

EnWave Corporation (ENW)

March 11, 2017

EnWave Corporation offers industrial-scale dehydration technology for commercial applications in the food and pharmaceutical spaces. The Company's Radiant Energy Vacuum ("REV") platforms are becoming the new global dehydration standard, as they are faster and cheaper than freeze drying, and have better end product quality than both air drying and spray drying.

For the first quarter of fiscal year 2017, ended December 31, 2016, EnWave reported consolidated revenues of \$3.46 million, compared to \$2.60 million in the same period last year, a 33% increase.

These solid results can be attributed to increased machine sales and royalties. NutraDried sales were flat as the subsidiary was still impacted by last year's reorganization. Stronger results are expected in the current quarter.

EnWave has started the year where it left off the previous one: with strong revenue growth. In addition, the Company is executing as planned with more TELOAs and royalty bearing commercial agreements.

We reiterate our buy recommendation for EnWave Corp. with a price target of \$3.59, which is 235% above today's stock price.



- ▣ The Company is clearly in sixth gear and making progress on all fronts. We expect more commercial license deals in the near future, and as a result a continued improvement of the Company's financials.
- ▣ The commercialization of both powderREV and freezeREV technology platforms continued to progress during the first quarter, with EnWave advancing the design and manufacture of scaled-up versions of each platform for Sutro Biopharma and Merck. Installation and start-up of these machines is planned for 2017. If the installation of the powderREV and freezeREV platforms in the pharmaceutical sector yields superior performance to incumbent dehydration technologies, it will solidify EnWave's value proposition with potential new partners in the pharmaceutical industry.



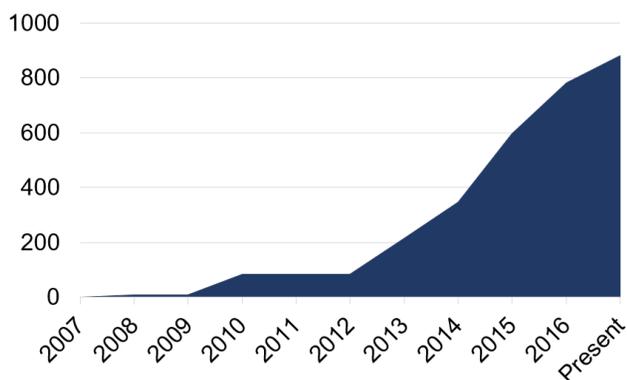
Market Data	
Price	C\$1.07
Sector	Diversified Machinery
52-Week Price Range	C\$0.71 - C\$1.35
Shares Issued (m)	90.78
Market Cap (m)	\$97.1
Listings	ENW (TSXV) & E4U (Fra.)
Website	http://www.enwave.net

THE COMPANY

EnWave Corporation is a Vancouver-based industrial technology company, that develops commercial applications for its proprietary Radiant Energy Vacuum (REV) dehydration technology.

The University of British Columbia manufactured the first prototype REV machine in 1996 for dehydrating food and nutraceuticals. Since then, EnWave has developed three commercial-scale REV platforms: nutraREV for the food industry to dry fruits, vegetables, meats and other products quickly and at low-cost, while maintaining high levels of nutrition, taste, texture and color; powderREV for the dehydration of bulk food cultures, probiotics and fine biochemicals such as enzymes; and quantaREV for continuous, high-volume low-temperature drying of sensitive food products in liquid or solid form.

In addition, the Company has one developmental-stage REV platform: freezeREV to stabilize and dehydrate biopharmaceuticals such as vaccines.



Graph indicates the impressive growth in total installed REV machine capacity (in kW).

EnWave's business model is to sell REV machinery and to sign royalty-bearing commercial licenses with leading food and pharmaceutical companies for the use of its revolutionary technology. Each license agreement restricts the partner's use of the technology to specific applications and geographic areas.

EnWave generates revenues from the following three sources:

- ❑ Machine sales and maintenance;
- ❑ Royalty streams from partners ranging between 2% and 10% on commercial products produced with a REV machine;
- ❑ NutraDried, a 51% owned joint venture, which sells healthy dried cheese snacks.

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During the past few months, the Company has continued to push the number of commercial licenses, machine purchase orders and technology evaluation agreements forward.

- ❑ Late January, EnWave signed a commercial royalty-bearing license with Van Dyk Specialty Products Ltd., a major Canadian producer of wild blueberry products. Van Dyk immediately submitted a purchase order for a large-scale 60kW royalty-bearing nutraREV machine.
- ❑ EnWave also received a purchase order for a 10kW small-scale machine from Natural Nutrition. This order represents the third purchase of a 10kW small-scale machine by the Chilean company, and will again expand its royalty bearing production capacity of high quality fruit products.
- ❑ Ereğli Agrosan purchased a fourth REV dryer. One 2kW and two 10kW REV machines are already up and running at Ereğli's facility in Turkey, and now - due to tremendous interest from several leading food processors in Europe and Asia for its dried fruit, vegetables and cheese products - it purchased a 100kW unit.
- ❑ In late 2016, Bonduelle - the world leader in ready-to-use vegetables - engaged EnWave to double the throughput of its existing 120kW REV machine.
- ❑ In addition, EnWave signed a Technology Evaluation and License Option Agreement

(TELOA) with four new companies. In December 2016, it closed a TELOA with a major dairy processor and a major meat processor, both located in Europe. A TELOA was signed with a major American pulse crop processor to explore the potential for dried pulse crop products. The fourth one was signed with Born Wild LLC, a seafood processor located in the United States (Also read Recent Events).

Over the coming quarters, EnWave intends to aggressively pursue its commercialization strategy by confirming more REV machine orders, growing royalty streams with established royalty partners, and the increase of NutraDried LLP's Moon Cheese sales.

The Company currently employs 35 people in Canada who operate a pilot plant and an engineering facility in Vancouver.

Clients

EnWave's international customer list truly validates its technology and potential. The Company's market strategy targets large, Tier 1 companies in the food and pharma sector, as well as Tier 2 players in niche markets and regions.

