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## ***Itronics Reports 2016 Sales and Updates Operations Expansion and Diversification Progress***

### **E-Scrap Refining Study is Beginning Phase III, Pilot Scale Operation**

RENO, NV--(Marketwired - March 30, 2017) - Itronics Inc. (OTC PINK: ITRO), a diversified fertilizer and silver producing green technology company, today summarized its operations and diversification progress and announced sales results for the twelve months ended December 31, 2016. Full year sales decreased 22 percent on a 20 percent decrease in fertilizer sales. However, 2017 sales are expected to improve significantly due to the end of the severe drought in California and start of pilot scale e-scrap refining. GOLD'n GRO fertilizer orders were up 54 percent through mid-March 2017.

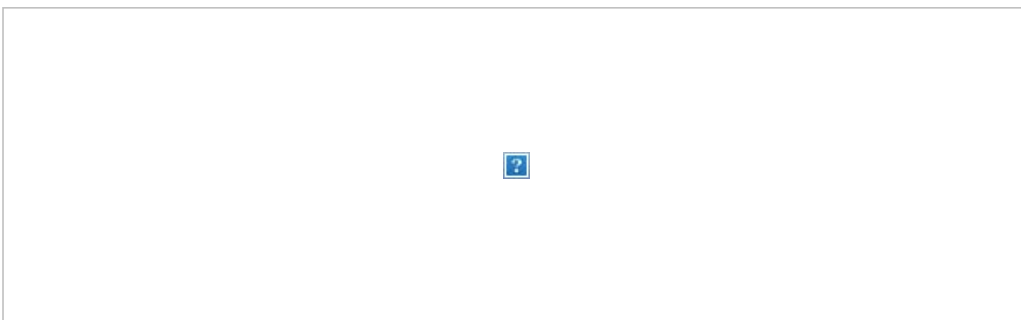
Total Revenues for the 12 months ended December 31, 2016 were \$1,433,742 compared to \$1,842,041 in 2015, a decrease of 22 percent. GOLD'n GRO fertilizer sales decreased by 20 percent. Most of the sales decline occurred in the first half of 2016. The Company had previously reported that 2016 was a difficult year due to adverse weather and difficult market conditions for California growers, a large market for the Company's GOLD'n GRO fertilizers.

"The year 2016 was a transition year for Itronics during which the Company's new five times scale up pilot leaching reactor was completed, and in which the Company succeeded in creating a new method for refining e-scrap to recover copper, gold, and palladium as saleable metals. These technologies are being put into pilot scale operation in 2017. The start of pilot scale e-scrap refining marks the beginning of Phase III of the Company's e-scrap refining study which began in 2015. Silver sales will provide an expanding non-seasonal sales component to mitigate the seasonality and weather influenced variability of fertilizer sales," said Dr. John Whitney, Itronics President.

In the first quarter of 2017, the Company's subsidiary, Whitney & Whitney, Inc., has staked 28 lode claims at the Fulstone Project to expand coverage of the high grade zinc anomaly it announced in 2015. Discussions intended to identify a joint venture development partner for the Fulstone Project are on-going.

### **Twelve Month Sales Results**

Unaudited Revenues for the fourth quarter, and 12 months ended December 31, 2016 together with comparative figures for 2015 are presented below:



Now that test refining of e-scrap has begun, the Company is expecting silver sales to make a significant contribution to total sales in 2017. The California drought ended during the first quarter of 2017 and growth in GOLD'n GRO fertilizer sales in 2017 would expand total sales even more.

Itronics is aggressively advancing development of its sustainability maximizing portfolio of new "Zero Waste" technologies whose objective is to create new non-seasonal lines of business using the Company's core technologies. The current focus of the leaching and fire refining technology extensions is on pilot scale development of refining e-scrap that contains recoverable silver, gold, and palladium and recoverable base metals including copper and tin.

### **Operational Developments**

One of the Company's fundamental strengths is its ability to invent, build, and operate green "zero waste" technology to completely convert certain categories of hazardous waste materials into cash through the production and sale of commercial goods. The Company is using this creative ability to diversify and further integrate its operations by developing a portfolio of core "zero waste" technology extensions to establish year-round non-seasonal sales in new markets and to produce internally generated raw materials for use in the GOLD'n GRO fertilizers. The focus of these technology extensions is on processing materials that contain silver and other precious metals and zinc with other base metals.

