

integral

Integral Technologies, Inc. | OTCQB:ITKG

Company Presentation – March 2018



Forward Looking Statements

THIS DOCUMENT CONTAINS FORWARD LOOKING STATEMENTS

All statements in this documents, including videos, are not historical facts and are forward-looking statements which involve risks and uncertainties; actual results may differ from the forward-looking statements. Sentences or phrases which use such words as "projected", "expect", "believe", "anticipates", "hopeful", "looking", "market penetration", "goal", "target", "hopeful", "should", "working to", "working toward", " pro-forma", "developing", "develop", "research, "investing" and others indicate forward-looking statements, but their absence does not mean that a statement is not forward-looking. The Company undertakes no obligation to publicly release the results of any revisions to these forward-looking statements that may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

These forward looking statements and projections should not be relied upon, but are provided only to show a theoretical outcome. Actual results may be materially different. We cannot and do not warrant the accuracy, completeness or timeliness of the information contained therein. The statements in this document are not historical facts and are forward-looking statements which involve risks and uncertainties; actual results may differ from the forward-looking statements. Sentences or phrases that use such words as "pro-forma", "projection", "anticipates", "attempt", "target", "develop", "working to", "working toward" and others indicate forward-looking statements, but their absence does not mean that a statement is not forward-looking. The Company undertakes no obligation to publicly release the results of any revisions to these forward-looking statements that may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

We caution you that a number of important factors could cause actual results to differ materially from those contained in any forward-looking statement.

- Company Overview
- Summary of Business Relationships
- Technology Overview
- Corporate Strategy
- Key Engineering Team

Company Overview

Integral Technologies, Inc. is a <u>new materials company</u> engaged in the development and commercialization of <u>electrically conductive hybrid plastics</u>.

- ElectriPlast®, (ITKG's core product), is a non-corrosive, electrically-conductive, resin-based material that replaces the metallic component currently used in electromagnetic interference ("EMI") shielding and conductive devices.
- ITKG has 53 patents issued and 118 patents filed.
- ElectriPlast's applicability includes the following industries:
 - Transportation | Aerospace & Defense
 - Industrial Materials | Electronics
 - Energy storage & Batteries





Key licensing partners:





Hanwha Advanced Materials

a subsidiary of Hanwha Corp. (KOSE:A000880) - Market Cap.: \$3.2 billion⁽¹⁾

PolyOne Corporation (NYSE:POL)

Provider of specialized polymer materials and services - Market Cap.: \$3.4 billion (1)

Summary of Business Relationships

ITKG has partnered with global blue-chip companies for the commercialization of ElectriPlast.

• Partnering allows the Company to focus on development and leverage the sales force of its partners.

Licensing Agreements	
PolyOne Corporation	 10 year exclusive, global (ex South Korea) license agreement for Shielding Applications.
Hanwha Advanced Materials	 10 year exclusive, license agreement to manufacture, sell and distribute ElectriPlast in South Korea; rights to sell and distribute ElectriPlast in Japan, Taiwan and China.
Other Partnerships	
Delphi Technologies	Co-Development for Wire & Cable Shielding
LeddarTech	■ Low-cost LIDER applications
Karma Automotive LLC	 Supplying materials to connectors for use in the Karma Rivero
Conductive Composites	 Will establish a separate manufacturing line, in a new facility, dedicated exclusively for ElectriPlast to provide nickel plated carbon fiber.













Technology Overview

ElectriPlast replaces the metal that is currently used in electromagnetic interference ("EMI") shielding and electrical conductive devices.

- ElectriPlast is manufactured into a pellet by extruding a plastic resin containing metal fibers rather than mixing the resin with fibers (as is done with other conductive plastics).
- The pellet can be fabricated into virtually any shape or dimension for almost any manufacturing industry.

ElectriPlast can be fabricated using low-cost capital investment: injection molding and extrusion vs. stamping

 Its design flexibility, shorter development cycle and speed manufacturing create a valuable market edge for customers.





