

Finland Advanced Facilities Profile: Market Analysis

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Abstracts

LEXINGTON, Massachusetts (October 10, 2019) – WinterGreen Research announces that it has published a new module Finland: Advanced Facilities Analysis. The 2019 study has 164 pages and 55 tables and figures. Growth is based on implementation polymer-based drug delivery technology, energy efficient data centers, and AI computing. Access to locations across the world through strategically placed cables promise to make Finland the location of choice for a data center.

Favorable work environments and a culture of integrity are a huge draw for the country. The people are nice and the working conditions are comfortable in Finland.

The research and development department in Turku Finland is the only research and development unit in the Bayer Group focused on polymer-based drug delivery technology. The technology can be utilized in products with a lifetime of a few months up to several years. polymer-based drug delivery technology promises to provide a significant high growth market and to attract companies who want to be close to the Finish center of excellence for this technology.

Byer production plant in Turku is Finland's second largest pharmaceutical factory worldwide. Bayer's global pharmaceutical plant is used to develop and manufacture high quality specialty products for worldwide distribution to more than 100 countries. Long-acting polymer-based products, MIRENA and JAYDESS Hormone Prosthesis and JADELLE Prevention Implants are made. In addition, Bayer produces tablets and capsules, BONEFOS for cancer treatment. MIRENA is sold in over 100 countries, United States, Europe, Far East.

Data centers and networks in Finland are unique and wonderful. Aiber Networks Finland data center implements a cloud. Aiber Networks converted an underground military facility. The caves in which the company is building are made up of three separate



tunnels that will each be used for individual data halls. The caves have been converted and used to host high availability cloud services.

The site offers 13,000 square feet of space. It supports 50 kW per rack, with a total power consumption of up to 4 MW. The Tampere data center is designed to meet Tier IV specifications. It features a high degree of automation. Free cooling and liquid cooling are employed, and waste heat is sold to the city's electrical company. The project is estimated to cost between \$55 million and \$110 million dollars.

Google PUE of 1.1 in Finland is unmatched anywhere else in the world. Climatic environment is an asset in Finland as data centers need cooling. Scale is everything in the era of Clos architecture of the data center and optical transceivers for inside the data center. Data moves at the speed of light around the network inside the data center so scale is important. Outside the mega data center, the charter is to leverage international cable infrastructure. Plans are attracting investment in data communications access in Finland that provides worldwide reach with millisecond data transmission anywhere.

According to Susan Eustis, principal author of the study, "The communication of data accurately is a demanding task. The data centers in Finland are poised to be world-class, supporting interconnectivity to the US, Europe, and Asia."

Varian Medical Systems Finland Oy is offering world class product sets. Varian Medical Systems Finland Oy makes ultraviolet (UV), infrared and radiological equipment for biological and medical applications. Varian Medical Systems Finland Oy is the developer of Varian's premium radiotherapy treatment planning systems, such as Eclipse and BrachyVision.

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