

# Smallcaps

## Investment Research

### EnWave Corporation (ENW)

June 18, 2016

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.

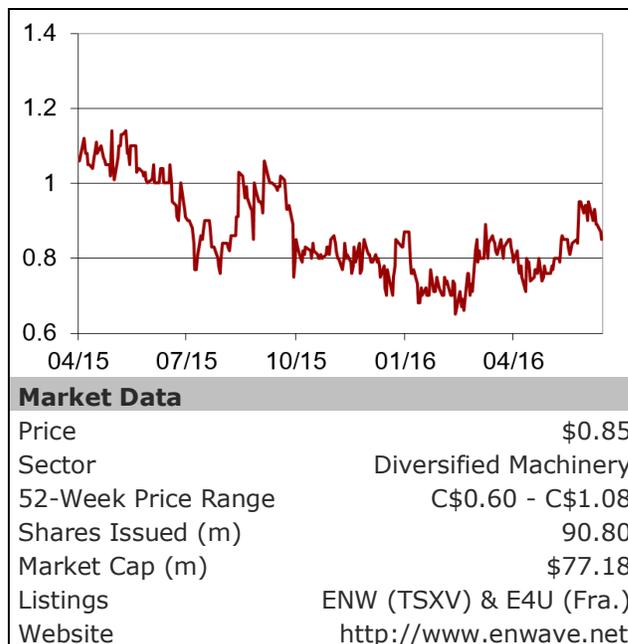
The second quarter of 2016 was a very strong one for EnWave. The Company more than doubled its revenues and achieved positive net income for the first time in its history.

Several companies, such as Natural Nutrition and Ereğli Agrosan, have recently purchased their second REV dryer. Other companies, such as Milne Fruit Products, NutraDried LLP, and Bonduelle are ramping up production to meet demand for their dried products. Moreover, dozens of companies in a variety of industries are currently evaluating EnWave's REV technology. Consequently, we expect to see a continued flow of new Technology Evaluation and Royalty-Bearing agreements being announced in the following months.

We reiterate our buy recommendation for EnWave Corp. with a price target of \$3.49, which is 310% above today's stock price.



- ❑ Sutro Biopharma, a pharmaceutical company based in San Francisco, is scheduled to receive a commercial scale powderREV machine in the first half of 2016. Commercial production will begin immediately after the testing phase is complete, contingent on the viability of their pharmaceutical products.
- ❑ With ever more national and international entities becoming aware of EnWave's superior technology, the Company's negotiating position is getting much stronger. The agreement with Natural Nutrition, for example, immediately included a minimum of three machine sales in order for the company to retain their exclusivity rights. And the deal with Ereğli Agrosan even included a total of four potential machine sales. This strategy may become EnWave's blueprint for future agreements.



## 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.

The Company'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.

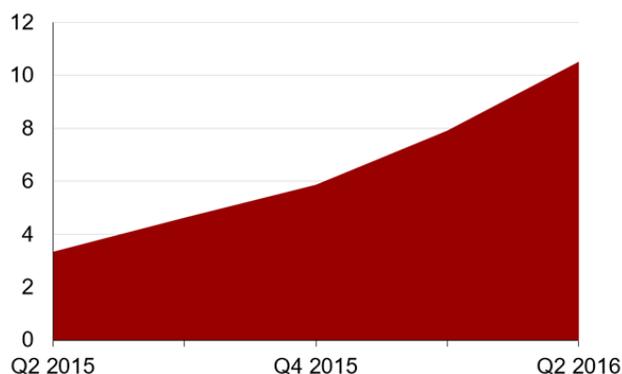
EnWave had an outstanding second quarter of fiscal year 2016, ended March 31, 2016. The Company reported a positive net income for the first time in its history. It generated net income from continuing operations of \$95,000 compared with a loss of \$910,000 in the second quarter of last year.

The Company also continued its trend of significant year-over-year revenue growth. For the three months ended March 31, 2016 revenues reached \$4,586,000, versus revenues of \$1,976,000 in the comparable period in 2015, an increase of \$2,610,000 or

132%. Revenues for the six months ended March 31, 2016 were \$7,190,000 an increase of \$4,640,000 or 182%, compared to the same period in 2015.

