

Global Leader in Vacuum Microwave Dehydration

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This presentation contains forward-looking information based on management's expectations, estimates and projections about the future, including statements about EnWave's strategy for growth, product development, market position, expected expenditures and operational & financial results. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated and are not a guarantee of future performance and involve a number of risks, uncertainties and assumptions. All third party references to market information in this presentation are not guaranteed to be accurate as EnWave did not conduct the original primary research. Please see "Risk Factors" in EnWave's Annual Information Form for the year ended September 30, 2016 available on SEDAR under EnWave's profile at <a href="https://www.sedar.com">www.sedar.com</a>. Although EnWave has attempted to identify important factors that could cause actual results to differ materially, there may be other factors that cause results not to be as anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements. EnWave's forward-looking information is based on the beliefs, expectations and opinions of management of EnWave on the date the statements are made. EnWave does not assume any obligation to update forward-looking information, whether as a result of new information, future events or otherwise, other than as required by applicable law. Amounts shown herein are in Canadian dollars unless otherwise stated.

\* NON-IFRS MEASURES – Management uses certain non-International Financial Reporting Standards ("IFRS") measures that it believes are useful to investors in evaluating the performance and results of EnWave. The term "Adjusted EBITDA" refers to earnings before deducting stock-based compensation, foreign exchange gain or loss, depreciation, amortization, interest, and taxes. Management believes that Adjusted EBITDA is a useful measure as it provides an indication of the operational results of our business. Adjusted EBITDA does not have a standardized meaning prescribed by IFRS and is not necessarily comparable to similar measures provided by other companies. Investors are cautioned that Adjusted EBITDA should not be construed as an alternative to operating income determined in accordance with IFRS as an indicator of EnWave's financial performance or as a measure of its liquidity and cash flows.

#### MANAGEMENT AND BOARD OF DIRECTORS

#### Management

#### JOHN P.A. BUDRESKI, MBA - EXECUTIVE CHAIRMAN



- Proven history of advancing and accelerating businesses in addition to tangible engineering experience
- 30+ years of extensive capital markets and executive management experience

#### DR. TIM DURANCE, Ph.D - PRESIDENT & CEO



- Inventor and company founder
- Author of 20 EnWave patents granted or pending
- Professor Emeritus Food Science at the University of British Columbia

#### **DAN HENRIQUES, CPA, CA - CFO**



- Extensive experience in finance effectiveness and financial reporting
- Supported numerous mid-market companies with financial reporting and compliance

#### **BRENT CHARLETON, CFA - SVP BUSINESS DEVELOPMENT**



- Expertise in leading and executing: marketing, investor relations and business development initiatives for both private and public companies
- Raised over \$34 MM for EnWave Corporation

#### **Board of Directors**

JOHN P.A. BUDRESKI, MBA - EXECUTIVE CHAIRMAN

DR. TIM DURANCE, Ph.D - PRESIDENT & CEO

#### MARY C. RITCHIE, FCA - DIRECTOR & CHAIR OF AUDIT COMMITTEE



- President and CEO of Ritchford Holdings Ltd., an accounting and investment advisory services company
- Fellow of the Canadian Institute of Chartered Accountants

#### DR. STEWART RITCHIE, Ph.D - DIRECTOR



- President of Canadian Poultry Consultants Ltd. since 1989
- President of S.J. Ritchie Research Farms since 1993
- President, American Association of Avian Pathologists from 2010 to 2011

#### **HUGH MCKINNON - DIRECTOR**



- Director and shareholder of Norscot Investments Ltd.
- Director of Premium Brands

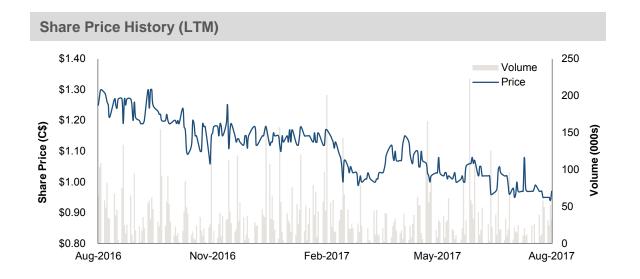
#### DR. GARY SANDBERG, Ph.D - SVP TECHNICAL SERVICES & DIRECTOR

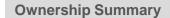


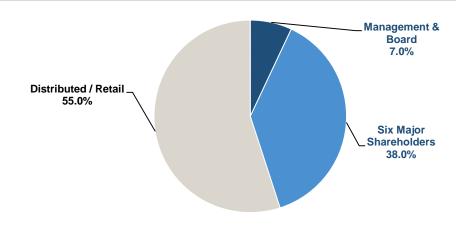
- Former long term employee of Lipton, a division of Unilever Canada Inc.
- Former Program Head of Food Technology, School of Health Sciences at British Columbia Institute of Technology