**GOLD'n GRO fertilizers.** The Company has identified a potential new environmental benefit that may be obtained by using GOLD'n GRO fertilizers. Based on experience, the Company has observed the non-nutrient metals cadmium, lead, and mercury are not soluble in the GOLD'n GRO fertilizers. Vegetable growers have a need to minimize uptake of cadmium from the soil by vegetable crops.

The Company's distributor performed field tests in 2016 that demonstrated that one of the GOLD'n GRO fertilizers is able to reduce cadmium uptake from high cadmium content soil for certain vegetable crops. In 2017 the Company plans to continue field testing to further develop this new technology.

Over time, cadmium levels have increased in agricultural soils, leading to increases in cadmium uptake by crops. Cadmium build up in agricultural soils is occurring worldwide and is especially important for vegetables and field grains. Cadmium has no known nutritional value to humans or plants and is known to be a health hazard for humans. Once cadmium is in the soil, there is no known way to remove it. Minimizing cadmium uptake by vegetables and field grains minimizes its presence in the human diet.

**Silver Production.** The Company has completed a refining campaign which includes incorporating ground up personal computer circuit board scrap (e-waste) to provide quantitative data that can be used to evaluate the feasibility of refining e-scrap to recover its copper, silver, gold, palladium, and possibly its tin content. This work is on-going and is now producing metal bullion, copper silver matte, and silver-bearing glass.

Assembly of the FeLix, SuLix leaching technology pilot operation five times scale up is now completed and start up testing has been completed. The expanded

pilot leaching plant is fully operational. It is being used as a batch operation to leach iron and sulfur from the low grade silver concentrate produced by the Company in its photoliquid desilvering operation. The residue that remains after the two leaching steps is a high grade silver concentrate which is delivered to the silver refinery for use in e-scrap refining.

**E-scrap processing feasibility study.** In the second quarter 2015 Itronics announced that it had started a feasibility study to determine whether e-scrap (personal computer circuit boards) processing can be integrated into the new refining operation. Significant progress is being made and minimum quantities needed for economic viability have been identified and are now being tested in the refining process.

The Company is gathering quantitative processing information to determine the operating parameters needed to recover commercially meaningful amounts of copper, silver, gold, palladium, and possibly tin from e-scrap. Sufficient work has been completed so that the Company is able to estimate the amount of personal computer circuit board scrap that it will require to support minimum scale commercial operation. The Company has entered into a preliminary agreement to purchase personal computer circuit boards from a northern Nevada computer services company that disassembles discarded personal computers and sorts the contents for sale to recyclers. The economics of a supply arrangement are being evaluated as part of on-going refining development work.

In 2017 the Company is beginning Phase III of this study which is to operate the refining process on a pilot scale. The objective of Phase III is to optimize the new refining process and to develop enough operational knowledge so that a plan for expansion to commercial scale operation can be developed.

**KAM-Thio Process Development.** The KAM-Thio technology is being developed by using one of the already proven and field tested GOLD'n GRO fertilizers. Development of this technology is expected to add non-seasonal chemical sales to the silver/gold mining industry, and possibly for use in other industries for cyanide neutralization. As KAM-Thio is developed, it will become a non-seasonal component to expanding GOLD'n GRO fertilizer sales.

Laboratory tests conducted by the Company have demonstrated that KAM-Thio has the ability to leach silver from the silver bearing glass slag generated by the Company's silver refinery. The tests have also demonstrated that KAM-Thio liquid is stable in the leaching application. Independent laboratory tests have demonstrated that KAM-Thio is able to neutralize the cyanide contained in spent cyanide solution generated by gold-silver leaching.

The amount of KAM-Thio required to neutralize cyanide is in a range appropriate for leaching gold and silver from ore. The next step for KAM-Thio technology development is to conduct a series of tests on silver-gold ore samples to measure the silver-gold leaching capabilities of KAM-Thio.

**Zinc Flue Dust Process Development.** An Itronics' press release announced a technical breakthrough by successfully testing electrowinning as a process to recover metallic zinc powder from zinc enriched liquids that are produced by leaching zinc oxide from zinc bearing flue dust. The innovative zinc recycling technology Itronics is developing is expected to eliminate the waste completely by converting all components to saleable goods (a new "Zero Waste" Technology). The process being developed may use up to 40 percent less electrical energy compared to conventional zinc refining. The potential energy savings would be a strong economic driver for the project.

The zinc price has recently been at a four-year high and is expected to stay in the range of its current price or trend higher. This increase in zinc price makes development of the zinc flue dust recovery technology more desirable to the Company due to cost savings that could be achieved by using recovered zinc to replace primary zinc that is currently purchased for manufacture of the GOLD'n GRO zinc micronutrient fertilizers which are a significant percentage of total GOLD'n GRO fertilizer sales.