Revenue growth was due both from a strong increase in Radiant Energy Vacuum (REV) machine purchase orders, as well as increased sales and distribution of Moon Cheese by NutraDried, EnWave's 51% owned subsidiary that produces healthy dried cheese snack.

This entire achievement is the result of EnWave's management team being extremely focused on selling machines and increasing the royalty streams over the past two years. Now that the Company has laid the foundation for substantial business growth, it has put forward additional resources to promote and tell the story to the investment community.



**Trailing 4-quarter revenues in millions CAD.**

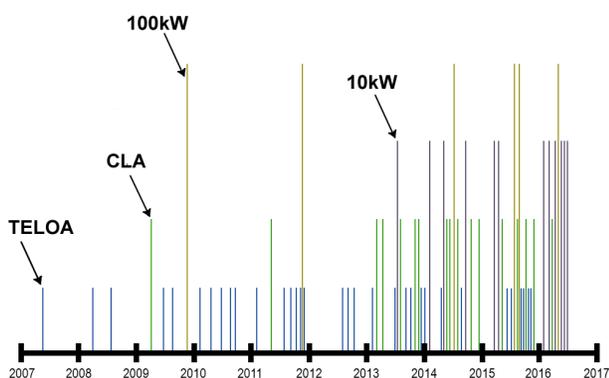
Over the coming quarters, EnWave will continue to aggressively pursue its commercialization strategy through confirming additional REV machine orders, growing royalty streams with established royalty partners, and the growth of NutraDried LLP's Moon Cheese sales.

**In fact, during a recent interview with Smallcaps Investment Research, Mr. Brent Charleton, the Senior Vice President, Business Development for EnWave remarked: "We have sight on at least three or four other large scale orders, which are expected in the next few months. Our target is to sell in the range of six large scale machines this year".**

The Company currently employs 30 people in Canada who operate two separate facilities including a pilot plant and an engineering facility in Vancouver.

EnWave generates revenues from the following three sources:

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



The chart above gives an overview of EnWave's achievements during the past 10 years. Each blue line indicates the signing of a Technology Evaluation and License Option Agreement (TELOA). The green lines indicate the signing of a Commercial License Agreement (CLA). The purple lines show the sale of 10kW machine, and the yellow lines show the sale of a 100kW machine. It is obvious that the momentum continues to build.

## 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, the Company has signed sixteen royalty-bearing licenses, opening up eight distinct market sectors for commercialization, with companies that include:

- ❑ Bonduelle, a global leader in the production of vegetables;
- ❑ Hormel Foods Corporation, a multinational manufacturer and marketer of consumer-branded food and meat products, for the production of healthy dried meat products;
- ❑ Gay Lea Foods, a dairy co-operative comprised of over 1,200 Canadian farmers, to process cheese snack products for human and pet consumption;
- ❑ CAL-SAN Enterprises, a blueberry producer in British Columbia;
- ❑ 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;
- ❑ A leading North American enzyme company, to dehydrate a series of food-related enzymes for their Tier 1 clients; NutraDried LLP to develop, manufacture, market and sell all-natural cheese snack products in the United States under the Moon Cheese brand;
- ❑ Umland for the dehydration of high kosher cheese snack products; and
- ❑ Sutro Biopharma, for the dehydration of a cell-free medium used in their patented protein synthesis process.

EnWave has signed research collaboration agreements with an expanding list of companies such as Nestlé, Kellogg's, Ocean Spray Cranberries, Sun-Maid Growers, R.J. Reynolds, Merck Pharma, and many others.

## 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 distribution of Moon Cheese at Starbucks is EnWave's biggest success so far in the cheese snack category.**

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

It was the intention that based on the trial period, Starbucks would determine if it was justified to continue selling the product. However, right from the start it was clear that

Moon Cheese was a big hit at Starbucks, as comments on social media, blogs and forums were overwhelmingly positive.