# **STOCK INFORMATION**

Exchange Listings	Toronto Venture Stock Exchange (TSXV) Frankfurt Stock Exchange (FSE)
Symbols	TSXV:ENW FSE:E4U
Share Price <sup>1</sup>	\$0.97
52-Week High	\$1.30 (October 6, 2016)
52-Week Low	\$0.94 (August 23, 2017)
Shares Outstanding	90.8 MM (Basic) 101.4 MM (Fully Diluted)
Daily Trading  Average Daily Volume:  Average Daily Value:	38,049 shares \$42,568
Market Capitalization	\$88.1 MM
Enterprise Value	\$87.3 MM







<sup>(1)</sup> All share price data as of August 24, 2017

<sup>(2)</sup> Shareholder breakdown is based on approximations.

#### **OUR MISSION**

EnWave's mission is to build a **diversified portfolio of royalty-bearing commercial licenses** in the food and pharmaceutical industries. We partner with companies of all sizes to find solutions to their processing challenges and to discover new and innovative application opportunities using **Radiant Energy Vacuum (REV<sup>TM</sup>) technology**. The Company aims to help each partner meet the evolving consumer demands for convenient, nutritious food applications.

#### **VALUE PROPOSITION**

- Highly scalable, lower cost, premium drying technology
- Innovation-driven product development
- Opportunity to secure exclusive geographic processing rights

## **EXPERIENCED LEADERSHIP**

## **Business Development**



**Food Science** 



**Engineering and Logistics** 



## **EnWave Overview**



- 1 Disruptive technology with a significant, long-term, competitive advantage
  - REV<sup>TM</sup> technology is superior to competition
  - EnWave owns a portfolio of patents to protect the competitive advantage
- 2 Significant market opportunity in large addressable market
  - Product applications to both food and pharmaceutical industries
- 3 Proven technology and business strategy
  - 22 Commercial License Agreements (CLAs) signed
  - Strong pipeline with 11 Technology Evaluation and License Option Agreements (TELOAs)
- 4 Rapidly growing revenue and cash flow profile
  - Revenue has grown from \$0.5 MM in 2013 to \$14.9 MM in 2016
  - Significant runway remains as partnerships ramp up production and new agreements are executed
- 5 Experienced management team with a proven track record





#### RADIANT ENERGY VACUUM TECHNOLOGY

REV<sup>TM</sup> is a patented, dehydration technology which uses a combination of ultra-low pressure and microwave energy to deliver a high-speed, controllable, low-temperature, efficient drying process. The superior technology of REV<sup>TM</sup> enables the homogeneous removal of water from organic materials, enhancing flavour and texture while preserving the product's nutritional or therapeutic value.

## REV™ PORTFOLIO









# **Food Industry**



# **Pharmaceutical Industry**





# **DEHYDRATION TECHNOLOGY COMPARISON**

	FREEZE DRYING	REV <sup>™</sup> TECHNOLOGY	AIR DRYING
PRODUCT QUALITY	High Nutrition Loss of Colour Styrofoam Texture	High Nutrition Vibrant Colour Natural Strong Flavour Novel Puffing	Augmented Colour Loss of Flavour Low Nutrient Value
PROCESS SPEED	16 hours – 24 hours	45 minutes – 2 hours	6 hours – 8 hours
COST COMPARISON	Higher Energy Cost Higher Labour Cost Higher Capital Cost	Up to 80% lower overall cost in comparison to Freeze Drying; more expensive than Air Drying	Higher Energy Cost Higher Labour Cost Lower Capital Cost



**Business Strategy** 





#### REV™ ADVANTAGE: TOTAL PROCESSING CONTROL

#### The Vacuum Advantage

- Lower boiling point: enables fast, low-temperature processing
- Rapid cooling during cycle: better process control
- Rapid water removal without cooking or oxidizing: closed system captures volatilized components
- Ability to "puff" products

#### The Microwave Advantage

- Efficient energy transfer: 85-90% efficiency and reduced energy requirements
- Volumetric heating: fast and uniform
- Fast temperature regulation: process control and cycle customization



EnWave has solved the five critical challenges that underpin the challenge to vacuum microwave drying:

- The design of the mechanism to transport organic material
- The amount of vacuum and microwave energy required
- The time that the material is exposed to the process

- The process for delivering microwave energy
- The shape and size of the vacuum chamber



## **INTELLECTUAL PROPERTY**



EnWave protects its proprietary intellectual property by constantly updating its patent portfolio to maintain and expand its coverage.

