

# SONOVIA – Update Report

11.09.2022



Stock Exchange  
**TASE**



Symbol  
**SONO**



Sector  
**TECHNOLOGY**



Sub-sector  
**ELECTRONICS & OPTICS**



Stock price target  
**NIS 30.7**



Closing price  
**NIS 6.69**



Market cap  
**NIS 107.8 Mn**



No. of shares  
**16.1 Mn**



Average Daily Trading Volume  
**47 stocks**



Stock Performance  
(Since Jan. 2022)  
**-51.98%**

Re-organization in the company's strategy; signed a MoU with Bruckner; completed the installation and began operation of a machine in Delta's production and development line; revenues decreased and operating losses increased; the price target remains unchanged.

**Sonovia develops ultrasonic technology to perform value-added treatments for textiles, which gives the fabrics unique properties such as anti-pathogenic, odor-repelling, water-repelling, and dyeing.**

**Main activities in Q2 2022:**

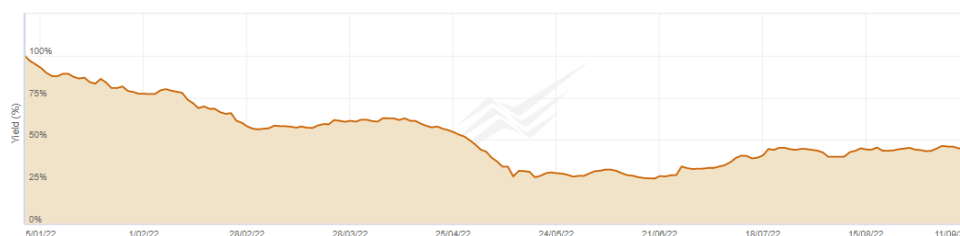
- Signed a MoU with Bruckner for the development, marketing, and sale of industrial curing machines combined with ultrasonic technology for textile treatment.
- Completed the installation and began operation of the Sonofix™ 240 model machine in Delta's production and development line.
- The company will be included in the "Ma'ale" index for 2022.
- The company made a significant decision to focus on the company's R&D activities, including the continued development of the ultrasonic curing machine and the consumables and the gradual reduction of the marketing and sales of final products in preparation for the termination of the products division.
- Signed a cooperation agreement with PureDenim, a leading Italian manufacturer specializing in the production of jeans, as a future commercial partner and future customer of the technology.
- Revenues decreased and operating loss increased compared to H1 2021.

The company's technology is expected to integrate easily with existing production lines and has disruptive potential for the textile application treatment industry - one of the most polluting industries in the world. We estimate that the market for chemicals for the application of functional textiles and the market for textile dyes, is estimated at a combined value of approx. USD 15.8 billion.

The company is nearing a critical stage of starting industrial pilots – the last stage before selling the technology to customers. In our opinion, the company has real and significant potential to disrupt the textile curing industry through its technological platform, but, its main challenge, as with other tech companies, will be the stage of increasing sales **volumes**.

**On the next page, we will expand more on the major events in the Q2 2022.**

| Year  | Revenues<br>(000 USD) | EBITDA<br>(000 USD) |
|-------|-----------------------|---------------------|
| 2021A | 14,500                | -2,842              |
| 2022E | 16,607                | 665                 |
| 2023E | 28,641                | 5,083               |



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### Key events in Q2 2022 and the passing months:

- On August 30, the company signed a binding MoU with Bruckner, which is the first and significant step in the transition to the commercial sale of an industrial textile treatment machine and the promotion of the company to the stage of commercializing the technology it has developed.
- On August 17, the company reported, following previous reports about an agreement dated June 1, 2021 between it and Delta to install an ultrasonic machine developed by the company at Delta's Innovation Center in Karmiel, on the completion of its installation and the start of operation of the Sonofix™ 240 machine in the production and development line of Delta. After installing the machine in Delta's development line, it will be used in phase A for internal tests and will later be integrated into the fabric tests for potential future production for the brands with which Delta works.
- On July 19, the company reported that as of August 1, the company's stock will be included in the "Ma'ale" index for 2022, which includes companies whose shares are traded on the Tel Aviv Stock Exchange Ltd. and which meet the criteria set for a "high" rating in environmental, social, and governance (ESG).
- On April 27, the company's board of directors made a strategic decision to move forward in the company's R&D activity, including the continued development of the ultrasonic curing machine and the consumables and a gradual reduction of the marketing and sales of final products in preparation for the discontinuation of the products division within 3 months.
- On April 5, the company entered into a strategic activity sharing agreement and actual start of work with PureDenim, a leading Italian manufacturer specializing in the production of denim clothing, for the development of indigo dyeing of denim fabrics and fibers using the company's ultrasonic technology.
- Finance results for H1 2022:
  - Revenues decreased and operating loss increased compared to the same period last year.