Key Advantages
Lightweight
Flexible
Non-Corrosive
Provides High Shield Effectiveness
Efficient as Metal
Highly Adaptable
Low Cost Capital Investment

Investment Highlights / Corporate Strategy

Investment Highlights

- Lightweighting is estimated to be a \$133B market opportunity by 2019⁽¹⁾
- Global lead acid battery market is projected to reach US\$58.5 by 2020⁽²⁾

Corporate Strategy

Targeting <u>NEW</u> Partners

■ Target major chemical companies, auto manufacturers, battery suppliers and OEMs

Co-Development with **EXISTING** Partners

- Use partners to market into their specific industry clients:
 - Automotive / Aerospace
 - Cable & Wire / Consumer Electronics
 - Defense
 - Energy Storage / Batteries

Diversify Revenue Streams

- Pellet sales / Licensing
- Product Joint-Ventures / Co-Branding

(2) Future Market Insights (2014)

⁽¹⁾ marketsandmarkets.com data (August 2014)

Key Engineering Team

Mohamad Zeidan – Chief Technology Officer

- Mr. Zeidan directs materials research, product development, design initiatives and the technical support team for Electriplast Corporation.
- Prior to joining ElectriPlast Mr. Zeidan was Chief Technology Officer of the Electrical Division for top Tier 1 automotive supplier Lear Corporation and later, the Director for Hybrid Engineering/Advanced Engineering/Systems Engineering for Lear.
- Mr. Zeidan has more than 25 years of senior engineering experience including leadership roles with United Technologies.
- He is a recognized industry innovator, holds 11 US Patents and has consulted for numerous automotive OEM's and Suppliers.

LEAR.

Slobodan Pavlovic – Vice President of Engineering

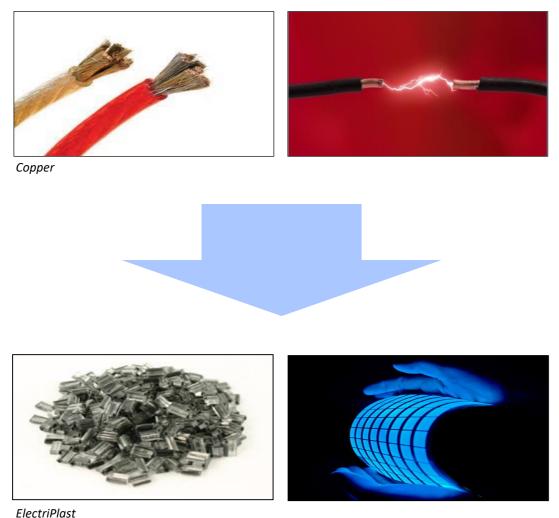
- Mr. Pavlovic is an industry leader in conductive plastic applications and a veteran of the automotive and aerospace industries with more than 34 years of experience in advanced engineering.
- Prior to ElectriPlast, he spent eight years at Lear Corporation serving as Vice President of Global High Voltage/High Power (HV/HP) Systems and Components, and made Lear a leader in the use of conductive plastics.
- Prior to Lear, Mr. Pavlovic was Director of Advanced Engineering at Amphenol Tuchel Electronics, and the Director of Advanced Engineering at FCI, a supplier of electronic and electrical interconnect systems.
- Mr. Pavlovic holds over 35 patents, including seven related to conductive plastics application.
- Mr. Pavlovic earned his BS and MS in Applied Physics.



- Electrically Conductive Plastics
- Electriplast Commercial Applications
- Technical Properties

Electrically Conductive Plastics

Most manufacturers use metals to conduct electricity. ITKG's ElectriPlast can replace these electrically conductive metals that are <u>significantly heavier</u>.



Electriplast Commercial Applications

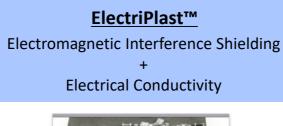
ElectriPlast's commercial applicability extends across many industry verticals.





















Technical Properties

ElectriPlast's unique properties allows for the creation of alternative, electrically conductive applications never before possible and <u>with a 40-60% weight</u> reduction.