In most cases, EnWave initially signs research collaboration agreements with potential partners, offering them certain product and geographic exclusivity. After completing a satisfactory due diligence on the technology and market opportunity, those companies have the option to sign commercial agreements and place machine orders.

Thus far, EnWave has signed eighteen royalty-bearing licenses, thereby opening up eight distinct market sectors for commercialization, with companies that include:

- ❑ **Bonduelle**, a global leader in the production of vegetables;
- ❑ **Ereğli Agrosan**, to process a variety of fruit, vegetable and cheese products in Turkey;
- ❑ **Gay Lea Foods**, a dairy co-operative comprised of over 1,200 Canadian

farmers, to process cheese snack products for human and pet consumption;

- ❑ **Perdue Farms**, the third-largest chicken processing company in the United States;
- ❑ **Natural Nutrition**, for the production of berry products in Chile;
- ❑ **Milne Fruit Products**, for the production of several dehydrated fruit and vegetable products in the whole, fragmented and powdered form;
- ❑ **NutraDried LLP** to develop, manufacture, market and sell all-natural cheese snack products in the United States under the Moon Cheese brand;
- ❑ **Sutro Biopharma**, for the dehydration of a cell-free medium used in their patented protein synthesis process.

In addition, EnWave has signed Technology Evaluation and License Option Agreements with a growing number of companies such as Merck Pharma, Ultima Foods, and Jack Link's, which are testing the technology.

NutraDried LLP

NutraDried LLP develops, manufactures, markets and sells 100% all-natural cheese snacks under the Moon Cheese brand. EnWave USA Corporation, a 100% daughter of EnWave Corp, holds a 51% stake in NutraDried, while ND Creations, a private company majority owned by a former director of EnWave, controls 49%. EnWave benefits from selling REV machines to the joint venture, while it also receives a revenue-based royalty of 5%.

In July 2013, the LLP began producing cheese snack products under the Moon Cheese brand in three flavors - Gouda, American Cheddar and Pepper Jack.

Since then, its distribution has expanded very rapidly. The cheese snack is now available in over 20,000 grocery stores across the United States and Canada. Recently, NutraDried confirmed that Moon Cheese will be sold at Ahold's 700+ supermarkets, which are known under brands as Stop & Shop, Giant Food Stores, Martin's Food Markets, and Peapod. Moon Cheese distribution was recently also broadened to 5,000 of the 8,000 United States stores of 7-Eleven.

The subsidiary's strongest accomplishment so far, is that Moon Cheese snacks are available at Starbucks. The adventure at the world's largest coffee chain started mid-July 2015, when the cheese snacks became available at approximately 3,400 Starbucks locations in the United States, as part of a 16-week long trial.

Because they were a big hit, Starbucks quickly expanded distribution to all of its 7,500 corporate stores in the US. Moreover, less than a month later, the large coffee chain also started selling Moon Cheese at its 1,400 corporate stores in Canada.



The Moon Cheese snacks continue to be a big hit at Starbucks.

In the previous two quarters sales of Moon Cheese were impacted by the fact that Starbucks switched the Pepper Jack flavor to Mozzarella. Sales in the current quarter are expected to make up for this decline.

A few weeks ago, several organizational changes were announced at NutraDried. Spire Brands, which was hired in 2015 as master distributor of Moon Cheese, was replaced by the non-exclusive distributor Slant Design. NutraDried has already worked extensively with Slant in the past, as it was responsible for the very successful introduction of Moon Cheese at Starbucks. Slant will again take over the existing distribution, which was originally established by the group.

In addition, Dr. Tim Durance, the President and CEO of EnWave, was appointed as the interim CEO of NutraDried.

There are several positive aspects to this reorganization:

- ❑ The distribution agreement with Slant is non-exclusive, so NutraDried can engage other parties that might be beneficial;
- ❑ We understand that in the past there was significant interest in private label deals for Moon Cheese, but they were never materialized. This will radically change as the new management won't pass up attractive deals;
- ❑ The new management is also open for toll processing opportunities. This would involve third parties bringing in their raw material to have it dried. NutraDried would simply charge a processing fee for this service; and
- ❑ NutraDried's margins and profitability will increase.

TECHNOLOGY

Before EnWave launched its Radiant Energy Vacuum technology, food processing companies were limited to opt for either 'freeze drying', which provides superior product quality, but is cost prohibitive and is only used to process higher-value products; or 'spray and air-drying', which is cost effective but degrades the quality of the products (Also see table on next page).

For the first time, companies can combine the effectiveness of freeze drying with the economics of spray and air drying thanks to EnWave's REV dryers.

EnWave's REV technology utilizes radiant energy (microwaves) in a vacuum environment to homogeneously dehydrate a wide variety of foodstuffs and biomaterials at temperatures ranging from approximately 37.5°C to below freezing.

The key to the technology is the vacuum environment in which the energy is applied, because it reduces the atmospheric pressure, therefore lowering the temperature at which the moisture can efficiently be removed. This reduction of heat and oxidization minimizes

the damage inflicted on the REV-dried products, preserving richer flavors, brighter colors and higher nutritional content.

Four REV platforms have been developed to address specific market opportunities. Three

platforms – nutraREV, powderREV and quantaREV - are at a commercial stage, while the fourth one – freezeREV - is under development. Each platform is described in more details below.

	EnWave's REV Technology	Freeze Drying	Air Drying
Better Product	Superior Color Superior Flavor High Nutritional Retention	High Nutritional Retention	Heat & Oxygen Damages Color, Flavor, Nutrients and Texture
Faster Process	Minutes or Hours (1,5 hours for Blueberries)	Hours or Days (24 - 36 hours for Blueberries)	Hours (6 hours for Blueberries)
Cheaper Cost	Up to 80% lower processing costs than freeze-drying (combination of lower capital, labor and energy costs)	High Capital Costs High Energy Costs	Low Capital Costs Competitive Energy Costs
Comparison between EnWave's REV technology, and freeze & air drying.			

