, compared with the previous year.

(thousands of euro)

Ageing	Total	Not yet due	Due not written down					Due written down
			< 30 days	30 - 60 days	60 - 90 days	90 - 180 days	> 180 days	
June 30, 2020	23,195	17,083	3,353	1,265	827	321	24	322
December 31, 2019	22,071	16,236	3,507	1,613	320	58	21	316

Receivables past due more than 30 days and not written down, since they are considered recoverable, represent an insignificant percentage if compared to the total trade receivables, and are constantly monitored. The higher impact of these receivables on total trade receivables (from 9.1% as at December 31, 2019 to 10.5% as at June 30, 2020) was mainly due to some specific credit positions of the Parent Company and the affiliate SAES Coated Films S.p.A., which was partly collected in July.

The table below illustrates the calculation of the average number of days for the Group to collect trade receivables after sale (Days of Sales Outstanding, or DSO), as at June 30, 2020 and December 31, 2019, respectively.

	June 30, 2020	December 31, 2019	Difference
<i>Days of Sales Outstanding - DSO</i> (*)	46	44	2

(*) DSO is an average collection time indicator for trade receivables and it is calculated as follow:

Trade receivables / Annualized net revenues * 365.

The DSO as at June 30, 2020, was essentially in line with December 31, 2019, and therefore shows no significant delays in payments from customers.

As a result of the COVID-19 pandemic, Management considered it appropriate to carry out additional tests, at Group level, for potential impairment of trade receivables considered not recoverable due to solvency difficulties of the end customers.

In particular, in addition to updating the expected loss calculation (see previous comments), an in-depth analysis was conducted of individual positions past due by more than 90 days to assess the probability of their collection by the Group.

From this analysis, further supported by the fact that the DSO is essentially aligned to that of December 31, 2019, no need emerged for an additional write-down.

Management considers the forecasts generated to be reasonable and sustainable, though current circumstances are a cause of uncertainty.

In relation to credit risk management on trade receivables, in order to understand how the Group monitors and manages credit quality in the event that the relative trade receivables are not past due or written down, please refer to the Interim Report on Operations.

25. OTHER RECEIVABLES, ACCRUED INCOME AND PREPAID EXPENSES

This item, which includes current non-trade receivables from third parties, along with prepaid expenses and accrued income, showed a balance of 4,418 thousand euro as at June 30, 2020, compared to 4,677 thousand euro as at December 31, 2019.

A breakdown of this item is provided below.

(thousands of euro)

Prepaid expenses, accrued income and other	June 30, 2020	December 31, 2019	Difference
Income tax and other tax receivables	1,139	1,863	(724)
VAT receivables	1,140	1,236	(96)
Social security receivables	32	32	0
Personnel receivables	4	1	3
Receivables for public grants	89	63	26
Other receivables	10	5	5
Total other receivables	2,414	3,200	(786)
Accrued income	0	0	0
Prepaid expenses	2,004	1,477	527
Total prepaid expenses and accrued income	2,004	1,477	527
Total prepaid expenses, accrued income and other	4,418	4,677	(259)

The item “Income tax and other tax receivables” includes the receivables for tax advances paid and other tax credits of the Group’s companies with local authorities. Compared to December 31, 2019, the decrease (-724 thousand euro) is mainly related to the tax advances paid by the affiliate SAES Getters/U.S.A., Inc. on its own behalf and on behalf of the other American affiliates (Spectra-Mat, Inc., Memry Corporation and SAES Smart Materials, Inc.), the payment of which was deferred to July 2020 as a COVID-19 government measure in support of businesses. This decrease was only partially offset by the Parent Company’s higher tax credits for recoverable withholding taxes applied mainly on royalties and intercompany dividends.

The decrease in “VAT receivables” was mainly due to offsetting by the Italian companies of the receivable generated in 2019 against other taxes and contributions relating to 2020. These decreases were only partially offset by the receivable generated in SAES Getters S.p.A. in the first half of 2020 due to the surplus of the taxable purchasing transactions over sales transactions and not yet subject to offsetting.

The item “Receivables for public grants” was composed of receivables accrued by the Parent Company as at June 30, 2020 in grants for outstanding research projects. During the first half of the year, income from public funding amounted to 30 thousand euro (79 thousand euro in the first half of 2019).

The increase in the item “Prepaid expenses” was mainly due to all the cost items (particularly, insurance costs) which were paid in advance at the beginning of the year but which refer to the entire period (at December 31, 2019, these costs were not deferred since the respective invoices applied to the year).

Please note that there are no receivables due after more than five years.

Public grants - disclosure pursuant to the Law no. 124 of August 4, 2017, article 1, paragraphs 125-129

Law no. 124 of August 4, 2017 - article 1, paragraphs 125-129 - “Fulfilment of transparency and disclosure obligations” introduced, starting from the 2018 financial statements, a series of disclosure and transparency obligations by parties who have financial dealings with the Public Administration. In light of the guidelines expressed by industry sources, the disclosure requirement is not deemed to apply to:

- general measures that can be used by all companies that fall under the general structure of the applicable system defined by the State (e.g., ACE);

- selective economic benefits, received in application of an aid regime, accessible to all companies that meet certain conditions, on the basis of general pre-determined criteria (e.g., contributions for research and development products and tax incentives);
- public resources that can be related to public parties of other states (European or non-European) and European institutions;
- contributions for training received by inter-professional funds, since they are funds for association purposes and for entities governed by private law, funded with contributions paid by the companies themselves.

In accordance with the above, the analysis made showed that the Group, in the first half of 2020, similarly to the previous financial period, did not receive public grants that would fall under the application of law no. 124/2017 (article 1, paragraphs 125-129) as amended.

26. CASH AND CASH EQUIVALENTS

The item includes the liquid funds for the cash flow management necessary for the operating activities.

The following table shows a breakdown of this item as at June 30, 2020 and December 31, 2019.

(thousands of euro)

Cash and cash equivalents	June 30, 2020	December 31, 2019	Difference
Bank accounts	31,212	48,623	(17,411)
Petty cash	11	11	0
Total	31,223	48,634	(17,411)

The item “Bank accounts” consists of short-term deposits with some leading financial institutions, denominated primarily in euro, US dollars and Chinese renminbi.

“Bank accounts” are shown net of the write-down, amounting to -26 thousand euro, determined in application of IFRS 9. In particular, the expected losses were calculated in accordance with a default percentage associated with each bank where the cash and cash equivalents are deposited, obtained on the basis of each bank’s rating.

At December 31, 2019, the write-down amounted to -78 thousand euro and the reduction of the expected losses at June 30, 2020 (52 thousand euro) was mainly a result of the lower amount of cash held by the Group, whilst the riskiness associated with the banks with which the Group operates essentially remained unchanged.

For a detailed analysis of the changes occurred in cash and cash equivalents during the period please refer to the comments on the cash flow statement (Note no. 39).

As at June 30, 2020 the Group has unused credit lines equal to 84.2 million euro compared to 25.7 million euro as at December 31, 2019.

The increase is due to the Parent Company’s signing of two new revolving cash credit lines, respectively with Unicredit S.p.A. on March 6, 2020, and with Intesa Sanpaolo S.p.A. on April 30, 2020, each for a maximum of 30 million euro and with a fixed duration of thirty-six months.

Both the credit lines provide for compliance with only one financial covenant (positive consolidated net financial position) subject to half-yearly verification. As better shown in the table below, as at June 30, 2020, all of the covenants had been met.

			<i>RCF Unicredit</i> (*)	<i>RCF Intesa Sanpaolo</i> (**)
			June 30, 2020	June 30, 2020
		Covenant		
Net financial position	k euro	> 0	99,477	99,487

(*) Net financial position calculated excluding financial receivables from related parties, receivables (payables) for derivative financial instruments evaluated at fair value and financial liabilities for leasing contracts pursuant to IFRS 16.

(**) Net financial position calculated excluding financial liabilities for leasing contracts pursuant to IFRS 16.

Reconciliation of net financial debt

Details on the Group's net financial debt are provided below, drafted in accordance with Consob Communication no. DEM/6064293 of July 28, 2006.