#### **Proprietary Patents:**

20 patents granted or pending

Granted: 14

Pending: 6

Methodology, apparatus and process patents

• 15 countries covered

## **Proprietary Trademarks:**

8 trademarks

4 countries: Canada, United States, Mexico, China

#### **FOOD INDUSTRY FACTS & FIGURES**

REV™ dehydration technology is disrupting the food processing industry by enabling the production of superior, high-value products at significantly lower cost and in less time than traditional freeze drying. REV™ is also a superior substitute to air drying and spray drying.

EnWave's addressable market for REV™ is segmented by the following product types:

#### **Fruits and Vegetables**



Dried, Dehydrated and Frozen USD 77Bn

**Dairy Products** 



Processed Cheese Products
USD 14Bn

#### **Meat and Seafood**



Meat Jerky Production\*
Dry Pet Food Production\*
Cured Seafood\*

USD 1.2Bn USD 15.3Bn USD 0.99Bn

**Spice and Herbs** 



USD 6.5Bn

Source: IBISWorld 2016 & 2017; International Trade Centre 2017 \*United States only



#### PHARMACEUTICAL INDUSTRY FACTS & FIGURES

The global pharmaceuticals and medicine manufacturing industry comprise companies that create biological, medicinal and pharmaceutical products: ampoules, tablets, capsules, vials, ointments, powders, solutions and suspensions.

Dehydration techniques are common in the pharmaceutical industry for the following reasons:

- Ease of handling and storage
- Reduced transportation costs
- Improved end product stability

Testing of REV™ technology has demonstrated greater than 80% reduction in drying time and faster optimization of the drying cycle, with yields similar to lyophilisation (freeze drying).

Current partners include:





#### **GLOBAL MARKET OPPORTUNITY**



Vaccines Market

USD 32.24Bn

(Markets and Markets 2016)



Protein Therapeutics Market **USD 315.9Bn** (Globe Newswire 2017)



Nutraceutical Ingredients Market **USD 198.7Bn** (PR Newswire 2017)

#### **CANNABIS INDUSTRY OPPORTUNITY**

EnWave's patented REV™ technology and patent-pending cannabis drying method will provide material operational and cost advantages to licensed producers.

REV<sup>TM</sup> provides the fastest, most controllable process to dry and decontaminate cannabis for both the smoking and extraction markets.

Material REV™ Technology Cannabis Advantages:

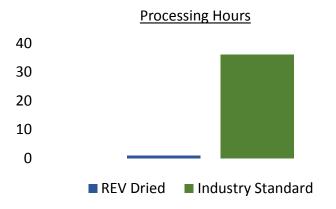
- Drying time shortened from 4-6 days (air drying) to approximately 1 hour (REV™)
- A combined drying and pasteurization process will prevent microbial contamination and need for sterilization with expensive ionizing radiation
- Eliminates inventory losses due to microbial growth during drying and curing
- Major reduction in capital cost with smaller drying facility space requirements
- Precise process control and patented technology provide higher drying uniformity throughout the cannabis buds and between batches
- Highly scalable options to fit any size of grow operation

Potential global markets that include Canada, Australia, Mexico, Chile, select United States jurisdictions, Germany, the Netherlands, South Africa and Spain.

EnWave's royalty-licensing model will remain consistent in this market vertical

Cannabis Market has projected value of **USD 55.8Bn** by 2025 (Source: PR Newswire 2017)





#### **TECHNOLOGY ON TREND**

#### **Snackification**

Snacks now account for one of every five 'eating occasions', driving the demand for shelf-stable, healthy grab-and-go food choices.  $REV^{TM}$  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.  $REV^{TM}$  allows food processing companies to retain high nutritional value.

#### **Protein**

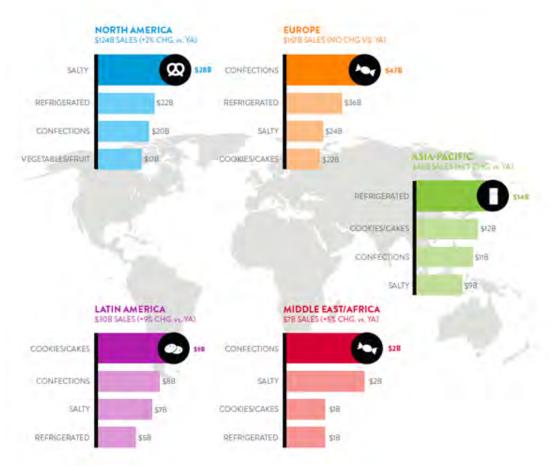
Powered by the 'naturally functional' trend, consumers are looking for protein rich snack options in new forms. REV™ is being used by several partners to produce protein rich products in the dairy, meat and pulse crop industries.