That positive impression was confirmed in October of last year, when Starbucks announced that it was going to expand the distribution of the all-natural cheese snack from 3,400 to 7,500 corporate stores and that it intended to extend the availability of the product into calendar year 2016.

Moreover, less than a month later, the large coffee chain started distributing the 100% all-natural cheese snacks to its 1,400 corporate stores in Canada as well.

As a result, Moon Cheese sales continue to outperform. For the six months ended March 31, 2016, NutraDried sales reached \$3,127,000 compared to \$752,000 in the same period in 2015 (Also read Financials).

**NutraDried is clearly on the edge of exponential growth. By using EnWave's proprietary Radiant Energy Vacuum (REV) technology, the subsidiary can produce all-natural products with attractive colors, excellent flavor and high nutritional content, characteristics valued by many consumers.**

## TECHNOLOGY

Before EnWave launched its Radiant Energy Vacuum technology, food processing companies' choices were limited to 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 are at a commercial stage, while the other is under development. Each one is described below.

	<b>EnWave's REV Technology</b>	<b>Freeze Drying</b>	<b>Air Drying</b>
<b>Better Product</b>	Superior Color Superior Flavor High Nutritional Retention	High Nutritional Retention	Heat & Oxygen Damages Color, Flavor, Nutrients and Texture
<b>Faster Process</b>	Minutes or Hours (1,5 hours for Blueberries)	Hours or Days (24 - 36 hours for Blueberries)	Hours (6 hours for Blueberries)
<b>Cheaper Cost</b>	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
<b>Comparison between EnWave's REV technology, and freeze &amp; air drying.</b>			

### 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.

The nutraREV platform has been built up to 100kW in power, and is capable of producing as much as 300 kg (660 lbs) of dried product per hour. A 100kW machine sells on average for \$1.2 million and generates between \$200,000 and \$400,000 in royalties per year at full utilization.

nutraREV is EnWave's most popular technology and continues to grow among food companies.

For example, **Milne Fruit Products**, a processor and global supplier for the industrial food ingredient and beverage markets, entered the dried fruits market a couple of years ago positioning MicroDried products as pure, healthy alternatives to sugar-infused offerings.

The MicroDried products are all-natural whole fruit pieces and powders with no added sugars, flavors, colors or preservatives. Independent third-party testing comparing MicroDried products to air-dried and freeze-dried products in a variety of applications revealed overall superiority in appearance, flavor and texture. Milne's MicroDried products are produced with an EnWave dehydrator.

After 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, the Washington based food processor has recently ramped up its production to satisfy significant orders from several major food companies.

Also, **Gay Lea Foods**, the second largest dairy co-operative in Canada, owned by over 1,200 dairy farmers, has purchased a 100 kW nutraREV machine for the production of "Nothing But Cheese", a crunchy cheese snack.

*Nothing But Cheese* will be sold under Gay Lea's well-known Ivanhoe cheese brand and

will be available in two flavors: Cheddar and Monterey Jack with Peppers. The cheesy nuggets make unique croutons for soups and salads and add protein to snack mixes. They are available in bulk for food processors and in single serve 18g pouches.

First royalties from the 100 kW machine are expected before year-end and could reach \$250,000 when operating at full capacity.



**100% cheese. 100% delicious. Nothing But Cheese has all the nutrition of two cups of milk and only 100 calories.**

Since April 2014 Gay Lea has been operating a 10 kW nutraREV unit to test both the product and its market potential. Production has so far been modest, and the snacks are only available in a few stores. As soon as the full-scale REV dryer is up and running – expected in the summer of 2016 – the dairy company can start securing additional distribution.

**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. Moreover, 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.

An example in this category is **Sutro Biopharma**, a pharmaceutical company based in San Francisco. Sutro signed a commercial royalty-bearing license and machine purchase agreement in May 2014. Shortly thereafter, EnWave delivered an 8kW prototype powderREV machine to Sutro to conduct a series of process optimization tests.

In September 2015, the pharmaceutical company ordered a commercial scale powderREV machine. The installation of the customized unit, at Sutro's GMP manufacturing facility in San Carlos, California, is scheduled for the first half of 2016.