## Investment Thesis

Sonovia is an Israeli high-tech company that focuses on the research and development of sound-based technology for performing value-added textile treatments in an environmentally friendly manner, which gives fabrics unique properties. Sonovia's anti-pathogenic application, which provides over 99% active protection against viruses (including covid-19), bacteria, and fungi, is already generating revenues (over \$9.5 million in 2020) and is tested by leading brands and manufacturers. The applicative water-repellent treatment developed by the company (for which the company filed a provisional patent application) was rated by an independent international laboratory, a rating of 100 under the international standard (AATCC-22), the highest rating under that standard. Additional applications - flame retardancy, dyeing, "DryFit", and more – are either in R&D, or in the company's R&D pipeline.

Sonovia operates within the textile industry, which is constantly growing yet is currently at a tipping point: Increased consumer awareness of and preference for textiles produced with a low ecological footprint, coupled with increasingly stringent regulation and enforcement of chemical use, are expected to drive a significant industrial change as manufacturers are already forced to seek innovative, 'green' solutions.

On November 15, 2021, the company ran its successful initial operation of its industrial machine 2.0 in Bruckner's industrial R&D line in Germany. This successful initial operation of the machine is evidence of the company's future operations and is a significant milestone on the way to the commercialization of their technology.

Sonovia's technology and its advantages over conventional methods and its ongoing activity with leading brands and OEMs across several key markets have the potential to disrupt the textile finishing and dyeing industries significantly and increase demand for new functional products. Realization of that potential depends greatly on successful entry into various verticals, achieving a global installation base, and creating brand awareness.

Sonovia's technology utilizes ultrasonic energy to physically infuse textiles with the required functional compounds, based on the required application, via a sustainable process. The Sono-finishing process eliminates the need for polymeric chemical binders and other harmful chemicals and dramatically reduces

water and chemistry consumption in the process.<sup>1</sup> As an example of the effectiveness of the technology, here are the results of the company's anti-pathogenic application:

- High performance: Sonovia's anti-pathogenic application displays 99.9% elimination of viruses (including SARS-COV-2) and bacteria.
- High durability: Fabrics treated with Sonovia's technology exhibit high durability to laundry as well as to high temperatures;<sup>2</sup>
- Versatility: Sonovia's technology applies to all types of textiles;
- Cost-effectiveness and sustainability: Sonovia's technology may reduce up to 95% of the water consumption compared with conventional textile wet-finishing and eliminate chemical binders' need.

#### The Sono-finishing process vis-à-vis traditional methods – a comparative overview

|  | Padding  | Extrusion      | Sono-finishing                                       |
|--|--|----------------|--|
| <b>Applicability to all textile compositions</b> | Requires different formulas and chemical binders | Only synthetic | Yes  |
| <b>Durability to industrial laundry</b>          | Moderate to poor                                 | Very high      | Very high <sup>3</sup>                               |
| <b>Durability to home laundry</b>                | Moderate   | High           | Moderate (expected to improve with R&D) <sup>4</sup> |
| <b>Durability to high-heat</b>                   | Low  | High           | High   |
| <b>Cost-effectiveness</b>                        | High   | Low            | High   |
| <b>Sustainability</b>                            | Moderate to poor                                 | Poor           | High   |
| <b>Scalability</b>                               | High   | Low            | High   |

Source: Sonovia and F&S analysis

Sonovia operates two distinct departments:

- (1) The personal safety department, which currently operates a B2C model: Direct sales of branded personal protective products – such as the SonoMask – to end-clients in the private sector;  
In 2020, SonoMask sales exceeded \$9.5 million. In H1/2021, revenues amounted to \$5.7 million.  
Sales of the company's products amounted to more than USD 9.5 million during 2020, and about USD 14.5 million in 2021.

