

## Terrafame's net sales in January-September 2019 were EUR 243.6 million - EBITDA 29% in July-September

(The financial interim data from Terrafame Ltd presented in this factsheet are unaudited FAS figures. Unless otherwise stated, the figures in parentheses refer to the corresponding period of the previous year.)

### January-September 2019 in brief

- Nickel production increased by 7.0% to 21,050 (19,667) tonnes year-on-year. Zinc production decreased by 7.1% to 42,377 (45,634) tonnes.
- In the review period the average price of nickel in USD in the London Metal Exchange was 1.8% lower than in the corresponding period in 2018.
- In July–September 2019, the price of nickel increased sharply and was on average 17.0% higher than in the corresponding period in 2018 and 26.7% higher than in April–June 2019.
- In the review period the average price of zinc in USD was 13.9% lower than in the corresponding period in 2018.
- The net sales in the review period reached EUR 243.6 (248.4) million. Supported by good production levels and the rise in the price of nickel in July–September 2019, the net sales in Q3 were nearly enough to compensate for the decrease in net sales in the first half of the year which was mainly due to lower prices.
- The net sales in Q3 were at EUR 102.4 (86.0) million, or 19.1% higher than in the corresponding period in 2018 and nearly 71% higher than in April–June 2019.
- The EBITDA in the review period was EUR 31.3 (33.8) million.
- Thanks to the strong net sales, the Q3 EBITDA was EUR 29.8 (12.9) million, or 29% of the net sales – an excellent result for an individual quarter.
- Operating profit for the review period amounted to EUR 3.5 (10.5) million.
- The free cash flow was EUR -1.7 (-2) million.
- The combined lost-time injury frequency of Terrafame and its partner companies was 12.2 (7.7). Increased attention has been directed to safe working methods at the industrial site, and active actions in safety measures will continue.
- The new battery chemical plant will start in 2021. During the review period installation of the building service systems were started inside the production buildings.

## Financial and production figures

	2019 Q3	2018 Q3	Change, %	2019 Q1-Q3	2018 Q1-Q3	Change, %	2018
<b>Financial figures</b>							
Net sales, EUR million	102.4	86.0	19.1 %	243.6	248.4	-1.9 %	325.8
EBITDA, EUR million	29.8	12.9	131.0 %	31.3	33.8	-7.4 %	32.8
Operating result, EUR million	19.6	4.7	317.0 %	3.5	10.5	-66.8 %	3.0
Free cash flow, EUR million <sup>(1)</sup>	21.0	12.7	65.4 %	-1.7	-2.0	-17.1 %	-15.6
Capital expenditure, total, EUR million	38.0	16.4	131.7 %	98.0	53.0	84.9 %	81.5
Sustaining capex, EUR million	3.4	5.5	-38.2 %	13.2	18.1	-27.1 %	28.1
Development and growth capex, EUR million	34.6	10.9	217.4 %	84.8	34.9	143.0 %	53.4
Equity, EUR million	321.8	310.2	3.7 %	321.8	310.2	3.7 %	365.6
Total assets, EUR million	763.6	616.2	23.9 %	763.6	616.2	23.9 %	681.6
<b>Metals production</b>							
Nickel produced, tonnes	7,466	7,326	1.9 %	21,050	19,667	7.0 %	27,377
Zinc produced, tonnes	15,341	16,530	-7.2 %	42,377	45,634	-7.1 %	61,608

1) Free cash flow after maintenance capex = EBITDA - Change in net working capital - Maintenance capital expenditure

### CEO Joni Lukkarainen:

“Terrafame’s net sales in January–September 2019 were EUR 243.6 (248.4) million. The price of nickel in USD increased sharply in July–September 2019, with the average price 17.0% higher than in the corresponding period in 2018 and 26.7% higher than in April–June 2019. Supported by good production levels and the rise in the price of nickel in July–September 2019, the net sales in Q3 hit a record EUR 102.4 million. The net sales in Q3 were nearly enough to compensate for the decrease in net sales in the first half of the year. We are especially happy that the stronger net sales were also evident in the EBITDA, which climbed to EUR 29.8 (12.9) million, or 29% of the net sales in Q3. This is an excellent result for an individual quarter. The EBITDA in the review period was a total of EUR 31.3 (33.8) million.

We concluded our annual strategy process in October. Our key strategic goal has remained the same since the beginning of our operations: we want our cost-effectiveness to be within the best 25% of the world’s nickel producers. Now that our production is reaching the planned level, we will continue our determined and systematic efforts to improve our operational excellence.

Terrafame’s strategic direction was outlined in autumn 2018. At the time, the decision was made to invest in a battery chemicals plant. The construction works of the new battery chemicals plant, due to be started in 2021, have been proceeding well. The installation of the steel, cladding and roofing structures for the first production buildings have almost been completed and installation of the building service systems have been started inside the production buildings. When operating, our new plant will be one of world’s largest production units for nickel and cobalt sulphates that are used in EV batteries.