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. If that were the case, 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 said, "I think that the Sutro Biopharma relationship is 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 this year".**

**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.

In November 2013, EnWave signed a commercial royalty-bearing license with a

division of **Bonduelle**, the world's leading processed vegetable producer. Bonduelle's global distribution reaches into over 100 countries worldwide, primarily selling fresh, frozen and canned vegetables. After signing the agreement, Bonduelle received an 18kW quantaREV machine to conduct tests and product refinement.



**InFlavor vegetables passed the ultimate comparison test with flying colors. Chefs and consumers alike found InFlavor vegetables to be similar or even better than fresh vegetables.**

There is nothing more credible than a blind taste test. The Institut de tourisme et d'hôtellerie du Québec conducted blind testing and qualitative studies among food service professionals and consumers. The response was unanimous, InFlavor vegetables are comparable to fresh vegetables. Also several chefs were impressed. They confirmed their interest in InFlavor products and 90% of them are convinced that such high-quality vegetables could easily replace fresh produce in many applications.

These results, combined with the economic value of DHF products derived from longer controlled shelf-life, more efficient delivery, and better product consistency over a calendar year, contributed to Bonduelle's decision to secure global exclusive licensing rights for REV technology.

In July 2015, EnWave installed, and started up the first 120kW commercial quantaREV machine at Bonduelle's facility. And in January 2016, Bonduelle finally launched InFlavor, a new category of frozen vegetables produced with EnWave's REV technology. (Also read Recent Events).

They have launched it to their B2B customers in North America and they are receiving feedback and initial orders. Within the next few months there should be more clarity on Bonduelle's potential for growth. Bonduelle also has an eye on the European market, so this could potentially be a very interesting evolution that would occur in the next six months.

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. If successful, several more REV machines could be ordered.

Moreover, Bonduelle is also collaborating with EnWave to finalize the design and construction of a 300kW quantaREV machine for potential future use.

### 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 which must have a minimum moisture content in order to maximize their shelf-life.

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.

### **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 be easily 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.

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 lyophilizer dried products. All in all, solid test results have been achieved, and EnWave has satisfied all of Merck's requirements to proceed.

Last November, 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.

**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, 18 separate 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 the United States, Canada, the European Union, China, Hong Kong, New Zealand, Chile and Australia. The Company also has an additional forty-one patent approvals pending in countries such as Brazil, India and Mexico.

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.

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

### Cheese Snacks Around The World

It is evident by the rapidly increasing number of stores in which Moon Cheese is available that North America loves these cheese snacks. Other food companies worldwide are sensing an opportunity and have closed agreements with EnWave to produce similar dried cheese snacks.

- ❑ **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;
- ❑ **Lake Blue Spa** for Chile. First production is expected in the first half of 2016;
- ❑ **Dominant Slice** for Portugal and Spain. In this case first production is also expected in the first half of 2016; and
- ❑ **Agricola Industrial La Lydia SA** for Central America. They will receive a 10kW nutraREV unit for initial production and plan to expand their business in 2016.
- ❑ **Ereğli Agrosan** for Turkey. The license actually grants the company the exclusive right to process a variety of fruit, vegetable and cheese products. A 10kW

REV machine is scheduled to be up and running at Ereğli Agrosan's facility shortly.

- ❑ **Kesito LLC** for Greece. The company will receive a 10kW commercial REV machine, which will allow Kesito to complete product development and initially enter the European market with a high-quality, shelf-stable dried cheese snack product (Also read Recent events).

Late March 2016, EnWave also signed a technology evaluation agreement with a major Australasian Dairy Company. The company will rent a 10kW commercial-scale REV machine to conduct a focused research program.

Furthermore, market tests with Moon Cheese have started at retail chains in Japan and Taiwan. If the outcome of the tests is successful, distribution could be increased and as such larger purchase orders would be placed with NutraDried.

Typically, EnWave will receive between 3% and 5% royalties 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

The growing list of fruit processors with whom EnWave has signed an evaluation or commercial agreement clearly indicates that this is a strong market segment for the Company's technology applications.