Technical Advantages		
Weight Reduction	 40% lighter than aluminum and 60% lighter than copper 	
Conductivity	 40% more efficient than other conductive plastics 	
Design Flexibility	Can be fabricated into virtually any shape or dimension	
Technology & Customization	Proprietary technology allows for customization	
Supply	 Utilizes conventional resin & fiber compounding equipment readily available 	
Speed	 20x faster than conventional metal fabrication processes 	



- Lightweighting
- EMI
- Energy Storage

The Lightweighting Market Opportunity

In 2011, the U.S. announced that the Corporate Average Fuel Economy (CAFÉ) Standards for 2025 were going to be 54.5 miles per gallon.

- The U.S. is aiming to significantly reduce car emissions and make cars more efficient.
- According to Frost & Sullivan, a 10% reduction in vehicle weight offers fuel saving of 5-7% mpg.
- For every pound of aluminum, an automaker can remove 21 pounds of steel and 20 pounds of carbon over the life of the car.
- Automobile companies have launched major initiatives to reduce the weight of their fleet of automobiles.





In 2015, Ford Motor Co. (NYSE:F) rolled out the new F-150 Truck that uses aluminum alloys replacing the heavier steel frame.

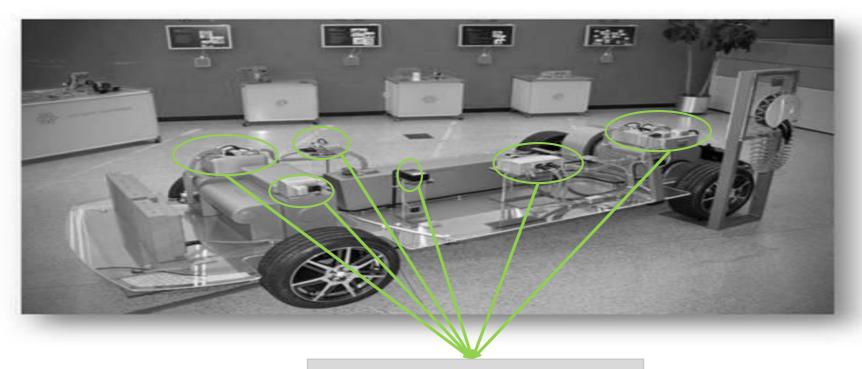
- The F-150 is the best-selling car in the U.S. (5% of all cars sold).
- Removing from 700 lbs from the truck by switching.



Electrically Conductive Plastics – Auto Commercial Opportunity

ElectriPlast provides automotive manufacturers with an attractive option to reduce weight and shield electrical components from EMI.

• There are <u>hundreds of pounds</u> of High Power Management Systems which are all replaceable candidates for ElectriPlast.

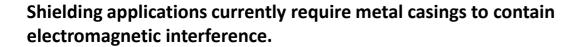


Numerous opportunities to replace metal parts with Electriplast

What is EMI?

Electromagnetic interference ("EMI") is when an electronic device adversely affects or interferes with the operation of another electronic device.

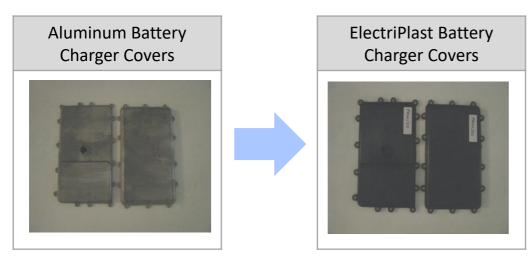
- Common household examples of EMI include:
 - Placing a cell phone near computer speakers and hearing loud static
 - Using a vacuum near a TV with an antenna



• ElectriPlast can replace these metal casings and save valuable weight and cost by meeting performance requirements with less metal material.







- Weight Savings 562 grams (~48%) with PA66-SS 316L
- Tooling cost reduction (~30%) savings

Market Opportunity – EMI

According to BCC Research, the global market for EMI and RFI shielding materials and technologies is forecast to reach \$7.9 billion by 2020.