# 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. REV™ can be used to process cheese, yogurt and milk snack products and ingredients.

#### THE BIGGEST SNACK CATEGORIES WORLDWIDE

#### RETAIL ANNUAL DOLLAR SALES ENDING MARCH 2014



Source: Nielsen Retail Sales, 52 Weeks Ending March 2014, adjusted for inflation



# REV<sup>TM</sup> COMMERCIAL FLEET



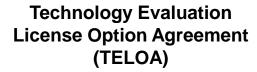
#### PARTNER DEVELOPMENT

# Mutual Non Disclosure Agreement (MNDA)

Product Sampling Feasibility Assessment Cost-Benefit Analysis



Income from Client-Directed Trials



Product Development On-Site Testing Machine Rentals



Rental Income License Option Fees

# Commercial License Agreement (CLA)

Product Launch
Grant of Exclusivity:

- Product
- 2. Geography



Machine Purchase Orders

Quarterly Royalties

# The Royalty Structure:

- 1. Term extends to EnWave's patent portfolio life; each new patent has 20-year duration
- 2. Rate ranges from 3% to 7% on the wholesale value of REV™ processed products
- 3. Target annual royalty is double-digit percentage of machine sales price



## **ROYALTY PARTNERSHIPS**







































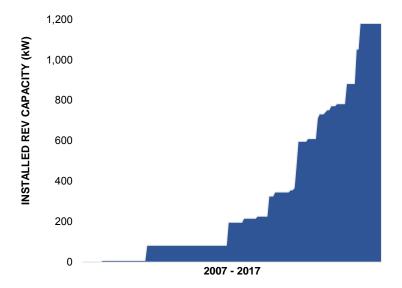


# NOTABLE TECHNOLOGY EVALUATIONS





AGREEMENTS OVERVIEW					
Agreement Type	Agreement Count	<b>Machine Count</b>			
CLA	22	33			
TELOA	11	7			
R&D	2	1			
Total	35	41			
Royalty Generating	10	17			
Fee Generating	11	7			



#### MOON CHEESE LEADS THE WAY!

Formed NutraDried LLP to demonstrate commercial viability of REV™ machinery; 100kW machine installed; EnWave owns 51%

Attractive product economics; profitable business unit

Moon Cheese® brand strength; dried crunchy, all-natural cheese snack product in 4 flavours.

Widespread North American distribution – led by Starbucks Coffee corporate distribution in 8,900+ stores; distribution in up to 20,000+ retailers.

Replicable model through similar product iterations in other geographies.

NutraDried pays 5% royalty to EnWave; EnWave consolidates 100% revenue and receives 51% of profit.

Significant capacity available to further increase Moon Cheese® production and launch new products

#### Available at:









**Business Strategy** 











#### **REVENUE MODEL**

## **Machine Sales**

- EnWave derives revenue from machine installations
  - Revenue per installation will depend on the size of the machine

# **Royalty Revenue**

- EnWave grows revenues by securing royalty streams through licensing its technology with royalty partners
- Royalties from CLA agreements are based on a percentage of sales or units produced by the partner
- TELOAs are used to co-develop product applications and convert partners into commercial licensees

3

# **NutraDried LLP**

- The Company holds a 51% partnership interest in NutraDried LLP
- Manufactures and sells Moon Cheese® using a 100kW nutraREV® machine
  - Currently sold in more than 20.000 retail locations across Canada and the **United States**

EnWave's business model offers significant operating leverage able to generate long-term, high-margin royalty streams with limited capital expenditures

## MACHINE DEPLOYMENT (60) 2017 JAN DYK'S Ultima Aliments Faces ASHGROVE TASMANIAN Nanuva Nanuva Agrosan Ingredients Pitalia Pitalia EREĞLİ AGROSAN (100) 10 10 2016 Nanuva Ingredients AGROSAN Neulty Dred Fruz Gay Lea Pitalia 2015 Umland's INTAKT **Hormel** Foods Gay Lea 2014 Nanuva Ingredients Bonduelle MEROM.