EnWave has signed a technology evaluation agreement with the following 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 in 2016;

- ❑ **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 2016.

In addition, EnWave has a royalty-bearing commercial license in place with these fruit related companies:

- ❑ **Natural Nutrition Limited**, a fruit processor located in the South American country of Chile. Initial production is going well and they are actively looking for larger customers to justify purchasing additional REV machinery; and
- ❑ **Milne Fruit Products** entered the REV-dried fruits market a couple of years ago positioning MicroDried products as pure, healthy alternatives to sugar-infused offerings. After 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, the Washington based food processor has recently ramped up its production to satisfy significant orders from several major food companies.

### Bonduelle InFlavor Vegetables

In January 2016, Bonduelle, the world's leading processed vegetable producer has 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. The recommended dehydration percentage is between 15% and 30% depending on the variety of vegetable and type of application.

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.

With the InFlavor process, even high water content frozen vegetables like peppers, mushrooms, onions, and zucchini can be prepared with superb results. InFlavor vegetables also leave no trace of water when prepared and they keep their original size.

Finally, the partially dehydrated vegetables are placed in a very low temperature environment of about -31°F (-35°C) for high-efficiency freezing.

**The new process enables Bonduelle to produce frozen vegetables with enhanced flavor, color and nutrient concentration. As such, it's able to significantly distinguish itself from its competitors.**

### Meat Snack Producers - Another Pillar Of EnWave's Success

In addition to dairy, fruits and vegetables, meat is becoming another pillar of EnWave's success. The Company currently has four major meat and protein processors engaged in technology evaluation relationships and one multi-billion dollar revenue company that has signed a royalty-bearing commercial license to produce dried meat snack products in the United States of America.

EnWave has signed a technology evaluation agreement with the following companies:

- ❑ **Maple Leaf Foods Inc**, 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, which was signed in August 2015, 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 its technology evaluation and license option agreement into 2016. This indicates that Jack Link's has already made very good progress with the development of one or more products, and pays a monthly rent for a small test dryer. If it saw no potential in REV dried products, it would have returned the test unit to EnWave and moved on.
- ❑ **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; and
- ❑ **Perdue Farms Inc**, a leading food and agricultural products company, is also evaluating EnWave's technology. If the results are positive, Perdue has the option to license the use of REV, on an exclusive basis, in the U.S. for a variety of food applications.

EnWave also has a royalty-bearing commercial license in place with the next company.

- ❑ **Hormel Foods Corporation**, is a \$15 billion dollar company known for its numerous meat and food products. In addition to a 100kW dryer, Hormel also purchased a 2kW REV machine for more product development and a 10kW REV machine for conducting market studies. This indicates that the well-known food processor is eager to develop and test new products with EnWave's technology.

## RECENT EVENTS

### Second Machine Purchase for Ereğli Agrosan

Last month Ereğli Agrosan, a Turkish company that produces high-value, natural products and derivative products for the food, cosmetic and health sectors, ordered a second 10kW REV unit. The machine is scheduled for delivery in the fall of 2016.

Ereğli Agrosan purchased its initial 10kW dryer only three months ago. That unit was started up a few weeks ago at the company's facility in Istanbul, Turkey. The order for a second machine indicates that Ereğli has already attracted several potential customers, which have shown interest in its REV dried products.

So far, the food processor only did product development work on a 2kW lab-scale REV machine that it purchased earlier this year from EnWave. Their technicians and scientists have been actively developing products on that small unit since March 2016. The samples produced on this machine were sent to potential buyers across Turkey and Europe, whom apparently were very satisfied with the products.



**The factory area in the Konya-Ereğli district where Ereğli's facility is being constructed.**

The license between EnWave and Ereğli Agrosan grants the latter the exclusive right to process a variety of fruits, vegetables and cheese products in Turkey using EnWave's REV dehydration technology.

In addition to the two REV dryers that Ereğli already purchased, the Turkish company is required to submit purchase orders for at least one full-scale 100kW REV machine within twelve months of the start-up of the first small commercial unit, and a second 100kW REV machine within three years in order to retain exclusivity. The agreement with Ereğli is potentially worth well over \$2.5 million in machine sales alone.