Commercial Stage

nutraREV is designed for the dehydration of fruits, vegetables, herbs, dairy products, meats and seafood. It provides higher nutritional content, and improved appearance, flavor and texture over freeze drying, which is the industry standard for dehydrating many food applications. It is EnWave's most popular technology and continues to grow among food companies.

nutraREV machines are available at varying scales: 2kW for product development, 10kW for pilot-scale production and 100kW or higher for commercial production.

A 100kW unit is capable of producing as much as 150 kg (340 lbs) of dried product (below 5% residual moisture) per hour. A 100kW machine sells on average for \$1.4 million and generates between \$200,000 and \$400,000 in royalties per year at full utilization.

nutraREV machinery tumbles the product in large baskets as they rotate through the vacuum-microwave chamber.

Total processing times range from forty-five to ninety minutes depending on the individual product and desired end moisture content. nutraREV® is continuous and is controlled by a PLC operating system.

quantaREV is designed for high-volume, low-temperature dehydration of solids, liquids, granular or encapsulated products. It uses a continuous belt design in a controlled vacuum-microwave environment with an eventual target of dehydrating several tonnes of material per hour. This low temperature technology is designed to provide a higher-quality end product than what is currently achieved with spray drying or air drying.

powderREV is designed to dehydrate a wide variety of materials including enzymes, probiotics and food cultures, pharmaceuticals, non-regulated biologicals and certain dry food products.

The technology is ideally suited to replace the expensive and time consuming process of tray freeze drying, which takes place in a high heat environment and damages sensitive organisms. Laboratory tests have shown that the potential benefits of powderREV over freeze drying include less capital cost due to faster dehydration times, smaller plant footprints, and lower energy and labor costs.

Development Stage

freezeREV is designed to provide high-speed dehydration for live and active organisms in vials with the potential for significantly lowering operating costs compared with freeze drying. freezeREV is intended for

products that must have a minimum moisture content in order to maximize their shelf-life. It is currently available as a multi-vial prototype for partner research and development.



A lab-scale freezeREV unit designed to provide high-speed dehydration for live and active organisms in vials.

In December 2011, EnWave signed a Research and Development agreement with **Merck**, one of the world's leading pharmaceutical, chemical and life science companies. Under the terms of the 10-year agreement, both parties established a work plan for the production of a specifically designed non-GMP freezeREV dryer. Merck should bear all the costs associated with this process.

The idea was to evaluate EnWave's REV technology as a viable replacement for **lyophilization** in the pharmaceutical industry. More specifically, the developmental work and testing has focused on the potential of dehydrating several vaccinations.

Unlike lyophilization, freezeREV employs a combination of microwave energy with a low-pressure environment to achieve rapid, highly controlled dehydration of live or active biological materials.

Tests conducted on a lab-scale freezeREV show that processing times are far less than with lyophilization, which dramatically reduces costs. In addition, the footprint of a freezeREV

machine is sizably smaller than a lyophilizer. And finally, third party tests show no key differences between freezeREV and lyophilized products.

In November 2015, EnWave commenced manufacturing a commercial scale freezeREV, for which it received an initial milestone payment from Merck. Additional milestone payments are expected on the delivery and start-up of the machine. In total, EnWave expects to eventually generate several million dollars of revenues from this deal.

LYOPHILIZATION

Freeze drying, technically known as lyophilization, is a dehydration process typically used to preserve a perishable material or to make the material more convenient for transport. Pharmaceutical companies often apply freeze drying on products such as vaccines and other injectables.

Freeze drying works by freezing the material and then reducing the surrounding pressure to allow the frozen water in the material to sublime directly from the solid phase to the gas phase. By removing the water from the material and sealing the material in a vial, the material can easily be stored, shipped, and later reconstituted to its original form for injection.

Because lyophilization is the most complex and expensive form of drying, its use is usually restricted to delicate, heat-sensitive materials of high value.

Test results with freezeREV have been very encouraging, prompting the manufacture of a scaled-up REV machine for continued development and product testing. Although it will take some more time to develop and commercialize freezeREV, the agreement with Merck provides revenues for EnWave from the sale of the machine, and it again confirms the high potential of the technology when a giant like Merck decides to proceed after a long test period.

Expanding Patent Portfolio

EnWave currently holds, or has filed, numerous patents that protect both its REV technology and specific methods of use. Because the Company's technology continues to be developed, new innovations are made. As such, its intellectual property portfolio continually expands.

EnWave's patent suite now consists of thirty-five patent approvals protecting its REV technology in countries such as the United States, Canada, the European Union, China, Hong Kong, New Zealand, Chile and Australia. In addition, many patent approvals are pending in other countries. In fact, in 2016, ten additional geographic patents related to the nutraREV, powderREV and quantaREV platforms were granted to EnWave.

These patents are an essential part of EnWave's royalty-generating business, because each time a new patent is granted, the royalty stream timeline extends twenty years from the patent's filing date.

THE MARKET

EnWave targets both the drying equipment market and dried products market, where it partners with companies that dehydrate their products.

Radiant Energy Vacuum technology allows EnWave's commercial partners to capitalize on the following important global food processing market trends:

- ▣ **Snackification** – Snacks now account for one of every five 'eating occasions', driving the demand for shelf-stable, healthy grab-and-go food choices. REV technology allows for the development of many new innovative snacking options;
- ▣ **Naturally functional** – Global consumer trends are placing increased importance on the inherent nutritional properties and the subsequent health claims of the foods they are consuming. REV allows food processing companies to retain high nutritional value;
- ▣ **Protein** – Powered by the 'naturally functional' trend, consumers are looking for protein rich snack options in new

forms. REV is being used by several partners to produce protein rich products in the dairy, meat and pulse crop industries; and

- ▣ **Dairy 2.0** – Companies are looking to make the most of dairy's natural advantages and deliver new innovative products that coincide with the three other market trends listed above.

The total market size for freeze drying equipment is estimated at \$16 billion and is expected to reach \$35 billion by 2020. Especially the food processing and pharmaceutical industries are expected to continue to drive demand for freeze drying equipment. While food processing is the largest segment with about 35% of the market, biotechnology is expected to be the fastest grower the following years.

