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## **Roots and Robur's Israel representative to collaborate on off-grid opportunities for gas-operated heat pumps**

- **Collaboration to explore off-grid opportunities for RZTO and IBC technologies in Israel and internationally.**
- **Robur's heat pump already installed in California with ROOTS's customer – initial success led to further instalments in Israel.**
- **Accessing off-grid market a priority for ROO; could significantly bolster RZTO and IBC sale potential.**
- **Robur is a leading Italian gas based heat pumps manufacturer with global presence**

**Roots Sustainable Agricultural Technologies Limited (ASX: ROO, "Roots" or "the Company")** is pleased to advise it has commenced collaboration with **FinePro Consulting Ltd**, representative in Israel of Robur, the leading Italian gas-based heat pumps manufacturer to explore complementary sales opportunities within the growing agricultural technologies sector.

This collaboration will also ascertain the level of demand for off-grid technologies with respect to root zone heating and cooling, and green house climate control.

Many farmers around the world are not connected to electricity grids, a limiting factor on their ability to operate climate management options in the greenhouses. Tapping into this market will significantly bolster the sale potential of Root's patented Root Zone Temperature Optimisation (RZTO) technology.

One of Robur's heat pumps is already installed in California and following the successful results achieved from the installation, the Company opted to expand the collaboration for both the Israeli and international markets.

The two parties will use Robur's teams in Israel for turnkey installations, with Roots technical staff to allow farmers to use RZTO technology for off grid installations.

Using Robur's gas operated off grid heat pumps opens vast markets in Israel, California and elsewhere to work with gas-operated heat pumps. In addition, Roots received initial design from Robur for an off-grid Irrigation by condensation (IBC) set up that includes gas operated chiller backed by small solar panel installation and batteries.

This design is intended to lower the IBC overall price and facilitate the use of IBC where electricity is not available or solar panels are not fully functional due to heavy cloud cover.

Special terms and prices will be awarded to Roots by Robur as a function of the number of units bought.



### **Comment**

**Roots CEO and Chairman Boaz Wachtel said:** “We see substantial opportunities for the integration of gas-operated heat pumps to operate with our RZTO and IBC systems.

“This marks an important technological development for the Company and significantly opens up opportunities to sell our RZTO and IBC systems for off-grid farms around the world – which would have considerable positive impacts on the Company’s bottom line.

“We look forward to providing further updates on how this collaboration progress in due course.”

**-ENDS-**

### **About Roots Sustainable Agricultural Technologies Ltd:**

Israeli-based, Roots Sustainable Agricultural Technologies Ltd. is developing and commercialising disruptive, modular, cutting-edge technologies to address critical problems faced by agriculture today, including plant's root zone temperature management and the shortage of water for irrigation.

Roots has developed proprietary know-how and patents to optimise performance, lower installation costs, and reduce energy consumption to bring maximum benefit to farmers through their two-in-one root zone heating and cooling technology and off the grid irrigation by condensation technology.

Roots is a graduate company of the Office of the Israeli Chief Scientist Technological Incubator program.

More information [www.Rootssat.com](http://www.Rootssat.com)

### **About FinePro:**

Finepro Consulting offers full engineering consultation and Turnkey solution services for engineering companies, contractors and industrial factories. These services include assistance in choosing the best technological solutions while maintaining proper budgetary control. Finepro was established in 2001 as a consultation firm, and since then has been involved in both local and international projects and tenders in the fields of cogeneration, wind and geothermal PV.

In addition, Finepro is also the official representative in Israel of 12 international companies with dozens of years of experience in the field of gas. These companies combined have a résumé of thousands of projects in Europe and the world in the fields of: compression and storage, the transportation of gas on roads (Virtual Pipe) and the planning and execution of gas conduction systems and infrastructures.

<http://finepros.com/home/home-eng/>

### **About Root Zone Temperature Optimization (RZTO)**

Root Zone Temperature Optimization (RZTO) optimises plant physiology for increased growth, productivity and quality by stabilising the plant's root zone temperature. Leveraging the principle of Ground Source Heat Exchange (GSHE), ROOTS installs a closed-loop system of pipes. The lower part is installed at a depth where soil temperature is stable and not affected by weather extremes, and the upper part in the target crop's root zone just below the soil surface. Water flowing through the lower pipes is charged by the soil's stable temperature. The heated (or cooled) water is pumped through the pipes installed in the root zone, where the heat (or cold) is discharged.



This significantly increases yields, increases growing cycle planting options, improves quality, mitigates extreme heat and cold stress while significantly reducing energy consumption by stabilising and optimising the ROOTS zone temperature.

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**Forward looking statements**

This announcement contains forward-looking statements with respect to ROOTS and its respective operations, strategy, investments, financial performance and condition. These statements generally can be identified by use of forward-looking words such as "may", "will", "expect", "estimate", "anticipate", "intends", "believe" or "continue" or the negative thereof or similar variations.

The actual results and performance of ROOTS could differ materially from those expressed or implied by such statements. Such statements are qualified in their entirety by the inherent risks and uncertainties surrounding future expectations. Some important factors that could cause actual results to differ materially from expectations include, among other things, general economic and market factors, competition and government regulation.

The cautionary statements qualify all forward-looking statements attributable to ROOTS and persons acting on its behalf. Unless otherwise stated, all forward-looking statements speak only as of the date of this announcement and ROOTS has no obligation to up-date such statements, except to the extent required by applicable laws.