Finally, Ereğli has also agreed to pay EnWave a quarterly product specific royalty based on the wholesale value of the individual product offerings. EnWave royalty streams typically range between 2% and 10%.

With its favorable geographical conditions and climate, large arable lands, and abundant water supplies, Turkey is considered to be one of the leading countries in the world in the field of agriculture and food.

As Ereğli Agrosan is operating from Istanbul, the strategically located capital of Turkey, it can easily reach 1.5 billion potential customers in Europe, Eurasia, the Middle East and North Africa.

Next to its head office and R&D laboratory in İstanbul, Ereğli Agrosan also owns about 900 hectares (2,225 acres) of agricultural land. It is in the process of completing two production facilities in Turkey: a 30,000m<sup>2</sup> (320,000 square feet) building in Konya and a 4,000m<sup>2</sup> facility (43,000 square feet) in Tarsus-Mersin.

### Natural Nutrition Orders Additional REV Dryer

Less than a year after the successful start-up of a 10kW Radiant Energy Vacuum (REV) machine at the facilities of Natural Nutrition in Chile, the fruit processor has ordered a second 10kW dryer from EnWave back in May 2016.

In just one year, Natural Nutrition has positioned itself as a leading provider of one-hundred-percent 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 in Latin America.

They process over thirty high quality fruit products using REV technology, including maquiberries, blueberries, strawberries, rosehip, pineapple, grapes and cherries. These products are sold to local and international customers under the Nanuva Ingredients brand name.

The Chilean company's first REV machine is currently running at full capacity, producing a maximum of about 50 tons of finished product per year. The second REV dryer will double the company's processing capacity and is scheduled to be installed in the fourth quarter of 2016.

The additional order illustrates the fruit processor's success with its dried products. Moreover, this is advantageous to EnWave as the Company benefits from both the sale of machinery, and receipt of revenue-based royalty in the range of three to ten percent.



**Inside the Nanuva Ingredients processing facility.**

Natural Nutrition holds the exclusive license to process blueberry products using EnWave's REV technology and the non-exclusive right to process apple, plum, strawberry, cherry, peach, grape, raspberry and blackberry products. In exchange, Natural Nutrition must pay EnWave a royalty on the revenue derived from the sale of the aforementioned products.

In order for the fruit processor to retain its exclusive license, it had to purchase a second nutraREV machine within one year of

commissioning the first machine and a third unit within one year from the start-up of the second dryer.

Because the Chilean company commenced production of dried fruits in May 2015, it was right in time to order a second machine.

### 8<sup>th</sup> Royalty Agreement for Dried Cheese Snack

A couple of days ago, EnWave signed a royalty-bearing Commercial License Agreement with Kesito LLC, a company specializing in healthy snack production and global distribution. The license grants Kesito the right to exclusively use EnWave's REV technology in the country of Greece for the production of dried cheese snack products. This is the eighth license granted by EnWave to use REV for the production of cheese products and the third confirmed commercial European partner.

Kesito's co-founders Cetin Amato and Antonio Ellek have already created and commercialized a number of healthy grab-and-go snacks, including olives in four flavors, all-natural dips, and quinoa salads. These snack products are distributed to major retailers and airlines in over 14 countries in North America, Europe, and the Middle-East.

## FINANCIALS

EnWave earns revenues from two business segments. First, EnWave Canada's rental or sale of REV machinery to royalty partners, combined with the receipt of royalties from these partners. And second, NutraDried's sale of Moon Cheese snacks into retail and wholesale distribution channels.

For the three months ended March 31, 2016, EnWave Canada had revenues of \$2,744,000 compared to \$1,685,000 in the same period in 2015. And for the six months ended March 31, 2016 the segment recorded revenues of \$4,063,000 compared to \$1,798,000 in the comparable period in 2015.