(thousands of euro)

	June 30, 2020	March 31, 2020	December 31, 2019
A. Cash	11	10	11
B. Other cash and cash equivalents	31,212	45,941	48,623
C. Securities held for trading	70,125	67,767	70,779
D. Cash and cash equivalent (A)+(B)+(C)	101,348	113,718	119,413
E. Current financial receivables	1	0	1
F. Bank overdraft	(27,066)	(27,282)	(27,195)
G. Current portion of long term debt	(5,237)	(5,629)	(5,365)
H. Other current financial liabilities	(3,490)	(3,818)	(2,826)
I. Current financial liabilities (F)+(G)+(H)	(35,793)	(36,729)	(35,386)
J. Current net financial position (I)+(E)+(D)	65,556	76,989	84,028
K. Long term debt, net of current portion	(98,125)	(99,933)	(100,724)
L. Bonds issued	0	0	0
M. Other non-current payables	(2,072)	(2,436)	(2,710)
N. Non current financial liabilities (K)+(L)+(M)	(100,197)	(102,369)	(103,434)
O. Net financial debt (J)+(N)	(34,641)	(25,380)	(19,406)

The table below shows the reconciliation of the net financial debt in accordance with Consob Communication no. DEM/6064293 of July 28, 2006 and the net financial position indicated in the Report on Operations.

(thousands of euro)

	June 30, 2020	March 31, 2020	December 31, 2019
Net financial debt included in the Explanatory notes	(34,641)	(25,380)	(19,406)
Related parties non current financial assets	49	49	49
Securities - long term	130,236	128,129	134,673
Net financial position included in the Management Report	95,644	102,798	115,316

27. SHAREHOLDERS' EQUITY

The Group shareholders' equity amounted to 243,988 thousand euro as at June 30, 2020, with a decrease of 8,542 thousand euro compared to December 31, 2019, due to the dividend distribution by SAES Getters S.p.A. (-9,198 thousand euro), partly offset by the profit for the period (+438 thousand euro) and to the exchange rate differences arising from the translation of financial statements in foreign currencies (+218 thousand euro).

A summary of the changes that occurred is provided in the Statement of Changes in Equity.

Capital stock

As at June 30, 2020 the capital stock, fully subscribed and paid up, amounted to 12,220 thousand euro, comprising 22,049,969 shares. The composition of capital stock was unchanged compared to December 31, 2019.

The implicit book value per share was 0.554196 euro as at June 30, 2020, unchanged from December 31, 2019.

Please refer to the Report on corporate governance and ownership structure, in the Consolidated Financial Statements as at December 31, 2019, for all information required by article 123-*bis* of the Consolidated Finance Act (TUF).

All the Parent Company's securities are listed on the segment of the Mercato Telematico Azionario of Borsa Italiana, known as "STAR" (Securities with High Requirements), dedicated to small and medium caps that meet specific requirements with regard to reporting transparency, liquidity and corporate governance.

Share issue premium reserve

This item includes amounts paid by the shareholders in excess of the par value, at the time of subscription, for new shares of the Parent Company.

This item was unchanged compared to December 31, 2019.

Treasury shares

The item amounted to -93,382 thousand euro at June 30, 2020, unchanged compared to December 31, 2019, and refers to the ordinary shares purchased by SAES Getters S.p.A. as part of the voluntary partial public tender offer finalized at the end of May last year. On May 31, 2019, the Parent Company acquired 3,900,000 ordinary shares at a price of 23 euro per share, with outlay amounting to 89.7 million euro.

The table below shows the breakdown of the capital stock, indicating the number of shares in issue and the treasury stock at June 30, 2020 (both unchanged since December 31, 2019).

	June 30, 2020
Ordinary outstanding shares	10,771,350
Savings outstanding shares	7,378,619
Treasury shares	3,900,000
Total shares	22,049,969

The percentage, at June 30, 2020, of treasury shares held in relation to the issue category and the overall number of shares that constitutes the capital stock is shown below in accordance with article 2357 of the Civil Code.

	June 30, 2020
Number of ordinary treasury shares	3,900,000
% on total ordinary shares	36.2%
% on share capital	17.7%

Note that the outlay to purchase the shares was 89.7 million euro, plus accessory charges for a total of 3.7 million euro.

As provided by the international accounting standards, the overall cost (of 93.4 million euro) to acquire the treasury stock, including the additional charges, reduced equity by the same amount.

Legal reserve

This item corresponds to the Parent Company's legal reserve of 2,444 thousand euro as at June 30, 2020, unchanged compared to December 31, 2019, since the reserve had reached its legal limit.

Other reserves and retained earnings

This item includes:

- the reserves (totalling 2,615 thousand euro) represented by the positive monetary revaluation balances resulting from the application of Law no. 72 of March 19, 1983 (1,039 thousand euro) and Law no. 342 of November 21, 2000 (1,576 thousand euro) by the Parent Company SAES Getters S.p.A. Pursuant to Law no. 342 of 2000, the revaluation reserve has been stated net of the related substitute tax of 370 thousand euro;
- the other reserves of subsidiaries, retained earnings, and other shareholders' equity items of Group companies which were not eliminated during the consolidation process.

The change in the item "Other reserves and retained earnings" includes the distribution to shareholders of the 2019 dividend, approved by the Parent Company's Shareholders' Meeting (-9,198 thousand euro) and the carrying forward of the 2019 consolidated profit (+19,837 thousand euro).

As reported in the Report on corporate governance and ownership structure annexed to the Consolidated Financial Statements as at December 31, 2019, each share is entitled to a proportional part of the net income that is allocated for distribution, except the rights attached to savings shares. More specifically, as described in article 26 of the By-laws, savings shares are entitled to a preferred dividend equal to 25% of their implied book value; if in one financial year a dividend of less than 25% of the implied book value has been allocated to savings shares, the difference will be made up by increasing the preferred dividend in the following two years. The remaining profit that the Shareholders' Meeting has resolved to distribute will be allocated among all shares in such a way to ensure that savings shares are entitled to a total dividend that is 3% of the implied book value higher than that of ordinary shares. In case of distribution of reserves, shares have the same rights irrespective of the category to which they belong.

Other components of shareholders' equity

This item includes the exchange rate differences arising from the translation of financial statements in foreign currencies. The translation reserve had a positive balance of 12,306 thousand euro as at June 30, 2020, compared to a positive balance of 12,088 thousand euro as at December 31, 2019.

The increase of 218 thousand euro was due both to the overall effect on the consolidated shareholders' equity of the translation into euros of the financial statements in the currencies of fully consolidated foreign subsidiaries and the respective consolidation adjustments (+205 thousand euro), and the share of the Group in the translation reserve arising from the consolidation of the companies³⁷ evaluated with the equity method (+13 thousand euro).

Please note that the Group exercised the exemption allowed under IFRS 1 - First-time Adoption of International Financial Reporting Standards, regarding the possibility of writing-off the accumulated translation gains or losses generated by the consolidation of foreign subsidiaries as of January 1, 2004. Consequently, the translation reserve includes only the translation gains or losses generated after the date of transition to the international accounting standards.

28. FINANCIAL DEBTS

As at June 30, 2020, the financial debts amounted to 103,362 thousand euro, with a decrease of 2,727 thousand euro compared to December 31, 2019.

The decrease is mainly a result of repayments of principal made during the first half of 2020 (-2,739 thousand euro).

The following table shows the changes in the financial debts during the first half of 2020.

(thousands of euro)

Financial debts	
December 31, 2019	106,089
Proceeds	0
Amortization of fees and interests	629
Repayments	(2,739)
Interest payments	(618)
Translation differences on loans in foreign currencies	1
June 30, 2020	103,362

In the first half of 2020 the Parent Company repaid 2,558 thousand euro of the principal. The difference, of 181 thousand euro, corresponds to the repayment of principal by SAES Coated Films S.p.A. and Memry Corporation.

The currency effect was almost zero (positive 1 thousand euro): only 0.4% of the Group's financial debt comprises loans in US Dollars of the US affiliate Memry Corporation (the total euro value of these debts increased slightly following appreciation of the US Dollar as at June 30, 2020, compared to December 31, 2019).

The following table shows the breakdown of the item by contractual maturity.

Please note that the debt with a maturity of less than one year is included under current liabilities among the "Current portion of medium/long term financial debts".

³⁷ Translation reserve deriving from the translation into euro of the financial statements of Flexterra, Inc. and its subsidiary Flexterra Taiwan Co., Ltd.

(thousands of euro)

Financial debts	June 30, 2020	December 31, 2019	Difference
Less than 1 year	5,237	5,365	(128)
Current portion of financial debts	5,237	5,365	(128)
Between 1 and 2 years	4,146	5,204	(1,058)
Between 2 and 3 years	1,087	2,584	(1,497)
Between 3 and 4 years	92,824	88	92,736
Between 4 and 5 years	68	92,825	(92,757)
Over 5 years	0	23	(23)
Non current financial debts	98,125	100,724	(2,599)
Total	103,362	106,089	(2,727)

The following table shows the details of loans held by the Group companies.