With the battery chemicals plant we will move ahead in the metal refinery chain to become a speciality chemicals producer. As a company, this also means that we need to reposition ourselves on the battery chemicals market. Together with all of our employees, we want to turn Terrafame into a brand that displays our company’s deep roots in Kainuu as well as its operational strengths: the significant nickel reserves of the Sotkamo mine, our unique integrated production process from the

pit to battery chemicals, the low carbon footprint of our production, responsible and traceable European supply chain as well as our skilled staff.

Safety is one of the cornerstones of our culture. Recently, the safety behaviour at our industrial site has not met our expectations although no serious accidents have occurred. Between January and September 2019, the aggregate rolling injury frequency of Terrafame and its partners for the past 12 months was 12.2 (7.7). During the summer and autumn, we have placed a bigger emphasis on safe working methods. We will continue with active actions in safety measures.”

## Market developments

### Electric vehicle and battery market

Global electric vehicle (EV) sales have continued strong in 2019. According to RhoMotion analysis, total EV sales across all vehicle classes i.e. passenger cars and commercial vehicles, were at nearly 1.4 million units for the year to August 2019. This is 28% higher than in the same period in 2018. EV sales rose significantly in China in June. This was at least in part due to a pre-buying effect ahead of the subsidy being reduced and was reflected in lower sales in July. In August, sales increased again by 16% from July and year to August sales in China were 38% higher compared to the same period in 2018.

Driven by strong EV sales and steadily increasing average pack sizes, the global battery demand is up 48% year-on-year for the year to August 2019. The vast majority of the demand, over 70%, is deployed in PC & LDVs. Average pack sizes across all vehicle classes rose to a sales weighted average of 55 kWh and the year to August battery demand is estimated to be up 41% versus the same period last year, at just over 71,000 MWh. Together with increasing average pack sizes also the share of nickel in the batteries has increased. This has been reflected on the increasing share of NCM 622 and NCM 811 batteries.

### Nickel and zinc

Early in the year, the uncertainty of the global economy kept the price development of nickel down, even though the combined nickel stocks of London Metal Exchange (LME) and Shanghai Futures Exchange (SHFE) have decreased quarterly since 2016. However, in July 2019, the market began to speculate that the world’s largest nickel producer, Indonesia, would bring forward its export ban decision, which resulted in a sharp upturn in nickel prices. The price was at its lowest in the beginning of July at USD 12,025 per tonne (USD/t) but reached its highest point at 18,330 USD/t in the middle of September. In September, Indonesia confirmed its decision to start the export ban on nickel ore on 1 January 2020.

In July–September 2019, the average price of nickel was 15,528 (13,266) USD/t, or 17.0% higher than in the corresponding period in 2018 and 26.7% higher than in April–June 2019 (12,258). However, due to the weak price development at the start of the year, the average price in January–September 2019 of 13,420 (13,667) USD/t was 1.8% lower than in the corresponding period in 2018.

The average global market price of zinc in July–September 2019 was 2,348 (2,537) USD/t, or 7.4% lower than in the corresponding period in 2018 and 15.0% (2,763) lower than in April–June 2019. The average price of zinc in January–September was 2,600 (3,020) USD/t, or 13.9% lower than in the corresponding period in 2018. The price of zinc was depressed by the uncertainty of the global economy as well as the low demand for galvanised steel.

The total combined nickel stocks of the London Metal Exchange (LME) and Shanghai Futures Exchange (SHFE) stood at 174,590 (244,399) tonnes at the end of September 2019, corresponding to less than 4 (5.5) weeks’ demand. At the end of June, the combined zinc stocks stood at 132,845 (234,272) tonnes, corresponding to less than a week’s demand.

### Exchange rate

The US dollar continued to get stronger compared to the euro in the third quarter of 2019. In July–September, the average EUR/USD exchange rate was 1.1119, whereas it was 1.1237 in April–June and 1.1358 in January–March 2019.

### Metal production

In January–September 2019, nickel production increased by 7.0% compared to the corresponding period in 2018 to 21,050 (19,667) tonnes. Zinc production decreased by 7.1% to 42,377 (45,634) tonnes. Cobalt and copper were produced alongside the company's main products.

During Q3, nickel production increased by 1.9% compared to the corresponding period in 2018 to 7,466 (7,326) tonnes. Zinc production decreased by 7.2% to 15,341 (16,530) tonnes. The production volumes are at a good level and correspond to the annual production levels of nickel and zinc specified at the start of the company's business operations.

Repairs to damage in the liner structure of the primary leaching area detected in March have progressed as planned with heap reclaiming and stacking of new ore.

### Net sales and financial performance

In January–September 2019, the net sales reached EUR 243.6 (248.4) million, or nearly the level of the corresponding period in 2018. Supported by good production levels and the rise in the price of nickel in July–September 2019, the net sales in Q3 were nearly enough to compensate for the decrease in net sales caused by lower prices in the first half of the year, even though the price protections slightly reduced the direct impact of price fluctuations on the net sales.

Net sales in Q3 were at EUR 102.4 million. The 19.1% is higher than in the corresponding period in 2018 and nearly 71% higher than in April–June 2019, when the low market prices as well as the lower production volumes due to annual maintenance downtime decreased the net sales.