The worldwide market size for dried products is estimated at an astonishing \$400 billion. The largest segment, estimated at \$140 billion, is the food industry, which includes dried fruits, vegetables, meats, etc. The biopharmaceuticals segment comes in second with a \$67 billion market share, closely followed by probiotics, food cultures and enzymes, that generates \$61 billion annually. The dried beverage market, primarily made up of coffee and milk, is estimated at \$31 billion.

EnWave intends to develop the market for REV technology by selectively collaborating with strategic partners focused on reducing processing costs and creating new or improved product opportunities.

GROWTH DRIVERS

While EnWave's dehydration technology has plenty of applications, it's clearly excelling in a number of sectors such as fruits, vegetables, meats and dairy products.

Building Further Momentum in the Dairy Snack Space

By far the most successful REV dried cheese snack on the market today is Moon Cheese, as it's available at every Starbucks in North America and at thousands of retail stores in

Canada and the United States. Attracted by this significant success, other food companies worldwide are sensing an opportunity and have closed commercial agreements with EnWave to produce similar snacks.

The companies below have all closed a commercial agreement with EnWave to produce a REV dried dairy product. It is also stated for which country or region the companies obtained an exclusive license.

- ❑ **NutraDried LLP** for the United States;
- ❑ **Umland LLC** for high kosher products in the United States. Production and distribution of the snacks has commenced;
- ❑ **Gay Lea Foods** for Canada. It started up a 100kW nutraREV machine to expand the production of its 'Nothing But Cheese' snack product;
- ❑ **Lake Blue Spa** for Chile. Commercial production of its INTAKT cheese snacks has recently started. The dried cheese products are available in four flavors: Original Gouda, Spicy Gouda, Oregano Gouda, and Mediterranean Mix;
- ❑ **Dominant Slice** for Portugal and Spain. It recently launched a dried cheese product, coined B!t Cheese;
- ❑ **Agricola Industrial La Lydia SA** for Central America. It has received a 10kW nutraREV unit for initial production. The goal is to expand the production capacity in 2017;
- ❑ **Ereğli Agrosan** for Turkey. The license actually grants the company the exclusive right to process a variety of fruit, vegetable and cheese products. One 2kW and two 10kW REV machines are up and running at Ereğli Agrosan's facility. In addition, the company ordered a 100kW machine early 2017; and
- ❑ **Kesito LLC** for Greece. A 10kW commercial REV machine was installed late 2016, which allowed Kesito to complete product development and enter the European market with a high-quality, shelf-stable dried cheese snack product.

In addition, EnWave has signed a TELOA with a number of other dairy companies. Last year in August, for example, EnWave closed an agreement with the Mexican food processor **New Products R&D de C.V.** (NPRD). The

agreement gives NPRD, during eight months, the exclusive right to use EnWave's REV dehydration technology to develop dried cheese products for the Mexican market.



Production of Moon Cheese snacks.

Also, in December 2016, EnWave signed a Technology Evaluation and License Option Agreement with **a major European dairy processor**. Although few details were announced, we understand that the dairy company leased a 10kW Radiant Energy Vacuum machine, which will be installed at its facilities early 2017. Subsequently, the company only has six months to conduct the necessary R&D work. The key focus will be on developing healthy dried dairy snacks.

Typically, EnWave receives a 5% royalty on all cheese snack sales.

We're convinced more cheese snack agreements for other territories will be signed, as the snacks are an obvious success and food companies worldwide are eager to launch new innovative products.

EnWave Excels In Dried Fruits Market

Moreover, a growing number of fruit processors have signed either an evaluation or commercial agreement with EnWave, indicating that this is another strong market segment for the Company's applications.

EnWave has a royalty-bearing commercial license with these fruit related companies:

- ❑ **Natural Nutrition Limited d.b.a. Nanuva Ingredients**, a Chilean fruit processor, that has positioned itself as a leading provider of 100% natural (with no additives) dried fruits with colours, shapes, flavours and nutrients very similar to those of fresh fruit. These healthy ingredients are used in the snack food, functional food, nutraceutical and cosmetics industry. Because of the products' immense success, the fruit processor ordered a third 10kW dryer from EnWave in January 2017;
- ❑ **Milne Fruit Products** entered the REV-dried fruits market a couple of years ago, positioning MicroDried products - all-natural fruit pieces and powders - as pure, healthy alternatives to sugar-infused offerings. Following an extensive product and market development effort, Milne's MicroDried products have been gaining traction with a growing network of customers. As a matter of fact, Milne recently placed an order for a 120kW quantaREV to expand its processing capacity. Machine construction has started and it is expected to be installed in 2017. Judging by the new machine purchase order, Milne clearly expects to ramp up its sales.

In addition, EnWave has signed a TELOA with the following fruit companies:

- ❑ **Ocean Spray Cranberries Inc.** is an agricultural cooperative owned by more than 700 cranberry growers in North America. The company is very actively testing market dried cranberries. A commercial license may be signed shortly
- ❑ **Sun-Maid Growers of California** is a cooperative, owned by family farmers who grow raisin grapes all located within 100 miles of each other in the Great Central Valley of California. The cooperative is doing specific product development work at the moment; and
- ❑ **California Grape Co** is a California based grape producer that has the right to evaluate EnWave's REV technology to develop dehydrated crispy grape snacks. Intensified test work is ongoing. In fact, a commercial decision could be made in the near future.

Growing in Important Vegetable Sector

In January 2016, **Bonduelle**, the world's leading processed vegetable producer launched a new category of frozen vegetables called InFlavor. The new exclusive InFlavor dehydration and preparation process uses EnWave's vacuum-microwave drying technology.

InFlavor vegetables are initially prepared the same way as all other Bonduelle processed vegetables: they are optimally washed, cut, and blanched. Then comes the key part of the InFlavor process, partial vacuum microwave drying. The vegetables are heated and partially dried at a low temperature for several minutes by EnWave's 120kW commercial quantaREV machine. This eliminates some of the water that vegetables contain and limits water release during preparation.