Description	Currency	Principal	Timing of capital reimbursement	Timing of covenants calculation	Interest rate	Effective interest rate	Value as at June 30, 2020 (thousands of euro)	Value as at December 31, 2019 (thousands of euro)
SAES Getters S.p.A. <i>Unicredit</i>	EUR	10 (millions of euro)	quarterly with maturity date March 31, 2022	Half -yearly	Three-months Euribor plus 1% spread	0.90%	3,493	4,489
SAES Getters S.p.A. <i>Intesa Sanpaolo</i>	EUR	10 (millions of euro)	half-yearly (with fixed principal amounts) with maturity date December 21, 2022	Yearly	Six-months Euribor plus 1.20% spread	1.18%	4,986	5,980
SAES Getters S.p.A. <i>Banco BPM</i>	EUR	5 (millions of euro)	quarterly (with variable principal amounts) with maturity date December 31, 2021	n.a.	Three-months Euribor plus 1% spread	1.11%	1,690	2,247
SAES Getters S.p.A. <i>Mediobanca – Banca di Credito Finanziario</i>	EUR	92.7 (millions of euro)	single solution at the final date (April 17, 2024)	Half -yearly	1.2%	1.20%	92,735	92,735
Menmy Corporation <i>Soft financing granted by the State of Connecticut (*)</i>	USD	1a tranche = 2 millions of USD 2a tranche = 0.8 millions of USD	monthly with maturity date March 1, 2025	n.a.	2%	2.00%	416	457
SAES Coated Films S.p.A. <i>Intesa Sanpaolo</i>	EUR	300 (thousand of euro)	quarterly with maturity date June 30, 2020	n.a.	Three-months Euribor plus 2.25% spread	1.90%	0	38
SAES Coated Films S.p.A. <i>Banco BPM</i>	EUR	231 (thousand of euro)	half-yearly with maturity date June 30, 2020	n.a.	Six-months Euribor plus 2.75% spread	2.41%	0	30
<i>Banco BPM - MIUR loan</i>	EUR	231 (thousand of euro)			0.5%	0.50%	0	29
SAES Coated Films S.p.A. <i>Intesa Sanpaolo</i>	EUR	400 (thousand of euro)	quarterly with maturity date December 31, 2020	n.a.	Three-months Euribor plus 1.50% spread	1.13%	42	84

(*) During 2018, 50% of the loan has been transformed in a non-repayable grant.

Note that, as at June 30, 2020, according to the original repayment plan, three of the four existing loans with the affiliate SAES Coated Films S.p.A. reached maturity.

Covenants

With the exception of the loan signed with Banco BPM, all the loans held by the Parent Company must comply with covenants calculated on some Group economic and financial figures. The loans granted by Unicredit and Mediobanca are checked to ensure compliance with the covenants every six months (at June 30 and December 31 each year) while the guarantee clauses for the loan granted by Banca Intesa Sanpaolo are only checked yearly (at December 31).

As better shown in the table below, as at June 30, 2020, all of the covenants had been met.

			<i>loan Unicredit</i> (*)	<i>loan Mediobanca</i> (**)
			June 30, 2020	June 30, 2020
		Covenant		
Net equity	k euro	> 94,000	243,988	n.a.
Net financial position	k euro	> 0	n.a.	99,527
<u>(Net financial position)</u> Net equity	%	< 1.0	(0.4)	n.a.
<u>(Net financial position)</u> EBITDA (§)	%	< 2.25	(3.0)	n.a.

(*) Net financial position calculated excluding financial receivables from related parties, receivables (payables) for derivative financial instruments evaluated at fair value and financial liabilities for leasing contracts pursuant to IFRS 16.

(**) Net financial position calculated excluding receivables (payables) for derivative financial instruments evaluated at fair value and financial liabilities for leasing contracts pursuant to IFRS 16.

(§) EBITDA calculated for the period from July 1, 2019 to June 30, 2020, without IFRS 16 application.

Please note that both the soft financing disbursed by the state of Connecticut to Memry Corporation and the loan agreement signed by SAES Coated Films S.p.A. with Banca Intesa Sanpaolo contain no economic and financial covenants.

Though in a context of general uncertainty caused by the COVID-19 pandemic, it is considered that the Group will be able to comply with the above-mentioned covenants also in the coming years.

29. FINANCIAL LIABILITIES FOR LEASES

At June 30, 2020 the “Financial liabilities for leases” amounted to 3,843 thousand euro, compared to 4,586 thousand euro as at December 31, 2019, and reflect the obligation to pay the lease payments and corresponds to the current value of future payments.

Debt with a maturity of less than one year is included under current liabilities.

(thousands of euro)

	June 30, 2020	December 31, 2019	Difference
Financial liabilities for leases - current	1,771	1,876	(105)
Financial liabilities for leases - non current	2,072	2,710	(638)
Total Financial liabilities for leases	3,843	4,586	(743)

The change from the end of last year is mainly due to the payment of instalments during the current half year (-1,130 thousand euro), only partly offset by new contracts signed, net of early settlements (in total +275 thousand euro).

The following table shows the breakdown of financial debt by contractual maturity.

(thousands of euro)

Financial liabilities for leasing	June 30, 2020	December 31, 2019	Difference
Less than 1 year	1,771	1,876	(105)
Financial liabilities for leasing - current	1,771	1,876	(105)
Between 1 and 2 years	969	1,425	(456)
Between 2 and 3 years	552	547	5
Between 3 and 4 years	393	418	(25)
Between 4 and 5 years	158	320	(162)
Over 5 years	0	0	0
Financial liabilities for leasing - non current	2,072	2,710	(638)
Financial liabilities for leasing	3,843	4,586	(743)

The average weighted incremental borrowing rate (IBR) applied to the financial liabilities recognized during the first half of 2020 amounted to 1.74%.

30. OTHER FINANCIAL DEBTS TO THIRD PARTIES

The “Other financial debts to third parties” at June 30, 2020, amounted to 1,679 thousand euro compared to 900 thousand euro on December 31, 2019.

(thousands of euro)

	June 30, 2020	December 31, 2019	Difference
Other financial debts to third parties - current	1,679	900	779
Other financial debts to third parties - non current	0	0	0
Other financial debts to third parties	1,679	900	779

The following table shows the changes in the other financial debts to third parties in the first half of 2020.

(thousands of euro)	December 31, 2019	Collections (Payments)	Other income statement accruals	Translation differences	Reclassifications	June 30, 2020
Import financing	879	749	9	0	0	1,637
Other commissions	21	(147)	168	0	0	42
Other financial debts to third parties	900	602	177	0	0	1,679

As at June 30, 2020, this item was composed of bank fees accrued and not yet paid (42 thousand euro), as well as financial debts of the associate SAES Coated Films S.p.A. (1.637 thousand euro as at June 30, 2020, compared with 879 thousand euro as at December 31, 2019) related to short-term loans intended for the import of goods, signed with primary financial institutions in order to have more financial resources to facilitate its procurement activities.

31. STAFF LEAVING INDEMNITIES AND OTHER EMPLOYEE BENEFITS

Please note that this item includes liabilities to employees under both defined contribution and defined benefit plans existing in the companies of the Group in accordance with the contractual and legal obligations in place in the various countries.

The following shows a breakdown and changes in this item during the period.

(thousands of euro)

Staff leaving indemnities and other employee benefits	Staff leaving indemnities	Other employee benefits	Total
December 31, 2019	5,195	4,321	9,516
Accrual (release) at P&L	180	1,114	1,294
Indemnities paid	(96)	(239)	(335)
Other changes	0	0	0
Translation differences	0	5	5
June 30, 2020	5,279	5,201	10,480

The amounts recognized in the statement of profit or loss may be broken down as follows.

(thousands of euro)	June 30, 2020	June 30, 2019
Financial expenses	180	208
Cost of current work performed	1,114	1,096
Released to P&L	0	0
Expected return on plan assets	0	0
Recognized past service costs	0	0
Total cost to P&L	1,294	1,304

The split between defined contribution plan and defined benefit plan obligations and the related changes during the first half of the year are shown below.