2013





Third Quarter

**Fourth Quarter** 

23

First Quarter

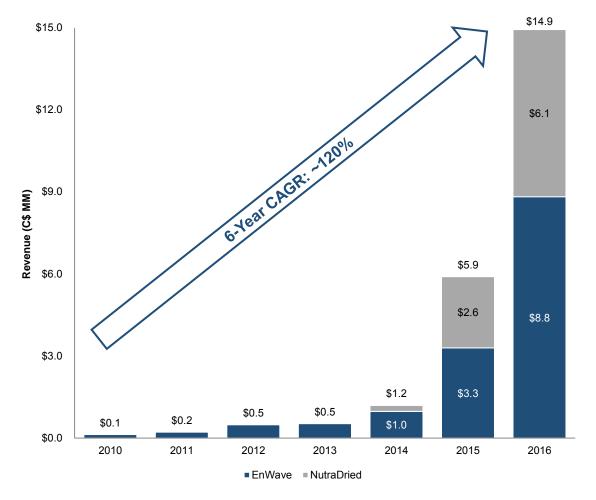
# **FINANCIALS**

- Fiscal 3<sup>rd</sup> Quarter Financials Comparison for 2017 vs 2016
  - Consolidated revenues for the 9 months ended June 2017 vs 2016 decreased by 0.7%
  - Working capital surplus of \$6.96MM
  - NutraDried generated positive net income of \$385K compared with \$348K in the prior year

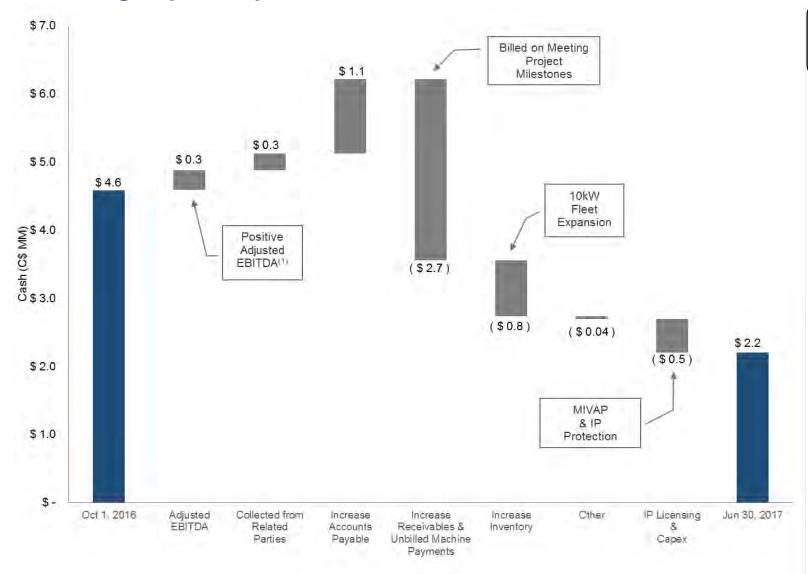
C\$ Thousands	FY2014	FY2015	FY2016	Q3 2017 YTD
Revenue	1,224	5,870	14,933	12,324
Net Loss	(5,034)	(4,993)	(1,837)	(1,926)
Interest Expense (Income)	(85)	(26)	16	20
Income Tax	-	-	-	-
Depreciation and Amortization	1,751	2,232	2,316	1,481
Stock-Based Compensation	608	261	399	661
Foreign Exchange loss (gain)	70	(129)	134	48
ADJUSTED EBITDA*	(2,690)	(2,655)	1,028	284
ADJUSTED EBITDA* MARGIN	(220%)	(45%)	7%	2%

<sup>\*</sup>Refer to Non-IFRS Measures set out on slide 2

#### **Consolidated Revenue (C\$ MM)**



# **Working Capital Expansion - Q3 2017 YTD**



Working capital expansion needed to scale REV<sup>™</sup> capacity on new machine orders; build future high-margin royalty streams

- Profitable business model with contribution margin generated from machine sales and Moon Cheese<sup>®</sup>
- Invested \$1.8MM into working capital during first 9 months of FY2017
  - Adjusted EBITDA<sup>(1)</sup> was positive \$284K
  - Inventory increased \$800K to shorten 10kW machine delivery lead time for new TELOAs and CLAs
  - Accounts receivable and unbilled machine payments to be billed based on machine contract milestones
- Cash conversion cycle on 60kW and larger REV<sup>TM</sup> machine orders is approx. 10 months
- Working capital has increased with machine sales growth and necessary to deliver royaltybearing REV<sup>TM</sup> capacity

(1) Refer to Non-IFRS Measures set out on slide 2

## **KEY TAKEAWAYS**



- Disruptive technology with a substantial, long-term, competitive advantage
- 2 Significant market opportunity in large addressable market
- 3 Proven technology and business strategy
- 4 Rapidly growing revenue and cash flow profile
- 5 Experienced management team with a proven track record

# **CONTACT US**

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