

## SONOVIA – Update Report

April 20, 2021

Stock Exchange  
**TASE**Symbol  
**SONO**Sector  
**TECHNOLOGY**Sub-sector  
**ELECTRONICS &  
OPTICS**Stock price target  
**NIS 30.7**Closing price  
**NIS 20.2**Market cap  
**NIS 302.1 Mn**No. of shares  
**14.9 Mn**Average Daily  
Trading Volume  
**765 stocks**Stock Performance  
(Since Jan. 2021)  
**13%****\$9.5M revenues in 2020 lead to operating profit; significant technological advancement in water repellence application; Company progress is as expected; Target price unchanged**

Sonovia develops high-performing, durable, and sustainable textile finishing applications, such as anti-pathogenic, flame retardancy and water repellency, while using ultrasound at the core of its technology.

**Strategy and market - Sonovia's ultrasonic technology aims to disrupt the textile wet-finishing industry – the 2<sup>nd</sup> most polluting industry globally – by integrating with existing textile finishing lines and proprietary chemical formulations. Sonovia operates within a \$15.8 billion market for functional textile finishing agents and textile dyeing.**

Sonovia has partnered with a globally renowned fabric finishing machinery manufacturer and conducts pilots with leading multinational brands; **we assume global market penetration is expected to be rapid and aggressive.**

In 2020, Sonovia generated approx. \$9.5M in revenue from global sales of its branded anti-pathogenic face mask.

The company's success in developing green technology to imbue fabrics with water repellency traits is proof of the feasibility of the company's vision.

**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. However, it remains to be seen whether Sonovia succeeds in ramping up its sales.**

Year	Revenues (000 NIS)	EBITDA (000 NIS)
2021E	12,000	365
2022E	16,607	665
2023E	28,641	5,083



**Review of significant developments since the [initiation of coverage report](#) we published to the reporting date:**

- **A significant increase in the company's revenues to approx. \$10 million in 2020.** A sharp increase compared to no revenues in 2018-2019.
- **Sonovia shifts from a net loss** of about \$1.2M in 2019 **to profitability** in 2020, along with a net profit of about \$430K. The company's R&D expenses increased by about 35% compared to last year, while the company's sales and marketing expenses increased from none in 2018-2019 to about \$5M in 2020.
- April 5th, 2021: **Sonovia reports successful test results in developing an applicative treatment for water repellency** using its ultrasonic process, under collaboration with a globally renowned supplier of water-repellent fabrics. The process resulted in the highest obtainable ranking for water repellency, without the use of conventional compounds PFOA & PFOS, which are suspected as carcinogenic. This success represents an important milestone in the company's path for realizing its vision of developing the future incumbent technology for performing textile applicative treatments and an example of the strength of its business strategy and competitive nature.
- To this date, we do not include the company water repellency applicative treatment in our valuation. However, we do note that successful development and commercialization of a water repellency applicative treatment would significantly bolster Sonovia's competitive position and its brand, and would open a new and lucrative commercial market (valued at some \$800M per annum).
- The company has successfully completed the adaptation of its biocidal chemical formulations (bactericides), based on active ingredients approved in EU countries. **Sonovia has resumed marketing and sales of the company's face masks in EU countries, except for France.**
- Sonovia is in the transition phase from a company that is mostly engaged in development to a mature company with substantial sales.

## Investment Thesis

Sonovia is an Israeli publicly-traded high-tech company focusing on R&D of high-performing, durable and sustainable textile finishing applications while using ultrasound at the core of its technology. 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. Additional applications - water repellency (advanced stage of development), flame retardancy, and dyeing – 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.

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> The result:

- High performance: Sonovia's anti-pathogenic application displays 99.9% elimination of viruses, including SARS-COV-2, bacteria, and fungi;
- High durability: Fabrics treated with Sonovia's technology exhibit high durability to industrial and home laundry as well as to high temperatures;<sup>2</sup>
- Versatility: Sonovia's technology applies to all types of textiles;

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

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

- 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 D2C 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.

- (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.

<sup>3</sup> Pending additional assessments

<sup>4</sup> Pending additional assessments

Sonovia operates within the functional textile finishing agents market which 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.

**Therefore, we view Sonovia as a good investment opportunity and value the company at NIS 458.4 million**

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