(thousands of euro)

	December 31, 2019	Financial expenses	Current service cost	Benefits paid	Actuarial (gains) losses on obligations	Translation differences	Translation differences on foreign plans	June 30, 2020
Present value of defined benefit obligations	8,200	180	1,067	(123)	0	0	(2)	9,322
Fair value of plan assets	0	0	0	0	0	0	0	0
Costs non yet recognized deriving from past obligations	0	0	0	0	0	0	0	0
Defined benefit obligations	8,200	180	1,067	(123)	0	0	(2)	9,322
Defined contribution obligations	1,316	0	47	(212)	0	0	7	1,158
Staff leaving indemnities and similar obligations	9,516	180	1,114	(335)	0	0	5	10,480

The obligations under defined-benefit plans are measured annually, at the end of each fiscal year, by independent actuarial consultants according to the projected unit credit method, separately applied to each plan.

When referred to the Group's Italian companies, staff leaving indemnity consists of the obligation, estimated according to actuarial techniques, related to the sum to be paid to employees of the Italian companies when employment is terminated.

Following the entry into force of the 2007 Budget Act and associated implementing decrees, in companies with a number of employees above 50, the liability associated with past years' staff leaving indemnity continues to be considered a defined benefit plan and is consequently measured according to actuarial assumptions. The portion paid to pension funds is instead considered a defined contribution plan and therefore it is not discounted.

The item "Other employee benefits" includes the provision for long-term incentive plans, signed by the Executive Directors and by some employees of the Group identified as particularly important

for the achievement of the medium- to long-term consolidated corporate objectives. The three-year plans provide for the recognition of monetary incentives proportional to the achievement of specific personal and Group's objectives.

The aim of these plans is to further strengthen the alignment over time of individual interests to corporate interests and, consequently, to the shareholders' interests. The final payment of the long-term incentive is always subject to the creation of value in a medium to long term, rewarding the achievement of performance objectives over time. The performance review is based on multi-year indicators and the payment is always subject, in addition to maintaining the employer-employee relationship/position with the company for the duration of the plan, also to the presence of a positive consolidated income before taxes at the expiry date of the plan.

Such plans fall into the category of defined benefit obligations and therefore they are discounted back on a yearly basis, at the end of each fiscal year.

The following table shows the Group's employees split by category.

Group's employees	June 30, 2020	December 31, 2019	Average June 30, 2020	Average June 30, 2019
Managers	93	92	93	92
Employees and middle management	318	310	312	312
Workers	588	585	587	541
Total (*)	999	987	992	945

(*) It does not include the employees of the joint ventures for which please refer to the Note no. 17.

The workforce numbered 999 as at June 30, 2020 (of which 550 employed abroad), compared to 987 employees as at December 31, 2019 (of which 552 employed abroad): the increase was mainly in the Parent Company's workforce.

This figure does not include the personnel employed at the Group companies with contract types other than employment agreements, equal to 79 staff (93 as at December 31, 2019).

The increase in the average number of employees at June 30, 2020 compared to the first half of the previous year is mainly due to the growth in the workforce of Memry Corporation and other US affiliates during the second half of 2019.

32. PROVISIONS FOR RISKS AND CHARGES

The "Provisions for risks and charges" amounted to 4,306 thousand euro at June 30, 2020 compared to 6,369 thousand euro as at December 31, 2019.

(thousands of euro)

Provisions for risks and charges	June 30, 2020	December 31, 2019	Difference
Product warranty provision	71	71	0
Bonus	2,680	4,834	(2,154)
<i>Phantom shares</i>	590	413	177
Other provisions	965	1,051	(86)
Total	4,306	6,369	(2,063)

The following table shows the breakdown and the changes in these provisions compared to December 31, 2019.

(thousands of euro)

Provisions for risks and charges	December 31, 2019	Increase	Utilization	Released to the income statement	Translation differences	June 30, 2020
Product warranty provision	71	0	0	0	0	71
Bonus	4,834	2,408	(4,585)	0	23	2,680
<i>Phantom shares</i>	413	177	0	0	0	590
Other provisions	1,051	43	(30)	(100)	1	965
Total	6,369	2,628	(4,615)	(100)	24	4,306

The item “Bonus” includes the provisions for the bonuses for the Group employees relating to the first half of 2020 (mainly relating to the Parent Company and the US subsidiaries³⁸). The change compared to December 31, 2019 was mainly due to both the accrual of bonuses matured during the period and payment of the variable remuneration for the previous year, which was made in the first half of 2020.

At the end of 2018, the Shareholders’ Meeting of SAES Getters S.p.A. approved the adoption of a bonus plan based on phantom shares, targeting Executive Directors and a number of key managers. The plan involves the free assignment to beneficiaries of a specific number of phantom shares which, under the terms and conditions of the plan, give them the right to receive a cash incentive, dependent on the increase in the stock market price of the shares on a date in which certain pre-established events are due to take place, with respect to the assignment value.³⁹ For example, events that could give the right to bonuses include: change of control of the Company; failure to renew the position as director at the end of the term of office; removing the position as director or a substantial change in the powers or the role, without there being just cause; resignation for just cause; dismissal for justified objective reason (only for Key Managers); reaching pension age; permanent invalidity; death; delisting. The maximum number of phantom shares assignable is 1,760,562⁴⁰. The plan aims to remunerate the beneficiaries in relation to the increased capitalization of the company, for retention purposes and a greater alignment between performance and the Company shareholders’ interests.

The first assignment was on October 17, 2018, for a total of 1,467,135 phantom shares. The assignment value of each phantom share was established as 16.451 euro. On February 13, 2020 (the second assignment date), at the proposal of the Remuneration and Appointments Committee, the Board of Directors of SAES Getters S.p.A. assigned an additional 195,618 phantom shares, with an assignment value of 21.14 euro.

The liabilities relating to the phantom shares plan (590 thousand euro at June 30, 2020 compared with 413 thousand euro at December 31, 2019) were evaluated by an independent actuary following the Risk Neutral approach required under IFRS 2. Please refer to the Consolidated Financial Statements at December 31, 2019 for more information on the economic-financial assumptions made at June 30, 2020 for an estimate of the fair value of the phantom shares, since they are the same used in the previous year. With reference to the second assignment only, note that based on the historic share values an annual volatility in returns on the share were estimated at 4.09% (4.69% volatility assumed for the first assignment).

The decrease in “Other provisions” is mainly due to the release to the income statement, amounting to 100 thousand euro, previously allocated in reference to an incident during the disposal of certain waste at the Parent Company’s Avezzano facility, following the decision in favour of the company issued by the Civil Court of Macerata on June 25, 2020.

³⁸ With respect to the US subsidiaries, the monetary bonus plan is related to reaching targets calculated on both the consolidated economic-financial results and the results obtained by the individual companies.

³⁹ The assignment value is the weighted average of official prices of the shares recorded on trading days falling within the thirty-six months prior to the assignment date.

⁴⁰ Of which 880,281 phantom shares reserved for Executive Directors.

The item “Other provisions” includes the allocation of a risk provision for 600 thousand euro as at December 31, 2019 and equal to the pro-rata financial resources necessary to Actuator Solutions to continue its operations over the next twenty-four months, in view of the update to the five-year plan of February 18, 2020, as well as implicit obligations of Spectra-Mat, Inc., calculated on the basis of the agreements made with the local authorities, in connection with the expenses to be incurred to monitor the pollution levels at the site in which it operates (237 thousand euro).

Lastly, the item includes the obligation (equal to 119 thousand euro at June 30, 2020) which arose in 2018 for a labour law dispute of the Parent Company with the social security institutions. The related risk provision increased by 43 thousand euro compared to December 31, 2019, against the updated estimate of the obligation.

A breakdown of provisions by current and non-current portion is provided below.

(thousands of euro)

Provisions for risks and charges	Current provisions	Non current provisions	June 30, 2020	Current provisions	Non current provisions	December 31, 2019
Product warranty provision	58	13	71	58	13	71
Bonus	2,680	0	2,680	4,834	0	4,834
<i>Phantom shares</i>	0	590	590	0	413	413
Other provisions	719	246	965	476	575	1,051
Total	3,457	849	4,306	5,368	1,001	6,369

33. TRADE PAYABLES

Trade payables amounted to 11,896 thousand euro as at June 30, 2020, marking a decrease of 3,798 thousand euro compared to December 31, 2019.

(thousands of euro)

Trade payables	June 30, 2020	December 31, 2019	Difference
Trade payables	11,896	15,694	(3,798)
Total	11,896	15,694	(3,798)

The decrease is mainly due to the fact that as at December 31, 2019, the Parent Company and Memry Corporation had open debt positions for investments in new production lines (lacquering systems and other machinery for the packaging department, as well as shape memory alloy processing machines).