The strong year-over-year revenue growth is due to the increased commercial REV

equipment sales and construction activity. During the six months ended March 31, 2016 revenue was generated from commercial equipment sale contracts with Sutro Biopharma, Merck and Gay Lea for powderREV, freezeREV and nutraREV machines, respectively. Additionally, EnWave shipped five 10kW nutraREV machines and one 2kW nutraREV machine to international royalty partners.

Amounts in \$000's	03/31/16	03/31/15
EnWave Canada Sales	2,748	1,685
NutraDried Sales	1,838	292
<b>Total Sales</b>	<b>4,586</b>	<b>1,976</b>
Cost of Goods Sold	2,911	1,493
<b>Gross Profit (Loss)</b>	<b>1,675</b>	<b>483</b>
Expenses	1,580	1,393
Income (Loss) from Discontinued Operations	(86)	882
<b>Net Profit (Loss)</b>	<b>9</b>	<b>(28)</b>
Diluted Shares Outs.	90,773	84,444
Diluted EPS	0.00	(0.00)
<b>Most important income statement data for the quarters ending March 31, 2016 and March 31, 2015. Source: Company Filings</b>		

Revenues from NutraDried were \$1,838,000 for the three months ended March 31, 2016 compared to \$292,000 in the second quarter of 2015. And for the six months ended March 31, 2016, revenues were \$3,127,000 compared to \$752,000 in the same period in 2015.

NutraDried's impressive revenue growth is attributable to increased sales and distribution activity with distributors and retail customers of Moon Cheese. A significant portion of sales growth is due to NutraDried sales to Starbucks, which increased its purchases of Moon Cheese for the expansion to 7,500 of its U.S. corporate stores and 1,400 Canadian corporate stores. Moon Cheese distribution was also broadened to 5,000 of the 8,000 United States stores of 7-Eleven.

Moon Cheese continues to be sold in several major North American retail outlets, including select Whole Foods, REI, and Winco Foods in the United States, and Safeway, Sobeys,

Mountain Equipment Co-op, Save-on-Foods and Thrifty Foods in Canada.

### Balance Sheet As Of March 31, 2016

As of March 31, 2016 EnWave had close to \$6 million in cash. Moreover, on May 4, 2016, the Company recovered \$1,020,000 of restricted cash that was held as collateral for a letter of credit issued to a customer of Hans Binder, a former subsidiary of EnWave, as a performance guarantee on one contract.

Restricted cash in the amount of \$480,000 remains held as collateral for the letter of credit issued to the customer. The Company continues to closely monitor the progress of the installation to secure the release of the remaining restricted cash.

With almost \$7 million in the bank, EnWave has sufficient funds to fulfill upcoming machine purchase orders from various customers.

It is also worth noting that EnWave generated positive cash flow from operating activities for the six months ended March 31, 2016, prior to changes to non-cash working capital, of \$874,000.

Amounts in \$000's	03/31/16	03/31/15
Cash and Cash Eq.	5,849	2,505
Restricted Cash	1,530	1,492
Trade Receivable	740	1,591
Inventories	2,167	1,817
<b>Total Current Assets</b>	<b>11,012</b>	<b>10,373</b>
Plant and Equipment	3,795	4,286
<b>Total Assets</b>	<b>17,159</b>	<b>22,219</b>
Trade and Other Payables	1,494	2,477
<b>Total Current Liabilities</b>	<b>3,339</b>	<b>5,068</b>
Long Term Debt	514	654
<b>Total Liabilities</b>	<b>3,853</b>	<b>5,721</b>
Total Stockholder Equity	13,306	16,497
<b>Most important balance sheet data for the periods ending March 31, 2016 and March 31, 2015. Source: Company Filings</b>		

Inventory as at March 31, 2016 includes machine parts of EnWave Canada of

approximately \$1,360,000 which is an increase of \$442,000 compared to March 31, 2015. EnWave Canada has increased its inventories to accommodate the higher sales activity related to commercial machine orders. NutraDried's food product and packaging supplies inventory was \$807,000 which is a bit less than \$897,000 on March 31, 2015. NutraDried's inventory remains relatively high in response to ever increasing sales of Moon Cheese and to meet order deadlines.

