

## **Polystyvert unveils the world's first polystyrene dissolution recycling plant**

- Polystyvert is the only company in the world that recycles polystyrene (PS) using a patent pending dissolution process.
- The demonstration plant will be able to recycle up to 600 tonnes of PS a year, at a production rate of 125 kg/h.
- Polystyvert's low-carbon-footprint process achieves high-yield circular economy of PS.
- The recycled PS resin has properties similar to virgin PS and can be used to manufacture new polystyrene products.

**Montreal, August 20, 2018**—Polystyvert is proud to announce the opening of the world's very first polystyrene (PS) dissolution recycling plant. Located in Montreal's Anjou industrial park, the plant will be able to recycle up to 600 tonnes of PS a year, at a production rate of 125 kg/h. This is a major step forward for the Montreal-based cleantech start-up, demonstrating success in scaling up its technology and opening the door to global marketing.

### **Polystyrene recycling is finally possible in Québec**

There was little or no recycling of number 6 classification plastics in Québec until the advent of Polystyvert's innovative process that produces better quality recycled PS than existing mechanical processes. Each year, Québec generates almost 92,000 tonnes of PS waste. Whether post-consumer or post-industrial, the vast majority of PS waste is buried in landfills and is replaced by new PS. This includes packaging for electronic products or protection for furniture, food trays, yogurt cups, commercial products or insulating products.

### **Polystyvert's Technology**

Polystyvert is the only company in the world to recycle polystyrene using a patent pending dissolution and separation process. Polystyvert's dissolution process reduces the environmental footprint of PS because it does not require a single drop of water and the operations are performed at low temperature, making it energy efficient. Polystyvert supplies a concentrator directly to businesses with PS waste to process. The PS is dissolved in an essential oil that is a very safe natural product. It is then separated from the essential oil and conditioned. This decentralized operating model cuts shipping costs by a factor of 10 while drastically reducing greenhouse gas emissions.

PS recycling produces a recycled polystyrene resin of excellent quality, with properties similar to new polystyrene, that can be used to manufacture new polystyrene products. Recycled PS is also less expensive to produce than new PS and can be used in high proportions, achieving a sustainable extension of product life cycle and opening the door to a broader market than that available to current mechanical technologies.

The start-up of Polystyvert's first plant follows the announcement in June 2018 of a second round of financing totalling \$11M. The new partners, Investissements Quadriam, Energy Foundry, and

Transition énergétique Québec, have joined the current partners Anges Québec, Anges Québec Capital, and Cycle Capital Management. Polystyvert has also received funding and support from Sustainable Development Technology Canada and the Ecofuel Accelerator.

In addition, Polystyvert recently signed a cooperation agreement with Total Polymers, a subsidiary of global energy leader Total, specifically targeting dissolution and recycling of domestic post-consumer polystyrene, to drive development of this technology on a large scale.

### **Quotations**

"The opening of Polystyvert's plant is excellent news for economic vitality and job creation in Anjou. In addition, by launching a process unique in the world and facilitating polystyrene recycling, this start-up is achieving a high profile in the clean technology sector."

- Lise Thériault, MNA for Anjou-Louis-Riel and Minister responsible for Consumer Protection and for Housing

"The technology developed by Polystyvert will transform the polystyrene recycling industry, currently one of the world's most pressing issue. Since it was selected for our Ecofuel Accelerator, the company has overcome major challenges. We are very proud to continue our collaboration with the management team and key strategic industrial partners as Polystyvert has just entered the commercial scale-up phase."

- Ms. Andrée-Lise Méthot, Founder and Managing Partner, Cycle Capital Management

"Polystyvert is proud to start the world's first PS dissolution recycling plant. This is a major milestone for us as it proves that our technology is effective at an industrial scale and thus can be used around the world."

- Solenne Brouard Gaillot, Founder and CEO, Polystyvert

### **About Polystyvert**

Polystyvert is a Montreal-based clean technology startup that has developed a proprietary, innovative, and low-carbon-footprint process that can recycle polystyrene based on a dissolution technology. Effective on all types of polystyrene, Polystyvert's technology includes a purification process that removes all contaminants, with a decentralized model that drastically reduces transportation costs. The result is a high-purity recycled resource that can be reused for upcycled polystyrene products, opening the door to a larger market than current mechanical recycling technologies.

Polystyvert's technology addresses a major global environmental issue, since large quantities of post-consumer or post-industrial polystyrene waste are buried in landfills every year, while more and more new polystyrene is produced. Polystyvert's technology offers a great opportunity to reduce the consumption of fossil fuels used in the production of new polystyrene and reduce GHG emissions.

<http://www.polystyvert.com/>

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