<sup>1</sup> Chemical and water consumption varies per application.

<sup>2</sup> Additional durability assessments to different washing protocols need to be executed.

<sup>3</sup> Pending additional assessments

<sup>4</sup> Pending additional assessments

(2) The Sono-applications department, which is due to operate under a B2B model:

- Capital sales of machines; with Brückner Trockentechnik GmbH & Co. as the machinery partner, global market penetration is expected to be rapid and aggressive.
- Repeating sales of required chemical formulations are expected to become the company's core revenue stream (the current install base of the Brückner alone is over 5,000 machines).
- Potential revenues from “Sonovia-inside” trademark tags

The company's vision is to develop the world's most green and advanced technology for applicative textile treatments.

Sonovia operates within the functional textile finishing agents market was valued at \$5.2 billion in 2020 and is projected to exceed \$6.9 billion by 2027, at a CAGR of 3.9%. Sonovia estimates the TAM for its anti-pathogenic application for its four verticals – medical textiles, hospitality textiles, sportswear, and automotive upholstery – at an aggregated value of \$1.56 billion.

Sonovia also aims to enter the textile dyeing market, which was valued at \$9.4 billion in 2018 and is projected to reach \$15.5 billion by 2026, growing at a CAGR of 6.3% from 2019 to 2026. While Sonovia’s entry into the textiles dyeing market is pending upon successful development and proof-of-concept, which are expected in the near future, its potential to disrupt the textile dyes market is equal – if not greater – than its potential to disrupt the textile finishing market.

In addition, the company operates under a European grant designed to support the fight against Hospital Acquired Infections (HAIs). Hospital Acquired Infections (HAIs) represent a persistent challenge in the healthcare sector, exacerbated by covid-19. HAIs affect hundreds of millions of patients worldwide each year, leading to significant morbidity and mortality as well as financial losses for health systems:

- 136,000 annual deaths in the US and Europe are attributed to HAIs.
- The direct financial burden of HAIs is estimated to account for €7 billion in Europe and \$6.5 billion in the US. Yet, research suggests that the total (direct + indirect) economic burden is significantly higher – up to \$45 billion per annum.

Textiles with anti-pathogenic properties show great promise in reducing the prevalence of HAIs and their associated economic burden. Evidence indicates that textiles treated with anti-pathogenic reduce HAIs rate dramatically and could result in cost reduction of up to €8,038 million. The severe impact of covid-19 on hospitals has elevated awareness of the speed and breadth with which HAIs spread in healthcare institutions and is expected to act as a catalyst on institutional demand for anti-pathogenic textiles, especially as novel solutions are proven effective in eliminating SARS-CoV-2 and other pathogens.

Covid-19 is also a catalyst for the rapidly growing interest in textiles with anti-pathogenic properties by additional verticals, such as the hospitality market, the sportswear market, and the automotive upholstery market. Sonovia holds a competitive advantage in the latter: Fabrics treated by Sonovia's durable anti-pathogenic application show elite anti-microbial and anti-viral performance while eliminating the use of hazardous chemicals.

**We believe Sonovia is on a path for growth and success on a global scale:**

- Sonovia develops a novel technological platform, envisioned to become the future incumbent technology for performing textile wet-finishing applications, in a versatile, cost-competitive and sustainable process.
- Sonovia's technology has been endorsed by the "*Fashion for Good*" accelerator and by the European Commission's SME program for its potential in fighting Hospital-acquired infections and dramatically reducing the ecological footprint of the fashion industry.
- Sonovia partnered with a globally-renowned designer and producer of finishing systems for textiles with a presence in 90 countries and an installed base of over 5,000 machines, and is already conducting pilot tests with leading brands in the fashion, sportswear, and automotive verticals, and has a clear strategy and R&D pipeline for the next 24 months.
  - On November 15, 2021, Sonovia successfully ran an initial operation in Bruckner's Industrial R&D line in Germany.

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