As at March 31, 2016, the Company had working capital of \$7,673,000 compared to \$5,306,000 on March 31, 2015. The increase in working capital is mainly due to an increase in cash and cash equivalents of \$3,344,000 from the October 2015 private placement.

## OUTLOOK & VALUATION

In the past, food processing companies had to choose between minimizing their drying costs or producing premium dried products. Thanks to 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.

And let's be clear, EnWave has only started scratching the surface of the global dehydration industry despite its significantly improved financial results.

The second quarter of 2016 was a very strong one for EnWave. The Company more than doubled its revenues and achieved positive net income for the first time in its history.

It's great to see repeat orders from EnWave's existing partners. We suspect that we might see several more in the coming months as multiple companies are showing strong commercial success.

Milne Fruit Products, for example, a Washington based food processor, has been gaining traction with its MicroDried products and recently had to ramp up its production to satisfy significant orders from major food companies.

Also the 100kW nutraREV machine at NutraDried LLP, the 51% owned subsidiary of EnWave, is running at close to full capacity thanks to the continued success of Moon Cheese at Starbucks and at thousands of other retail stores across North America.

And finally, Bonduelle, the global leader in the production of vegetables, has launched its InFlavor dehydrofrozen vegetables early 2016, and is gaining lots of traction.

All these partners pay quarterly royalties to EnWave ranging between 2% and 10% on all commercial products produced with their REV machines.

Moreover, dozens of companies in a variety of industries are currently evaluating EnWave's REV technology. Consequently, we expect to see a continued flow of new Technology Evaluation and Royalty-Bearing agreements being announced in the following months.

Also, with ever more national and international entities becoming aware of EnWave's superior technology, the Company's

negotiating position is getting much stronger. As a result, it can enforce bigger and better deals in return for certain product and geographic exclusivity.

The agreement with Natural Nutrition immediately included a minimum of three machine sales in order for the company to retain their exclusivity rights. And the deal with Ereğli Agrosan even included a total of four potential machine sales. This strategy may become EnWave's blueprint for future agreements.

EnWave is clearly on its way to become a big success.

### 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 \$3.49, about equal compared to our previous report.

**We reiterate our buy recommendation for EnWave Corp. with a price target of \$3.49, which is 310% above today's stock price.**

This intrinsic value suggests significant appreciation potential for EnWave's shares from the current price over the medium-term. The Company's share price and volume do not reflect the progress the Company made during the past year. We believe that it is a matter of time before the market realizes what a bargain it truly is.

### SHARE DATA & OWNERSHIP

As of May 25, 2016, EnWave had approximately 90.8 million common shares outstanding. In addition, the Company has

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 3.7 million stock options outstanding with a weighted average exercise price of \$1.40. Each stock option entitles its holder to purchase one common share of the Company.

The principal owners of the Company's common stock are DJE Investment (7.57%), Manulife Asset Management (2.75%), Kimelman & Baird (1.37%), 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 2013 – 6M 2016

All numbers in thousands

PERIOD ENDING	FY 2013	FY 2014	FY 2015*	6M 2016
<b>Total Revenue</b>	<b>5,448</b>	<b>4,554</b>	<b>5,868</b>	<b>7,190</b>
Cost of Revenue	3,796	3,976	4,689	4,654
<b>Gross Profit (Loss)</b>	<b>1,652</b>	<b>578</b>	<b>1,179</b>	<b>2,536</b>
<b>Expenses</b>				
Administrative	1,994	2,117	2,089	839
Sales & Marketing	979	1,165	719	238
R&D	2,675	1,591	1,386	1,049
Amortization Intangible Assets	1,905	1,432	1,420	703
Stock-based Compensation	1,118	608	261	87
<b>Net Loss Applicable To Common Shares</b>	<b>\$7,772</b>	<b>\$6,706</b>	<b>\$4,993</b>	<b>\$474</b>

**Annual Income Statement FY 2013 – 6M 2016. Source: Company Filings**

\* Note that in the Fiscal Year 2015 column all revenues and expenses generated by Hans Binder Maschinenbau have been excluded, due to its insolvency on September 29, 2015.



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