The effect of the dollar revaluation compared to December 31, 2019 generated an increase in this item of 11 thousand euro.

Trade payables do not bear interest and are due within twelve months.

There are no trade payables in the form of debt securities.

The following table provides a breakdown of trade payables by those not yet due and past due as at June 30, 2020 compared with December 31, 2019.

(thousands of euro)

Ageing	Total	Not yet due	Due				
			< 30 days	30 - 60 days	60 - 90 days	90 - 180 days	> 180 days
June 30, 2020	11,896	11,451	246	8	9	145	37
December 31, 2019	15,694	13,459	1,481	108	579	27	40

34. OTHER PAYABLES

The item “Other payables” includes amounts that are not classified as trade payables and amounted to 10,017 thousand euro as at June 30, 2020 compared to 9,868 thousand euro as at December 31, 2019.

The table below shows the details of the other payables compared with the end of the previous year.

(thousands of euro)

Other payables	June 30, 2020	December 31, 2019	Difference
Employees payables (vacation, wages, staff leaving indemnity, etc.)	6,105	4,232	1,873
Social security payables	1,089	1,726	(637)
Tax payables (excluding income taxes)	864	1,340	(476)
Other	1,959	2,570	(611)
Total	10,017	9,868	149

The item “Employees payables” is mainly made up of the provisions for holidays accrued but not taken during the period and for the additional monthly salaries, as well as the June salaries, allocated but not yet paid as at June 30, 2020.

The increase compared to December 31, 2019 was mainly due to the increased holiday provisions that will be used during the summer, as well as the higher accruals for the additional monthly salaries of the Group’s Italian companies.

The item “Social security payables” includes the payables owed by the Group’s Italian companies to the INPS (Italy’s social security agency) for contributions to be paid on wages as well as the payables to the treasury fund operated by the INPS and to the pension funds under the reformed staff leaving indemnity legislation.

The decrease was mainly due to the fact that as at December 31, 2019, this item included also the liability for the social security (INPS) retentions on the thirteenth month’s pay, paid in January 2020.

The item “Tax payables” primarily consists of the payables owed by the Italian companies to the Treasury in connection with the withholding taxes on the wages of employees and consultants, the payable to the tax authorities for VAT to pay and the local tax payables by the US subsidiaries on top of income taxes. The decrease was mainly due to the fact that as at June 30, 2020, this item also included the liability for IRPEF withholdings on the thirteenth month’s pay, paid in January 2020.

The item “Other” mainly includes payables of the Parent Company for both fixed and variable remuneration of Directors (1,613 thousand euro as at June 30, 2020).

The decrease compared to last year is mainly due to the fact that as at December 31, 2019 the item included the payable for the bonus due to Executive Directors for the variable remuneration accrued for all 2019 (later paid in the first half of 2020), whilst at June 30, 2020, the same debt refers to the half year only.

Please note that there are no accrued payables due after more than five years.

35. ACCRUED INCOME TAXES

This item consists of payables for taxes associated with the Group's foreign subsidiaries and the IRAP (regional production tax) payable for the Italian companies. Instead with regard to the IRES (corporate income tax), the Italian companies engaged in national tax consolidation with the Parent Company in its position as consolidating company, and therefore, the positive taxable income is offset by both the negative amounts and the past tax losses carried forward; IRES only has to be paid on the remaining taxable amount, but since it was negative at the end of the current period, there are no payables to the tax authorities recognized in the financial statements as at June 30, 2020. For more details on the national tax consolidation, please see Note no. 20.

It is lastly reported that the item includes, if owed, the payable of the Parent Company to the tax authority for IRES on income subject to separate taxation of the foreign subsidiary SAES Getters International Luxembourg S.A., in application of provisions regarding subsidiaries (known as "CFC Legislation" dictated by art. 167, paragraph 5-*bis* et seq. of the Consolidated Law on Income Tax).

As at June 30, 2020, the income taxes payable amounted to 1,531 thousand euro and include tax obligations accrued during the year, net of advance payments. The increase compared to December 31, 2019 (taxes payable of 602 thousand euro) is mainly due to the non-payment of the tax payable by the US affiliates following the deferral to July 15, 2020 of fiscal payments as granted by the Treasury Department and the Internal Revenue Service as part of the COVID-19 business support measures (for further details, please see Note no. 25, "other receivables, accrued income and prepaid expenses").

36. DERIVATIVE FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE

As at June 30, 2020 the item "Derivative financial instruments measured at fair value", which represents the fair value of agreements signed by the Group with a view to fixing the interest rate on long-term bank loans, as well as the fair value of the implicit derivatives included in said loan agreements, recorded a negative balance of 40 thousand euro compared to a negative net balance of 50 thousand euro as at December 31, 2019.

The following table provides the details of these contracts and their fair value as at June 30, 2020 compared to December 31, 2019.

Description	Subscription date	Currency	Notional amount (thousands of euro)	Maturity	Interest rate	Timing	Fair value June 30, 2020 (thousands of euro)	Fair value December 31, 2019 (thousands of euro)
SAES Getters S.p.A. <i>Interest Rate Floor</i> on Banco BPM loan (derivative embedded in the loan agreement)	December 22, 2016	EUR	5,000 (*)	December 31, 2021	If three month Euribor <0, the financing variable rate is equal to the spread	Quarterly	(4)	(3)
SAES Getters S.p.A. <i>Interest Rate Swap (IRS)</i> on Unicredit S.p.A. loan	April 7, 2017	EUR	10,000 (*)	March 31, 2022	Fixed rate paid: 0.0% Variable rate received: three month Euribor (**)	Quarterly	(16)	(23)
SAES Getters S.p.A. <i>Interest Rate Swap (IRS)</i> on Intesa Sanpaolo S.p.A. loan	April 19, 2017	EUR	5,000	December 21, 2022	Fixed rate paid: 0.16% Variable rate received: six month Euribor	Half-yearly	(20)	(24)
SAES Coated Films S.p.A. <i>Interest Rate Cap</i> on Intesa Sanpaolo S.p.A. loan	March 31, 2016	EUR	400 (*)	December 31, 2020	Cap rate on three month Euribor: 0.0%	Quarterly	0 (#)	0 (#)
SAES Coated Films S.p.A. <i>Interest Rate Cap</i> on Banco BPM loan	October 29, 2015	EUR	230 (*)	December 31, 2020	Cap rate on three month Euribor: 0.67%	Quarterly	0 (#)	0 (#)
SAES Coated Films S.p.A. <i>Interest Rate Cap</i> on Intesa Sanpaolo S.p.A. loan	November 2, 2015	EUR	300 (*)	September 15, 2020	Cap rate on three month Euribor: 0.25%	Quarterly	0 (#)	0 (#)
Total							(40)	(50)

(*) The reference amount is aligned with the amortization plan of the hedged long-term loan.
(**) In case of a negative three months Euribor, the contract provides for a floor equal to -1.00%.
(#) Fair value lower than 1 thousand euro.

With regard to such contracts, the accounting requirements to apply the hedge accounting method are not met, as set out under IAS 39, therefore they are evaluated at fair value and the profits or losses deriving from their evaluation are directly charged into the statement of profit or loss.

During the year, the Group did not enter into any new IRS agreements.

The derivatives of SAES Coated Films S.p.A. refer to interest rate options that fix, for each revision date of the interest rate, a maximum limit for the rate paid on the loan (Cap) or, conversely, a minimum limit for the same rate (Floor).

Note that, against the loan agreements signed in the first half of 2019 with Mediobanca, if the Parent Company makes early repayments of the loan instead of waiting until the maturity date (April 17, 2024), it must pay the repayment amount and any mark-to-market amount - if negative - of the IRS derivative agreed by the lending entity to cover the risk of fluctuating interest rates; if the mark-to-market is positive, Mediobanca will pay this amount to SAES. There were no assets or liabilities accounted for at June 30, 2020 for that embedded derivative since no conditions arose that would make the contract certain or payable.

In the first half of 2020, the Group had not signed hedging contracts to hedge against exposure to fluctuations in the future cash flows originating from commercial and financial transactions carried out in different currencies to the euro, and there were no contracts of this type in place at December 31, 2019.

The Group enters into derivative contracts with various counterparties, primarily leading financial institutions and it uses the following hierarchy to determine and document the fair value of its financial instruments:

Level 1 – (unadjusted) prices listed on an active market for identical assets or liabilities;

Level 2 – other techniques for which all inputs with a significant effect on the fair value reported may be observed, either directly or indirectly;

Level 3 – techniques that use inputs with a significant effect on the fair value reported that are not based on observable market data.