InFlavor vegetables offer all the convenience of frozen products, but with a texture and taste that is unmatched.

It truly separates InFlavor from all other frozen vegetables. Because the more water vegetables contain, the more ice crystals are formed during the freezing process, which damages their cellular structure. This phenomenon affects the texture and taste of vegetables, and is also responsible for the water that is released during the preparation.

Bonduelle first launched InFlavor to its B2B customers in North America. In addition, it also has an eye on the European market, so this could potentially be a very exciting evolution. In fact, late 2016, Bonduelle

contracted EnWave to double the production capacity of its existing 120kW dryer.

Bonduelle will pay a production-based royalty between 3% and 5% on a quarterly basis and a monthly lease for the use of the EnWave machinery.

This is a clear indication that Bonduelle must have received favorable feedback from existing and potential clients that it decided to move forward with expanding the production capacity of its dryer.

The machinery improvement will allow Bonduelle to commit to larger purchase orders from its customers, as well as further the enhancement of the already high quality InFlavor premium frozen vegetable brand.

The market potential is enormous for Bonduelle. According to a 2014 food study of the food service segment conducted by the research firm Technomic, it could exceed eight million kilograms (17.6 million pounds) annually. Initially, Bonduelle targets businesses that deal in manufacturing as well as large chain restaurants.

And in June last year, EnWave announced that **Merom Farms**, an agricultural and food production company located in British Columbia, Canada, was going to start selling wasabi-based products in Canada and the United States.



Numerous studies have shown that the consumption of wasabi protects against cancer more effectively than the total intake of fruits and vegetables.

Merom Farms is a large commercial greenhouse operation that consists of 36 acres of covered greenhouse area. The family-owned operation has specialized in the production of peppers, which are marketed

under the Green House Delight Foods Inc. brand.

It produces roughly 11 million pounds of yellow, red, orange and green bell peppers annually for grocery stores in Canada and the United States. The expansion into wasabi production and processing will complement Merom's core competency.

After many years of research and development, Merom Farms now launched dried, powdered and encapsulated wasabi for the natural health supplement market under the "Your Wasabi" brand name.

Your Wasabi holds the ONLY license issued by Health Canada to produce wasabi capsules in Canada. The company recently attended the Canadian Health Foods Association conference in Toronto, where the product was very well received.

WASABI AS A MEDICINE

Wasabi Japonica is a perennial herb which has been grown in Japan for many centuries. It is a member of the cruciferous vegetable family, such as broccoli, Brussels sprouts, kale, cauliflower, cabbage and watercress.

Cruciferous vegetables are one of the most studied food groups with over 600 studies completed to date. These studies have shown that the consumption of cruciferous vegetables protect against cancer more effectively than the total intake of fruits and vegetables.

In addition, in vitro and in vivo studies have shown that wasabi has anti-microbial, anti-inflammatory, and anti-fungal properties.

Merom has a two year lead time over its competitors with the production of high-quality wasabi, and already has decades of experience with the distribution of vegetables in Canada and the United States. Consequently, the company is confident that within 5 years it can become the largest and most respected supplier of greenhouse grown

Wasabi capsules for the natural health products industry in North America.

EnWave will receive a 5% royalty on the wholesale price of all wasabi products sold by Merom. Knowing that wasabi is a high-value product that can cost more than \$25 per ounce, it's clear this could become another lucrative royalty stream for EnWave.

Meat Snack Producers - Another Pillar of EnWave's Success

In addition to dairy, fruits and vegetables, meat is another pillar of EnWave's success.

The intention of most of these meat companies is to develop crispy meat snacks. Although similar snacks are already being produced with non-REV technology, the texture and taste of most meat chips is poor because they are either air dried or baked.

In the meat category, EnWave has signed a royalty-bearing agreement with the following two companies:

- ❑ **Hormel Foods Corporation**, is a \$15 billion dollar company known for its numerous meat and food products. In addition to a 100kW dryer, Hormel purchased a 2kW REV machine for product development and a 10kW REV machine for market studies. This indicates that Hormel is eager to develop and test new products with EnWave's technology.
- ❑ **Perdue Farms**, a leading food and agricultural products company, ordered a 10kW REV dryer in July 2016 to process pet food and pet treats in the United States and Canada. The initial TELOA with Perdue was signed in April 2015, after which R&D work commenced on a smaller scale REV unit. Because Perdue ordered a larger 10kW REV dryer, we're convinced that market tests went very well. In fact, we wouldn't be surprised if they already had some distribution lined up.

Moreover, EnWave has engaged in technology evaluation relationships with several other major meat and protein processors,

- ❑ **Maple Leaf Foods**, a major Canadian food processing company that employs

approximately 12,000 people and exports to more than 20 global markets including the US and Asia. The agreement grants Maple Leaf the right to evaluate EnWave's REV technology for the potential production of a variety of food applications;

- ❑ **Jack Link's**, the number one meat snack manufacturer worldwide, extended the Technology Evaluation and License Option Agreement, as it continues to see tremendous promise in the REV technology;
- ❑ **Campofrio Food Group**, Europe's leader in the processed meats sector is conducting product development work using the REV dehydration technology. The company intends to create a number of new, healthy dried meat products for potential commercialization;

EnWave is in active negotiations with many more companies in this sector in various parts of the world. So we'll undoubtedly continue to see a steady news flow with developments in the meat area.

Pharmaceutical Dehydration Technology

A fifth and final pillar of EnWave's success is pharmaceutical applications. The commercialization of both powderREV and freezeREV technology platforms continues to progress, with EnWave advancing the design and manufacture of scaled-up versions of each platform for its two pharmaceutical partners Merck and Sutro Biopharma.

The powderREV and freezeREV machines have been designed to be constructed in accordance with Good Manufacturing Practices (GMP) standards, and GMP certification will be pursued. Installation and start-up of these machines is planned for 2017.

If the installation of the powderREV and freezeREV platforms in the pharmaceutical sector yields superior performance to incumbent dehydration technologies, it will solidify EnWave's value proposition with potential new partners in the pharmaceutical industry.