- Growth drivers include:
 - Rapid increase in the number of electronic equipment and the need to reduce electromagnetic pollution
 - Critical need for shielding in the aerospace, defense and automotive sectors.



The Asia-Pacific region represents the largest market worldwide, followed by Europe.

- Growth in the Asia-Pacific region continues to accelerate as the region continues to transform into the global production hub for electronic equipment and components.
- Growth is expected to have a CAGR of 4.8% to 2020.



EMI Commercial Partner

In February 2018, ITKG signed an exclusive 10 year license with PolyOne Corp. for commercialization of shielding applications.

About PolyOne Corporation

- Trades as NYSE:POL
- Market capitalization of \$3.3 Billion⁽¹⁾
- In 2017, they had sales of \$3.2 billion.
- Headquartered in Avon Lake, Ohio.
- Global provider of specialized polymer materials and services.
- PolyOne offers more than 35,000 polymer solutions to over 10,000 customers across the globe.
- They employ approximately 6,000 people and have 60 manufacturing sites and 9 distribution facilities in North America, Europe, Asia and South America.
- Over 100 sales people globally
- In 2010, PolyOne was ranked the #1 in the "Top North American Compounders" list by Plastics News.



Batteries & Energy Storage

In May 2015, ITKG announced the invention of a patent pending, highly conductive plastic bipolar plate which will improve traditional lead acid battery manufacturing technology

- Lightweighting eliminating lead, batteries can be 50% lighter in weight and smaller.
- Unlimited 3D shapes and forms enable plates to be molded into any shape that is suitable for its available space.
- High volume manufacturability and cost savings
- Improved performance shortens the path between positive/negative terminals for more efficient energy output.

In August 2015, ITKG attends The Battery Show 2015

Show cased new technology in conjunction with BASF, and was very well received.

In November 2015, ITKG demonstrates prototype

Demonstrated a prototype 12v lead acid bipolar battery



Market Opportunity – Batteries

Growth Drivers

- Reducing traditional carbon producing energy production requires efficient energy storage of wind and solar resources.
- Need significant improvement in cost and efficiency of existing battery technologies.
- All battery types (lead, lithium, copper) are being improved to meet new demand for smarter energy storage.

Size of Opportunity

- In September 2015, Johnson Controls Inc. (NYSE:JCI) announced that they are going to invest over \$500 million to increase worldwide manufacturing capacity of lead battery production, and more than double production in China, the world's largest car market.
- According to Future Market Insights, the worldwide market demand for lead-acid batteries was estimated to be \$44.7B in 2014 and "projected to reach \$58.5B by 2020.





Battery Commercial Partners

In July 2016. ITKG announced an MOU with Ultimate Battery Company.

- The MOU states that ITKG will license its technology to Ultimate and, subject to certain conditions, sell its yet to be formed subsidiary that will hold the Technology, to Ultimate, in return for which Integral will receive \$4,000,000 and 20% of the outstanding shares of Ultimate.
- ITKG will also be the exclusive supplier of conductive plastic to Ultimate and receive up to \$50 million in licensing fees based on Ultimate's revenues.
- A representative of ITKG will also be appointed to the board of directors of Ultimate.



In April 2016, ITKG entered into a Joint Technology Assessment Program (JTAP) with Advanced Battery Concepts.

- The JTAP will involve the use of the ElectriPlast bi-polar plate in the existing architecture of the ABC GreenSeal® 12V battery, for the purpose of assessing the performance, efficacy and cost efficiency of Integral's ElectriPlast® bi-polar plate.
- The JTAP will evaluate the production readiness of bi-polar batteries manufactured with ElectriPlast bi-plate materials and processes, as well as measure key performance metrics including capacity, capacity at rate, high temperature stand loss and cycle life.





integral

Integral Technologies, Inc. | OTCQB:ITKG

Company Presentation – March 2018



Please Contact:

Doug Bathauer, Chief Executive Officer Integral Technologies, Inc. (OTCQB:ITKG) 2605 Eastside Park Road, Ste. 1 Evansville, IN 47715

Email: DBathauer@itkg.net