As at June 30, 2020, the derivative contracts held by the Group belonged to Level 2: in fact, the fair value, measured by an independent third party, was calculated on the basis of market data such as interest rate curves and exchange rates curves.

No instruments were transferred from one level to another during the year.

37. DUE TO BANKS

As at June 30, 2020 the amounts due to banks amounted to 27,066 thousand euro and consisted of short-term debt owed by the Parent Company in the form of “hot money” loans (27,006 thousand euro as at June 30, 2020 compared to 27,004 thousand euro as at December 31, 2019), whose average interest rate, spread included, was around 0.11%.

The item also includes current account overdrafts (60 thousand euro as at June 30, 2020, pertaining to the Parent Company, compared to 191 thousand euro at the end of the previous year pertaining to SAES Getters S.p.A. and SAES Coated Films S.p.A.).

38. ACCRUED EXPENSES AND DEFERRED INCOME

Accrued expenses and deferred income amounted to 983 thousand euro as at June 30, 2020 comparing to a balance of 498 thousand euro at December 31, 2019.

This item may be broken down as follows.

(thousands of euro)

	June 30, 2020	December 31, 2019	Difference
Accrued expenses	139	149	(10)
Deferred income	844	349	495
Total	983	498	485

The “Accrued expenses” include the portion pertaining to future financial periods of the public capital grants granted in previous years to the Parent Company, in relation to the investments to develop the production lines of the Avezzano facility.

The item “Deferred income” is connected the commercial sales income pertaining to future collected by the customers. The increase compared to December 31, 2019, is mainly due to the higher advances of the Chinese affiliate SAES Getters (Nanjing) Co., Ltd. following the lengthening of average collection times from customers due to logistics problems associated with the COVID-19 pandemic.

Please note that there are no accrued payables due after more than five years.

39. CASH FLOW STATEMENT

The cash flow from **operating activities** was a positive 2,780 thousand euro in the first half of 2020, in line with the corresponding period of the previous year (+2,281 thousand euro). As with self-financing, the highest increase in net working capital (particularly the previously mentioned increase in inventory, especially in the Nitinol segment and Specialty Chemicals Division, as well as the decrease in trade payables of the Parent Company and Memry Corporation which at December 31, 2019 included debt for investments in new production lines) was offset by the

deferral of advance payments on 2020 in the USA as part of the business support measures implemented to overcome the COVID-19 emergency.

Investing activities used liquidity for 7,194 thousand euro (-109,734 thousand euro as at June 30, 2019).

In the first half of 2020 the cash outlay for investments in property, plant and equipment was equal to 6,827 thousand euro (10,525 thousand euro in the corresponding period of 2019); instead, the investments in intangible assets were not significant (106 thousand euro compared to 433 thousand euro as at June 30, 2019). Capex in the first half of 2020 includes investments related with the construction of a new department to manufacture pipes in Nitinol at the Bethel plant of Memry Corporation (a project started last year), as well as investments in expansion of the production capacity of a number of existing lines, again in the Nitinol business. Lastly, note that the Parent Company capex in the Avezzano plant to adapt the line for the production of advanced getters for the consumer electronics market, as well as for the purchase of new machines at the Lainate plant especially dedicated to the electronic devices business (a new sputtering machine), in the industrial SMA sector (new SMA extrusion) and in the vacuum systems sector (NEG coatings department). The higher value for investments in the first half of 2019 was mainly due to the purchase of the property, located in Bethel, where the Memry Corporation has its manufacturing headquarters (4,938 thousand euro, net of the deposit of 258 thousand euro paid at the end of the previous year). Please refer to Notes no. 14 and no. 15 for further details on the capex.

There were no sales of fixed assets in the first half of 2020, while in the corresponding period of 2019 note the payment collected for the sale to the joint venture Flexterra, Inc. of part of the intellectual property developed by E.T.C. S.r.l. in liquidation (2,291 thousand euro) and other collections on asset disposals for 5 thousand euro.

Within the scope of the investment activities, there were financial payments made to acquire securities by the Luxembourg-based subsidiary SAES Investments S.A. (for further information on the securities acquired please see Note no. 18) which, net of the disinvestments made, amounted to a total of -1,431 thousand euro⁴¹ (-100,466 in the first half of 2019) and coupons collected, net of securities portfolio management fees, of +1,170 thousand euro (+877 in the first half of 2019).

Lastly, during the previous half year, an advance of 1,100 thousand euro was paid (see Note no. 22) for a potential minority investment currently being evaluated, while the related outlay from adjustment of the sale price of the gas purification business was 383 thousand euro.

The balance of **financing activities** was negative for 12,941 thousand euro against a balance, again negative, of -21,226 thousand euro as at June 30, 2019.

The financial management for the period involved the payment of dividends (-9,198 thousand euro), the repayment of both short- and long-term loans and the related interest (-2,620 thousand euro), and the payment of lease instalments and related interest (-1,130 thousand euro).

The adoption of the accounting standard IFRS 16 - Leases led to an increase in the net Group financial debt, against a notional increase in fixed assets due to accounting for the right of use to the leasing assets.

However, the notional financial payables, recorded to show future debts and expense related to transactions for the use of leased assets, did not have any impact on the actual Group cash flows, which are still tied to the contractual scheduling of the lease payments. Also at the level of cash flows from investing activities, there were no actual financial transactions associated with rights of use on leased assets.

The following is a reconciliation of the net cash and cash equivalents shown in the statement of financial position and in the cash flow statement.

⁴¹ Financial outlay to purchase securities for 4,456 thousand euro, net of disinvestments of 3,025 thousand euro.

(thousands of euro)

	June 30, 2020	June 30, 2019
Cash and cash equivalents	31,223	41,801
Bank overdraft	(27,066)	(27,002)
Cash and cash equivalents, net - statement of financial position	4,157	14,799
Write-down of other financial assets (in application of IFRS 9)	26	64
Short term debt	27,006	27,003
Cash and cash equivalents, net - cash flow statement	31,189	41,866

The following table shows the reconciliation between the balances of the liabilities arising from financial transactions as at December 31, 2019 and June 30, 2020, with the changes arising from monetary movements and from non-cash flows.

(thousands of euro)	December 31, 2019	Cash flows	Translation differences	Change in fair value	Other movements	Reclassifications	June 30, 2020
Financial debts	100,724		1			(2,600)	98,125
Financial liabilities for leasing contracts	2,710		12		201	(851)	2,072
Non current debt for financial operations	103,434	0	13	0	201	(3,451)	100,197
Derivative financial instruments evaluated at fair value	50	(15)		(10)	15		40
Current portion of medium/long term financial debts	5,365	(3,357)			629	2,600	5,237
Other current financial payables to third parties	900	602			177		1,679
Financial liabilities for leasing contracts	1,876	(1,130)	12		162	851	1,771
Bank borrowings	27,195	(142)			13		27,066
Current debt for financial operations	35,386	(4,042)	12	(10)	996	3,451	35,793

The column “Other movements” includes the provision for the interest accrued during the period on the loans (both short term and long term) and on the lease contracts, in addition to the new obligations that arose on the lease contracts entered into during the current half-year period.

40. POTENTIAL ASSETS/LIABILITIES AND COMMITMENTS

The table below shows the guarantees that the Group has granted to third parties.

(thousands of euro)

Guarantees	June 30, 2020	December 31, 2019	Difference
Guarantees	8,734	9,806	(1,072)

The decrease compared to December 31, 2019 is largely explained by the removal of an insurance guarantee (total value of 1.1 million euro) provided by the Parent Company against a VAT refund received in 2017.

The table below shows the information on the contractual commitments for the use of third-party assets that fall outside the range of application of IFRS 16.

(thousands of euro)

	Less than 1 year	1-5 years	Over 5 years	Total
June 30, 2020	369	389	0	758
December 31, 2019	342	315	0	657

In order to support understanding of the financial impacts resulting from the application of IFRS 16 and, more generally, of the future cash-out related to operating lease agreements in place as at June 30, 2020 and included in the scope of the new standard, the table below presents the details of the non-discounted future cash flows.