GOOD MANUFACTURING PRACTICES (GMP)

Good Manufacturing Practices (GMP) are the practices required in order to conform to guidelines for manufacture and sale of food, drug products, and active pharmaceutical products. These guidelines provide minimum requirements that a pharmaceutical or food products manufacturer must meet to assure that the products are of high quality and don't pose any risk to the consumer or public.

Good manufacturing practices, along with good laboratory practices and good clinical practices, are overseen by regulatory agencies in the United States, Canada, Europe, China, and other countries.

The powderREV machine for **Sutro Biopharma**, a pharmaceutical company based in San Francisco, is scheduled to be finished first.

If this REV machine is successful with the production of Sutro's products, they will immediately go into commercial production, as their ingredient does not require FDA approval. In that scenario, Sutro Biopharma would pay EnWave a royalty based on the production of their pharmaceutical ingredient.

Commenting on this upcoming event in a recent interview with Smallcaps Investment Research, Brent Charleton, the Senior Vice President, Business Development for EnWave said, "I think that the Sutro Biopharma relationship could be the "dark horse" in our investment case. If successful, their throughput capacity will press the need for additional machinery. I think that this is an area that could surprise a lot of people."

RECENT EVENTS

EnWave Closes 18th Commercial License and Sells 60kW REV Dryer

In January 2017, EnWave Corp. signed a commercial royalty-bearing license with Van

Dyk Specialty Products Ltd., a major Canadian producer of wild blueberry products.

The license grants Van Dyk certain exclusivity for the production of wild blueberry products using EnWave's Radiant Energy Vacuum (REV) technology. Van Dyk will pay EnWave a royalty of between 3% and 10% on the wholesale value of the finished products when sold.

Van Dyk – best known for its highly successful blueberry juice - is focused on providing the market with high-quality REV dried blueberry products. Consequently, the company has purchased a large-scale 60kW nutraREV dryer from EnWave, which is scheduled for installation in the second half of 2017.



Harvesting wild blueberries at Van Dyk farms.

Although EnWave hadn't mentioned Van Dyk in previous communications, the two companies have been cooperating for quite some time. Last year, a batch of Van Dyk's fresh blueberries were dried at EnWave's test facility for evaluation. These dried berries were subsequently shown for feedback to a number of fairly large companies in North America, Europe, and Asia. That feedback must have very positive as Van Dyk now proceeds with buying a large REV machine.

As Van Dyk has a high level of experience in the food industry, with plenty of distribution relationships throughout North America, Europe and Asia, we wouldn't be surprised if the initial distribution for their dried blueberries has already been established.

It obviously helps that the tiny summer blueberry is packed with antioxidants, vitamin C and all kinds of other nutrients that make it popular among health-conscious consumers.

THE VAN DYK HISTORY

Located in West Caledonia, Canada, the Van Dyk name is widely recognized. It all started in 1954 when Case Van Dyk, and his wife Riek, moved from Holland to Nova Scotia, Canada.

A few years later the Van Dyks started a pig farm when they discovered wild blueberries on their property. The pair saw an opportunity to diversify into the blueberry business. It came to their attention that these wild blueberries were spread across other old, abandoned farms in the area, and so they started to acquire more of those fields over the years.

Nowadays, the Van Dyks have about 600 acres of wild blueberry land in Queens County, Annapolis County, Digby County, Shelburne County and Yarmouth County. They produce 180,000 bottles of pure wild blueberry juice annually, of which 35% is shipped overseas, mainly to China, Germany and the United Kingdom.

New REV-Dried Products Hit the Shelves!

Next to the growing number of research and commercial customers, also the amount of REV dried products on the market continues to rise.

Moon Cheese is by far the most successful REV-dried product on the market today, with sales going into the millions of dollars annually. The crunchy cheese snacks are available in over 20,000 grocery stores across the United States and Canada and in all of Starbucks' corporate stores in North America.

Most recently, the Chilean food processing company Lake Blue launched four variants of its INTAKT cheese snacks and Merom Farms entered the North American market with Your Wasabi, a dried and encapsulated wasabi

powder for the natural health supplement market.



Lake Blue has launched four variants of its INTAKT cheese snacks: Original Gouda, Spicy Gouda, Oregano Gouda, and Mediterranean Mix.

In 2016, three more dried cheese snacks were brought to the market. First, Gay Lea Foods started producing its Nothing but Cheese on-the-go crunchy snack made with 100% cheese. Portuguese firm Dominant Slice launched a dried cheese product, coined B! Cheese, for the European market. Finally, Turkish company Ereğli Agrosan also started selling its dried cheese snack.

In the fruits category, Natural Nutrition has positioned itself as a leading provider of 100% natural dried fruits with colours, shapes, flavours and nutrients very similar to those of fresh fruit. These are used in the snack food, functional food, nutraceutical and cosmetics industry in Latin America, the United States, Asia and Europe. In addition, the MicroDried products by US based Milne Fruit have been gaining traction with a growing network of customers.

And last, but not least, Bonduelle, the world's leading processed vegetable producer launched a new category of frozen vegetables called InFlavor. The new exclusive InFlavor dehydration and preparation process uses EnWave's vacuum-microwave drying technology.

On average, royalty streams from partners vary between 2% and 10% on commercial products produced with a REV machine.

Constant Deal Flow

Ever more companies in a growing number of sectors recognize that EnWave's REV technology is ideal to distinguish themselves in the worldwide marketplace.

To give an idea, during December 2016, EnWave signed no less than four TELOAs. The first one was with **a major American pulse crop processor** to explore the potential for dried pulse crop products. The agricultural company entered the TELOA after it thoroughly conducted product-focused application trials at EnWave's pilot plant facilities in 2016. The company has rented a 10kW REV dryer for further product development work at its own facilities. It has a maximum of six months to enter into a commercial agreement.

The second TELOA was signed with **Born Wild LLC**, a seafood processor located in the United States. Born Wild serves the global seafood market with processing capabilities and sourcing from Alaska, through Canada, Washington, Oregon, and northern California. It is led by several individuals with vast seafood processing experience.