The stronger net sales were also reflected in the EBITDA, which amounted to a total of EUR 31.3 (33.8) million in the review period. Operating loss for the review period amounted to EUR 3.5 (10.5) million.

Thanks to the strong net sales, the Q3 EBITDA was EUR 29.8 (12.9) million, or 29% of the net sales – an excellent result for an individual quarter. The operating profit/loss in the quarter rose to EUR 19.6 (4.7) million.

### Strategy 2023

Terrafame's annual strategy process was concluded in October. The key strategic goal set to the company was kept unchanged: the company's aim is to be within the best 25% of the world's nickel producers in cost-effectiveness. Production which was started in 2015 is reaching the planned level and the focus has been moved to improving operational excellence.

Terrafame's strategic direction was outlined in autumn 2018. At the time, the decision was made to invest in a battery chemicals plant which will use the current main product of the metals production plant, nickel-cobalt sulphide, its raw material. When this intermediate product is refined in-house instead of selling it to other metals refining companies it means that Terrafame will move ahead in the metal refinery chain to become a speciality chemicals producer.

## Capital expenditure

In January-September 2019, total capital expenditure stood at EUR 98.0 (53.0) million. Of this amount, EUR 84.8 (34.9) million were used to development and growth, while sustaining capital expenditures were EUR 13.2 (18.1) million.

The most significant capital expenditures for development and growth related to the construction works and equipment purchases for the battery chemicals plant which will start in 2021. Capital expenditures also related to the construction of the new gypsum pond and the surface structures of the third block in the waste rock area.

The installation of the steel, cladding and roofing structures for the first production buildings of the battery chemicals plant have almost been completed and installation of the building service systems have been started inside the production buildings.

The most significant sustaining capital expenditures were capital spare parts for mining equipment and the ore crushing line, in addition to the modification of the hydrogen sulphide plant.

## Environment

During January-September 2019, 2.8 (2.2) million cubic metres of purified water were released from the industrial site. The Nuasjärvi discharge pipe was in operation from April to mid-July and was started again in late August. The substance concentrations of purified water released from the site have been below permit levels.

The environmental permit application for the battery chemicals plant was submitted to the Northern Finland Regional State Administrative Agency in April.

## Personnel and occupational safety

At the end of September 2019, Terrafame employed 736 (665) persons, or approximately 11% more than in the corresponding period in 2018.

The company has started both internal and external actions in order to recruit experienced process and maintenance professionals for the production organisation of the battery chemicals plant. The plant will employ over 100 person in early 2021 and approximately 150 persons when the plant is in full speed.

Active educational collaboration is part of Terrafame's personnel strategy. A three-year principal lecturer position in process industry, which was donated by Terrafame, started at Kajaani University of Applied Sciences KAMK in the spring. The aim is to create a new process technology specialisation programme at KAMK that will be launched in 2020. Also the two-year apprenticeship training leading to a professional qualification in the process industry organised by Terrafame, Kainuu Vocational College and Oulu Vocational College OSAO started in the spring. A new group started in September 2019. The goal is to train 50 new process engineering professionals annually.

During January-September 2019 approximately 70 partner companies worked regularly at the Terrafame industrial site and they employed a total of 704 (590) persons during the reporting period.

In January-September 2019, Terrafame's employees suffered 6 (7) lost-time injuries. The rolling 12-month lost-time injury frequency rate, or number of accidents resulting in absence per one million person-hours, was 6.3 (7.3). The personnel of the partner companies suffered 17 (5) injuries that

resulted in absence, and the lost-time injury frequency of our partners was 17.5 (8.1). The combined lost-time injury frequency of Terrafame and its co-operation partners was 12.2 (7.7). During the summer and autumn, increased attention has been directed to safe working methods at the industrial site, and the active actions in safety measures will continue.

The company also invests in internal training by providing continuous training for its multidisciplinary employees, in order to develop their competence in the processing sectors, including internal security, environment, quality and equipment trainings.

### **Near-term outlook**

Since the end of the review period, the average price of nickel in the London Metal Exchange (LME) has remained at over 16,000 USD/t level. Nonetheless, the fluctuation of prices has continued strong.

The installation of the battery chemicals plant's process equipment will begin in late 2019 and continue till the summer of 2020.

The environmental impact assessment (EIA) process for the Kolmisoppi open pit located within the mining district will be launched in early 2020.

The Government is expected to issue a decision on the application for a uranium recovery permit in the near future.

Terrafame will continue to develop production and improve cost efficiency.

### **Further information:**

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Terrafame Ltd is a Finnish multi-metal company producing nickel, zinc, cobalt and copper at its mine and metal works located in Sotkamo. We are currently building a battery chemicals plant to process our main product, nickel-cobalt sulphide, into nickel and cobalt sulphates, which are suitable for electric vehicle batteries. Our aim is to conduct environmentally sustainable, safe and profitable operations. [www.terrafame.com](http://www.terrafame.com)