(thousands of euro)

Financial flow for leasing (not discounted)	June 30, 2020	December 31, 2019	Difference
Less than 1 year	2,001	2,202	(201)
Financial flow for leasing (not discounted) - current	2,001	2,202	(201)
Between 1 and 2 years	1,157	1,728	(571)
Between 2 and 3 years	660	704	(44)
Between 3 and 4 years	510	574	(64)
Between 4 and 5 years	214	481	(267)
Over 5 years	0	0	0
Financial flow for leasing (not discounted) - non current	2,541	3,487	(946)
Total	4,542	5,689	(1,147)

The shareholders of SAES RIAL Vacuum S.r.l., SAES Getters S.p.A. and Rodofil S.r.l. have a put & call option, according to a predefined schedule, set out in more detail in Note no. 17. Since at June 30, 2020, the Management did not have enough information to be able to make an accurate assessment of the fair value of the above options, the latter are not valued in the financial statements.

Lastly, in addition to that indicated in the initial table, note that the Group's financial assets classified under non-current assets (fair value of 130,236 thousand euro as at June 30, 2020) represent a guarantee on the medium/long-term loan obtained by the Parent Company to fund the purchase of ordinary shares as part of the voluntary partial public tender offer finalized at the end of May 2019 (for additional details, please refer to Notes no. 18 and no. 28).

On June 22, 2020, the Parent Company signed a new seven-year lease, effective from July 1, 2020, and renewable for a further seven years under the same terms, for the use of a property for office use in Milan, at Piazza Castello 13, to house the Corporate and Management functions. The related future cash flows not discounted were estimated, in the first seven years of the contract, at 2.1 million euro, against an annual lease payable set at 350 thousand euro, reduced for the first two years of the lease to facilitate start up. The lease, within the scope of IFRS 16, will be recognized as right of use/financial liability with effect from July 1, 2020.

On June 23, 2020, the Group finalized an agreement with EUREKA! Venture SGR S.p.A. which will see SAES invest in the EUREKA! Fund I - Technology Transfer venture capital fund, established and managed by the SGR and with investors including Cassa Depositi e Prestiti (CDP) and the European Investment Fund (EIF). The maximum commitment of SAES is 3 million euro, with outlay in instalments, based on investment opportunities that gradually arise for the Fund. In particular, based on the Fund regulations, it is expected that 50%-60% of the investment will be called within the first five years (for more details, please see the paragraph "Main events in the half-year period" in the Interim Report on operations).

41. RELATED PARTY TRANSACTIONS

Related parties are identified in accordance with IAS 24 revised.

Related parties are the following as at June 30, 2020:

- **S.G.G. Holding S.p.A.**, a relative majority shareholder holding 34.21%⁴² of the ordinary shares of SAES Getters S.p.A. at June 30, 2020, which is debtor of SAES Getters S.p.A. in relation to the application for a refund of the excess IRES paid in prior years by the merged SAES Advanced Technologies S.p.A., a request filed by S.G.G. Holding S.p.A. as the consolidator of national tax consolidation in place until December 31, 2014⁴³ (see Note no. 20).

Compared to December 31, 2019, this payable reduced by around 144 thousand euro following the partial reimbursement in May 2020 from the Tax Authorities, transferred from S.G.G. Holding S.p.A. to the Parent Company in June. Lastly, note that on April 29, 2020, S.G.G. Holding S.p.A. collected dividends from SAES Getters S.p.A. for a total of 2.5 million euro.

- **Actuator Solutions GmbH**, a joint venture 50% jointly owned by SAES and Alfmeier Präzision Groups, focused on the development, manufacturing and marketing of actuators based on the SMA technology.

- **Actuator Solutions Taiwan Co., Ltd. in liquidation**, a Taiwan-based company entirely controlled by the joint venture Actuator Solutions GmbH, aimed at the development of SMA actuator devices mainly for the consumer electronics market. The company's liquidation process was launched in October 2019 and is expected to close by the end of the current year.

- **Actuator Solutions (Shenzhen) Co., Ltd. in liquidation**, a wholly owned subsidiary of Actuator Solutions GmbH, initially involved in the technological development of actuators for the mobile market, and whose liquidation process was initiated in March 2019 and expected to close in the next few months.

With regard to Actuator Solutions GmbH, in the first half of 2020 the SAES Group had a commercial relationship (sale of raw materials and semi-finished products) and performed various services (in particular, development services and accessory/administrative activities) that are charged back on the basis of a service contract. In addition, there is a trade arrangement in place between the Parent Company and Actuator Solutions GmbH that envisages recognition to the joint venture of sales commissions on SMA wire procured for SAES Getters S.p.A. from the business activities of Actuator Solutions.

Lastly, SAES Nitinol S.r.l. granted several interest-bearing loans to the joint venture Actuator Solutions GmbH, for the details of which please refer to Note no. 21. As at June 30, 2020, the financial debt of Actuator Solutions GmbH towards SAES Nitinol S.r.l. was equal to a total of 9.9 million euro, including 1.9 million euro of interest accrued and not yet paid⁴⁴. The total amount of financial credit (both principal and interest) of SAES Nitinol S.r.l. due from the German joint venture was already completely written off at the end of the previous financial period; at June 30 2020, an additional write-down was made on the financial credit corresponding to the interest accrued in the present half-year period (0.2 million euro) since SAES management decided that it would be difficult to recover.

⁴² As at June 30, 2020, 2,819,773 ordinary shares held by S.G.G. Holding had matured and therefore S.G.G. Holding holds 44.81% of the voting rights (percentage calculated by also including the voting rights on treasury stock held by SAES Getters S.p.A.).

⁴³ Please note that on May 27, 2015, the tax consolidation among SAES Getters S.p.A., SAES Advanced Technologies S.p.A. (subsequently merged into SAES Getters S.p.A. in 2016), SAES Nitinol S.r.l., E.T.C. S.r.l. in liquidation and S.G.G. Holding S.p.A., with the latter company as consolidator, was interrupted with effect from January 1, 2015, following a reduction in the percentage of participation of S.G.G. Holding S.p.A. in SAES Getters S.p.A. below 50%, which resulted in the loss of control under the legislation on the national tax consolidation.

⁴⁴ On December 17, 2019, SAES Nitinol S.r.l. and Actuator Solutions GmbH signed an agreement to postpone until December 31, 2020 the payment of all interest accrued from 2016 to 2019 on loans granted by SAES, in several tranches, to the joint venture.

- **SAES RIAL Vacuum S.r.l.**, a joint venture between SAES Getters S.p.A. and Rodofil S.r.l., focused on the design and production of integrated vacuum components and systems for accelerators, for the research, as well as for industrial systems and devices.

With regard to SAES RIAL Vacuum S.r.l., SAES Group has a commercial relationship (the purchase and sale of raw materials, components and processing for the creation of vacuum systems) and performs various services, mainly sales and marketing activities and administrative support. Finally, as already mentioned, SAES Getters S.p.A granted a loan of 49 thousand euro⁴⁵, aimed at financially supporting SAES RIAL Vacuum S.r.l. (for further details, please refer to Note no. 21).

- **Flexterra, Inc.**, a joint venture of SAES Getters International Luxembourg S.A. based in Skokie (USA), established at the end of 2016 for the development, production and the commercialization of materials and devices used in flexible displays.

- **Flexterra Taiwan Co., Ltd.**, a company established at the beginning of 2017, wholly owned by the joint venture Flexterra, Inc.

With regard to Flexterra, Inc. and its subsidiary, the SAES Group provides administrative, legal, financial and tax support services, as well as assistance in the joint venture's research and development activities, including the management of patents.

Note that in the first half of 2019, SAES finalized the sale to Flexterra, Inc. of the OLET intellectual property developed by E.T.C. S.r.l. in liquidation. Since these patents were not valued in the assets of E.T.C. S.r.l., the transaction resulted in a gain for SAES Getters S.p.A. from a related party equal to the sale price (around 2.3 million euro).

- **Managers with Key Responsibilities**, these include the members of the Board of Directors, including non-executive directors, and the members of the Board of Statutory Auditors.

Also considered managers with key responsibilities are the Group Human Resources Manager, the Group Legal/Compliance & Internal Audit Manager and the Group Research Lab Manager⁴⁶. Their close relatives are also considered related parties. In this respect, note that as at June 30, 2020, Ginevra della Porta and Lorenzo della Porta, the children of Massimo della Porta, were employees of SAES Getters S.p.A. and SAES Coated Films S.p.A., respectively.

The following tables show the total values of the related party transactions at June 30, 2020 compared with those at June 30, 2019 (for the economic values) and December 31, 2019 (for the asset values).