Born Wild will collaborate with EnWave's product development team at the Company's pilot plant facility to develop several unique seafood snack products for human consumption. Noteworthy is that EnWave's food science group has already conducted quite a lot of product development work in the dried seafood snack space.

Born Wild has a term of seven months to exercise its option to license the use of REV dehydration technology.

And earlier in the month, EnWave signed a TELOA with **a major dairy processor and a major meat processor, both located in Europe.**

The dairy company will lease a 10kW REV machine. During a six month test period the dairy processor has the exclusive option to license the use of REV technology for the production of dairy products within an agreed European territory. When this option is

exercised, it may involve the purchase of larger commercial machinery.

It is worth noting that the dairy company already conducted product development trials at EnWave's facility last September. Therefore, the results must have been satisfying, as the company is now expanding its efforts and budget to do more test work.

Milk plays an important role in Europe as it is produced in every single EU member state. According to information by the European Dairy Association, the dairy industry represents approximately 15% of the turnover for the total food and drink industry in Europe. An impressive number! No surprise that the top-5 European dairy companies are all giant businesses: Nestlé, Lactalis, Danone, FrieslandCampina, and Arla Foods.

Also, the major meat processor obtained an exclusive option to license the use of REV technology for the production of meat snacks within an agreed European territory.

Similar to the dairy processor, this company did some initial test work at EnWave's facilities a couple of months ago. It will now conduct more product development trials at the same facility in February 2017. After a thorough evaluation of the end products, signing a commercial license may be the next step.

FINANCIALS

EnWave earns revenue from two business segments: EnWave Canada and NutraDried. EnWave Canada generates revenue from the sale of REV machinery to royalty partners, rental revenue from short term rentals of REV machinery to prospective royalty partners, and royalties earned from royalty partners. NutraDried generates revenue from the sale of Moon Cheese to retail and wholesale distribution channels.

EnWave Canada had revenue of \$2.15 million for the three months ended December 31, 2016 compared to \$1.32 million for the three months ended December 31, 2015. The strong rise, was due to increased commercial REV equipment sales and construction

activity. During the first quarter, revenue was generated from commercial equipment sale contracts with Milne Fruit Products, Ereğli Agrosan, Kesito and Natural Nutrition.

Amounts in \$000's	12/31/16	12/31/15
EnWave Canada Sales	2,145	1,326
NutraDried Sales	1,322	1,278
Total Sales	3,467	2,604
Cost of Goods Sold	2,683	1,743
Gross Profit	784	864
Expenses	1,402	1,344
Net Profit (Loss)	(618)	(483)
Diluted Shares Outs.	90,776	89,346
Diluted EPS	(0.01)	(0.00)
Most important income statement data for the first quarters ended December 31, 2016 and December 31, 2015. Source: Company Filings		

In addition, EnWave Canada earned royalties of \$122,000 during the three months ended December 31, 2016 compared to \$48,000 for the three months ended December 31, 2015. Royalties are payable to EnWave as a percentage of the value of products sold or based on the number of units produced by the Company's royalty partners. The increase in royalty revenues is due to more and more royalty partners starting up commercial production (Also see below).

EnWave Canada reported a net loss of \$744,000 for the first quarter of fiscal year 2017, while it had a net loss of \$429,000 in the comparable period last year. The increased loss was especially related to the design and construction of a large amount of REV equipment for current and future customers.

Revenue from NutraDried was \$1.32 million for the three months ended December 31, 2016 compared to \$1.29 million for the three months ended December 31, 2015.

NutraDried reported a net income of \$126,000 in the first quarter of 2017 compared to a net loss of \$54,000 in the first quarter of 2016. Although this is a strong achievement, more growth is expected from the current quarter onwards. A few weeks ago, EnWave

implemented organization changes at NutraDried to create operational efficiencies and to allow for growth of the Moon Cheese brand.

It is worth noting that during the first quarter, NutraDried launched its new mozzarella flavoured Moon Cheese at Starbucks and that sales are doing well.

Balance Sheet As Of December 31, 2016

A few items on the balance sheet stand out. First, the "Due from Customers on Contract" figure, which grew by about \$538,000 relates to work already performed on equipment construction contracts, but where the amounts are still to be invoiced to the customer based on the contract terms. Also "Inventories" rose with approximately \$580,000.

Both items are related to the higher number of REV machines that are being produced at the moment. In addition, the decline in "Cash and Cash Equivalents" is also correlated to higher production activities.

Amounts in \$000's	12/31/16	12/31/15
Cash and Cash Eq.	3,435	4,590
Restricted Cash	250	250
Trade Receivable	959	770
Due From Customers Under Contract	2,080	1,542
Inventories	2,261	1,681
Total Current Assets	9,666	9,449
Plant and Equipment	3,485	3,679
Total Assets	14,731	14,962
Trade and Other Payables	1,510	1,084
Total Current Liabilities	2,905	2,552
Long Term Debt	151	201
Total Liabilities	3,056	2,753
Total Stockholder Equity	11,675	12,209
Most important balance sheet data on December 31, 2016 and December 31, 2015. Source: Company Filings		

Inventory on December 31, 2016 was \$2,261,000 compared with \$1,681,000 a year before. The higher inventory, which includes completed machines and parts of EnWave

Canada and food product and packaging supplies for NutraDried, is due to increased sales activities by both EnWave Canada and NutraDried.

OUTLOOK & VALUATION

In the past, food processing companies had to choose between minimizing their drying costs or producing premium dried products. With EnWave's REV technology, companies no longer have to choose, as they're able to produce high-value dried products at a much lower cost. The main goals of using REV technology are to shorten processing times, reduce operational costs and to produce higher-value products than previously achievable via alternative processing technologies with similar economics.

As EnWave's unique dehydration technology is becoming widely known, companies recognize its potential. The food industry is extremely competitive and producers are constantly looking to make the difference. For the first time in many years a brand new dehydration technology has entered the market, which is faster and cheaper than freeze drying, and has better end product quality than air drying or spray drying.