**Battery Recycling Evaluation.** The Company is studying the potential use of the electricity generating contents of silver batteries and "non-rechargeable" alkaline batteries as a source of raw material for use in manufacturing the GOLD'n GRO fertilizers and for silver production. Once the Company has completed the testing and start-up of e-scrap refining, it will evaluate processing of silver oxide batteries which have to be crushed or ground up prior to introduction into the refining furnace. Processing silver oxide batteries would increase the silver feed to the refinery for use in refining e-scrap and would be non-seasonal.

The alkaline batteries contain potassium, zinc, and manganese. The potassium and zinc are recoverable using Itronics' leaching technology and are raw materials needed for manufacturing GOLD'n GRO fertilizers. The manganese remains in the solid residue from leaching. In the second quarter a decision was made to begin laboratory evaluation to develop leaching technology to solubilize manganese. The work is producing positive results and is progressing.

The Company has begun discussions with a battery recycling company that would like to be considered as a potential supplier for the new process. The Company is considering the proposal and plans to evaluate the potential supplier's product.

**Auric Fulstone Project.** An Itronics press release announced that its subsidiary Whitney & Whitney, Inc. has identified surface high grade zinc-lead-silver mineralization at its Auric Gold & Minerals Fulstone copper-gold exploration project. Within the Auric Fulstone project area, the Company has discovered surface high grade zinc, lead, and silver mineralization that contains anomalous molybdenum in a large area that is geochemically anomalous for zinc. It has also discovered high grade copper mineralization that contains anomalous gold and molybdenum in a separate area that is anomalous for copper. Discovery of the potential for significant zinc, lead, silver, and molybdenum mineralization increases the economic attractiveness of the project by adding potentially significant near surface zinc, lead, silver, and molybdenum values to the over-all copper and gold values that are expected to be identified as the project is explored.

At the end of 2016 Auric Gold & Minerals received an advance from a project partner for the purpose of staking up to 28 additional lode claims to expand the claim coverage of the high grade zinc anomaly that has been identified in the Fulstone Project Area. In the first quarter 2017, 28 claims have been staked.

The Company is continuing to evaluate options for developing this project and is discussing joint venture development with potentially interested parties. Copper, zinc, and silver are all at multi-year highs, creating investor interest in getting the development launched.

## About Itronics

Headquartered in Reno, Nevada, Itronics Inc. is a "Creative Green Technology" Company which produces GOLD'n GRO specialty liquid fertilizers, silver bullion, and silver-bearing glass. It owns a large Iron Oxide Copper Gold (IOCG) mineral property (the Auric Fulstone Project) in the prolific Yerington Copper Mining District in northwestern Nevada. Within the Auric Fulstone project area, the Company has discovered surface high grade zinc, lead, and silver mineralization that contains anomalous molybdenum in a large area that is geochemically anomalous for zinc. It has also discovered high grade copper mineralization that contains anomalous gold and molybdenum in a separate area that is anomalous for copper. The Company's goal is to achieve profitable clean technology driven organic growth in specialty GOLD'n GRO fertilizers, silver, zinc, and minerals. The Company's technologies maximize the recovery

and use of metals and minerals and by doing this also maximize sustainability.

Through its subsidiary, Itronics Metallurgical, Inc., Itronics is the only company with a fully permitted "Beneficial Use Photochemical, Silver, and Water Recycling" plant in the United States that converts 100 percent of the spent photoliquids into GOLD'n GRO liquid fertilizers, silver bullion, and silver bearing glass. This is internationally recognized award winning "Zero Waste" Technology. The Company is developing a portfolio of environmentally compatible "Zero Waste" processing and mining technologies. Itronics has received numerous domestic and international awards that recognize its ability to successfully use chemical science and engineering to create and implement new environmentally clean recycling and fertilizer technologies.

The Company's environmentally friendly award winning GOLD'n GRO liquid fertilizers, which are extensively used in agriculture, can be used for lawns and houseplants and are available at the Company's "e-store" on Amazon.Com at [http://www.amazon.com/s/ref=bl\\_sr\\_lawn-garden?ie=UTF8&field-brandtextbin=GOLD%27n+GRO&node=2972638011](http://www.amazon.com/s/ref=bl_sr_lawn-garden?ie=UTF8&field-brandtextbin=GOLD%27n+GRO&node=2972638011)

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Contact:

Paul Knopick  
888-795-6336