(thousands of euro)

	1 st half 2020						June 30, 2020				
	Total net sales	Cost of sales	Research & development expenses	Selling expenses	General & administrative expenses	Other income (expenses)	Other financial income (expenses)	Trade receivables	Trade payables	Tax consolidation receivables from	Financial receivables from related parties
S.G.G. Holding S.p.A.	0	0	0	0	0	0	0	0	0	128	0
SAES RIAL Vacuum S.r.l.	393	(147)	0	5 (*)	5 (*)	0	1	283	(55)	0	50
Actuator Solutions GmbH	309	0	20 (**)	1 (**)	21 (**)	0	239	66	0	0	0 (***)
Flexterra, Inc.	0	0	11 (**)	0	42 (**)	0	0	53	0	0	0
Total	702	(147)	31	6	68	0	240	402	(55)	128	50

(*) Costs recovery.
(**) Financial receivable (both principal and interest) fully written down.

(thousands of euro)

	1 st half 2019						December 31, 2019				
	Total net sales	Cost of sales	Research & development expenses	Selling expenses	General & administrative expenses	Other income (expenses)	Other financial income (expenses)	Trade receivables	Trade payables	Tax consolidation receivables from	Financial receivables from related parties
S.G.G. Holding S.p.A.	0	0	0	0	0	0	0	0	0	272	0
SAES RIAL Vacuum S.r.l.	15	(68)	(6)	5 (*)	5 (*)	0	1	27	(92)	0	50
Actuator Solutions GmbH	503	0	20 (**)	1 (**)	21 (**)	0	238	41	0	0	0 (***)
Actuator Solutions Taiwan Co., Ltd.	4	0	0	0	0	0	0	0	0	0	0
Flexterra, Inc.	0	0	23 (**)	0	60 (**)	2,267	0	166	0	0	0
Total	522	(68)	37	6	86	2,267	239	234	(92)	272	50

(*) Costs recovery.
(**) Financial receivable (both principal and interest) fully written down.

The following table shows the guarantees that the Group gave to third parties (and, therefore, included in the detail reported in the Note no. 40) in favour of the joint ventures.

⁴⁵ As at June 30, 2020, the financial receivable due to SAES Getters S.p.A. from the joint venture SAES RIAL Vacuum S.r.l. amounted to 50 thousand euro (49 thousand euro principal and 1 thousand euro interest).

⁴⁶ The Group Research Lab Manager became a Key Manager with effect from January 1, 2020.

(thousands of euro)

Guarantees	June 30, 2020	December 31, 2019	Difference
Guarantees in favour of the joint venture Actuator Solutions	1,388	1,471	(83)
Guarantees in favour of the joint venture SAES RIAL Vacuum S.r.l.	0	0	0
Total guarantees in favour of the joint ventures	1,388	1,471	(83)

The following table shows the remuneration to managers with key responsibilities as identified above.⁴⁷

(thousands of euro)

Total remunerations to key management	1 st half 2020	1 st half 2019
Short term employee benefits	1,985	1,928
Post employment benefits	683	686
Other long term benefits	370	341
Termination benefits	0	274
Share-based payments	119	113
Total	3,157	3,342

“Short-term employee benefits” mainly comprised fixed and variable remuneration of the Managers with Key Responsibilities. The slight increase compared to last year is due to the appointment of a new Key Manager from January 1, 2020.

The slight increase in “Other long term benefits” is also due to the appointment of a new Key Manager from January 1, 2020.

The item “Termination benefits”, zero as at June 30, 2020, in the first half of 2019 included severance costs relating to Key Managers of the Parent Company who resigned.

The item “Share-based payments” includes the allocation of the phantom shares incentive plan (for further details, please see Note no. 32).

As at June 30, 2020, payables to managers with key responsibilities, as defined above, were equal to 4,490 thousand euro, to be compared with payables of 4,090 thousand euro as at December 31, 2019. The increase is mainly associated with the allocation for the first half of 2020 for the long-term cash bonus plans, as well as to the payable for fixed remuneration of the Manager with Key Responsibilities appointed at the beginning of the year.

Pursuant to the Consob communications of February 20, 1997 and February 28, 1998, as well as to IAS 24 revised, we report that also in the first half of 2020 all related-party transactions fell within ordinary operations and were settled at economic and financial standard market conditions.

⁴⁷ This value also includes remuneration received by Ginevra della Porta and Lorenzo della Porta under the terms of their employment contracts with the SAES Group (as at June 30, 2020, the first with a short-term contract and the second with a work experience contract).

42. SUBSEQUENT EVENTS

For events occurring after the end of the period, please refer to the specific paragraph “Subsequent events” in the Interim Report on operations.

Lainate (MI), September 10, 2020

on behalf of the Board of Directors
Massimo della Porta
President

**Certification of the Interim Condensed Consolidated Financial
Statements as at June 30, 2020**

CERTIFICATION OF THE INTERIM CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

pursuant to article 81-ter of Consob Regulation no. 11971 of May 14, 1999 as amended

1. The undersigned, Giulio Canale, in his position as Vice President and Managing Director and in his capacity of Officer responsible for the preparation of the corporate financial reports of SAES Getters S.p.A., confirms, also in accordance with the provisions of article 154-bis, paragraphs 3 and 4 of Legislative decree no. 58 of February 24, 1998:

- the adequacy with respect to the type of enterprise, and
- the application

of the administrative and accounting procedures adopted in the preparation of the Interim Condensed Consolidated Financial Statements for the period January 1 - June 30, 2020.

2. To that end, note the following:

- Regarding the Administrative - Accounting Control Model of the SAES Group and its implementation, the provisions of paragraph 2 of the Certification of the consolidated financial statements of the SAES Group for the financial period ended on December 31, 2019 are confirmed since no changes were made.
- With regard to the results of the internal confirmation process for the accounting period from January 1 to June 30, 2020, it is confirmed that the controls illustrated in the aforementioned paragraph were also put in place and checked for the Interim Condensed Consolidated Financial Statements.
- As of today's date, the Manager responsible had received all the representation letters requested, signed by the General Manager/Financial Controller of the subsidiaries involved in the processes chosen as significant following the risk assessment.

The correct application of the administrative-accounting control system was confirmed by the positive result of the inspections carried out by the Internal Audit Department in its support of the Manager responsible for the preparation of the corporate financial reports.

3. The following is also confirmed:

3.1. The Interim Condensed Consolidated Financial Statements as at June 30, 2020:

- a) were drawn up in accordance with the applicable international accounting standards recognised in the European Union pursuant to regulation (EC) no. 1606/2002 of the European Parliament and Council, of July 19, 2002 and more especially, by IAS 34 revised - Interim Financial Reporting;
- b) correspond to the accounting books and records;
- c) provide a true and faithful account of the capital, financial position and operating results of the issuer and the group of enterprises included in the consolidation.

3.2. The Interim report on operations includes a reliable analysis of the performance and operating result and the situation of the group of enterprises included in the consolidation, along with a description of the main risks and uncertainties that it is exposed to.

Lainate (MI), September 10, 2020

Vice President and Managing Director and
Manager responsible for the preparation of the corporate financial reports
Giulio Canale

**Independent Auditors' Report on the Interim Condensed
Consolidated Financial Statements as at June 30, 2020**

REPORT ON REVIEW OF THE HALF-YEARLY CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

**To the Shareholders of
SAES Getters S.p.A.**

Introduction

We have reviewed the accompanying half-yearly condensed consolidated financial statements of SAES Getters S.p.A. and subsidiaries (the "SAES Getters Group"), which comprise the statement of financial position as of June 30, 2020 and the income statement, statement of comprehensive income, statement of changes in equity and cash flow statement for the six month period then ended, and the related explanatory notes. The Directors are responsible for the preparation of the half-yearly condensed consolidated financial statements in accordance with the International Accounting Standard applicable to the interim financial reporting (IAS 34) as adopted by the European Union. Our responsibility is to express a conclusion on the half-yearly condensed consolidated financial statements based on our review.

Scope of Review

We conducted our review in accordance with the criteria recommended by the Italian Regulatory Commission for Companies and the Stock Exchange ("Consob") for the review of the half-yearly financial statements under Resolution n° 10867 of July 31, 1997. A review of half-yearly condensed consolidated financial statements consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (ISA Italia) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the accompanying half-yearly condensed consolidated financial statements of the SAES Getters Group as at June 30, 2020 are not prepared, in all material respects, in accordance with the International Accounting Standard applicable to the interim financial reporting (IAS 34) as adopted by the European Union.

DELOITTE & TOUCHE S.p.A.

Signed by
Carlo Laganà
Partner

Milan, Italy
September 11, 2020

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