An increasing number of food and biopharmaceutical companies are realizing that REV is the way to go if they want to maintain their competitive advantage. EnWave's business model allows for territorial exclusivity, therefore it is simply a matter of signing an agreement first before a competitor snatches away the rights for a certain country or product.

EnWave continues to progress with its royalty partners by receiving purchase orders for additional REV machinery to expand their royalty bearing production capacities. EnWave also advanced with several prospective royalty partners that are conducting initial testing and product development under TEOAs.

The Company's technology licensing business model continues to gain momentum with each additional commercial partner agreeing to pay royalties for the use of the Company's

innovative REV machinery. Most recently, REV dried wasabi pills and INTAKT cheese snacks were launched.

To date, EnWave has entered into eighteen royalty-bearing commercial licenses with major food processing and pharmaceutical companies.

The Company is clearly in sixth gear and making progress on all fronts. We expect more commercial license deals in the near future, and as a result a continued improvement of the Company's financials.

The commercialization of both powderREV and freezeREV technology platforms continued to progress during the first quarter, with EnWave advancing the design and manufacture of scaled-up versions of each platform for Sutro Biopharma and Merck. Installation and start-up of these machines is planned for 2017. If the installation of the powderREV and freezeREV platforms in the pharmaceutical sector yields superior performance to incumbent dehydration technologies, it will solidify EnWave's value proposition with potential new partners in the pharmaceutical industry.

EnWave has started the year where it left off the previous one: with strong revenue growth. In addition, the Company is executing as planned with more TEOAs and royalty bearing commercial agreements.

Following quarters may still be a bit lumpy profit wise, but the Company has clearly set the pace for an outstanding 2017.

Valuation

EnWave's technology works and is validated by many commercial agreements. The dehydration market is large and spread over many different sectors.

Given the still emerging nature of EnWave's earnings, a multiple-based valuation is challenging. Instead, we apply a Discounted Cash Flow (DCF) model.

Based on our estimate of 98 million shares outstanding, the intrinsic value of EnWave's

shares derived from our model is \$3.59, about equal compared to our previous report.

We reiterate our buy recommendation for EnWave Corp. with a price target of \$3.59, which is 235% above today's stock price.

SHARE DATA & OWNERSHIP

As of February 23, 2017, EnWave had approximately 90.78 million common shares outstanding. In addition, the Company had 3.125 million warrants outstanding with an exercise price of \$1.20 and 225,000 agent's warrants with an exercise price of \$0.80. Each warrant entitles the holder to purchase one common share of the Company until October 22, 2020 and October 22, 2017 respectively.

Finally, EnWave has a little over 5.1 million stock options outstanding with a weighted average exercise price of \$1.17. Each stock option entitles its holder to purchase one common share of the Company.

Note that just a few days ago, the Company granted 1,800,000 incentive stock options to certain directors, officers and employees of the Company. The Options are exercisable at a price of \$1.09 per share, and expire on March 5, 2022.

The principal owners of the Company's common stock are DJE Investment (5.95%), Manulife Asset Management (2.75%), and Petercam S.A. (0.55%).

MANAGEMENT

▣ DR. TIM DURANCE - PRESIDENT & CEO, DIRECTOR

One of the founders of EnWave, Dr. Durance has 35+ years' experience in the processed food industry and is the co-inventor of the Company's REV technology. Dr. Durance received his Ph.D. and M.Sc. in Food Science

from UBC, as well as a B.Sc. in Microbiology from the University of Guelph and a B.A. in Anthropology from the University of Waterloo. He's the author of more than 75 peer-reviewed scientific publications, 16 patents, and numerous book chapters, scientific presentations, and invited lectures on technology and food processing. As EnWave's President & Co, his responsibilities include research and development related to all of the REV technologies, as well as ongoing intellectual property development.

▣ MR. JOHN P.A. BUDRESKI - EXECUTIVE CHAIRMAN

Mr. Budreski has over 30 years of extensive capital markets and executive management experience. He was formerly a Vice Chairman of Cormark Securities Inc. from 2009 to 2012 and President and CEO of Orion Securities Inc. from 2005 to 2007, prior to its successful sale to Macquarie Bank. He has filled the roles of a Managing Director of Equity Capital Markets and Head of Investment Banking for Scotia Capital Inc. from March 1998 to February 2005 after starting out as a Managing Director of US Institutional Equity Group for Scotia Capital. He also held senior roles in investment banking and equity sales and trading for RBC Dominion Securities.

▣ MR. DANIEL HENRIQUES - CFO

Mr. Henriques is a Chartered Accountant and brings extensive experience in finance effectiveness and financial reporting to his role at EnWave. Prior to joining EnWave, Mr. Henriques was a manager in the Assurance group at PricewaterhouseCoopers LLP, and supported numerous mid-market companies, including companies listed on the Toronto Stock Exchange, TSX Venture Exchange and the New York Stock Exchange, with financial reporting and compliance. While at PwC, Mr. Henriques provided clients in the manufacturing and technology sectors professional services in the areas of financial audits, financial reporting and tax.

ANNUAL INCOME STATEMENT FY 2014 – 3M 2017

All numbers in thousands

PERIOD ENDING	FY 2014	FY 2015*	FY 2016	3M 2017
Total Revenue	4,554	5,868	14,933	3,467
Cost of Revenue	3,976	4,689	10,383	2,683
	578	1,179	4,550	784
Expenses				
Administrative	2,117	2,089	1,989	535
Sales & Marketing	1,165	719	793	305
R&D	1,591	1,386	1,656	291
Amortization Intangible Assets	1,432	1,420	1,222	254
Stock-based Compensation	608	261	399	22
Net Loss Applicable To Common Shares	\$6,706	\$4,993	\$1,837	\$618

Annual Income Statement FY 2014 – 3M 2017. Source: Company Filings

* Note that in the Fiscal Year 2015 column all revenues and expenses generated by Hans Binder Maschinenbau – a former subsidiary of EnWave - have been excluded, due to its insolvency on September 29, 2015.



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