



One line pitch:

Polystyvert has developed a new technology to recycled polystyrene. This dissolution process is very innovative and reached high profitability.

Market Analysis:

Polystyrene (PS) is not recycled, or very few, mainly because of transportation costs. Polystyrene is very light and takes a lot of room. If carried as is in a truck, this generates a lot of GHG and high transportation costs. Moreover PS is very often contaminated. It is extremely costly to remove tapes, labels, card box and wood manually. PS recycled by traditional method is poor quality because heated, so this is a cheap product.

In a consequence companies that generate wastes of PS prefer to pay for the garbage than paying more to recycle. And company that use PS to manufacture packaging, insulation panels, coolers, etc., are not able to find big quantity of high quality recycled PS, so they have to buy virgin PS.

Value proposition

Polystyvert install an equipment named a concentrator directly where the wastes of PS are generated. This equipment contains an essential oil. Upon contact PS dissolve very quickly. When the equipment is full, we bring it back to our plant and we revers it on a grid. This allow us to remove the contamination at low cost. Then the PS is separated from the essential oil. This technique lies to the heart of our technology. The PS is then formed into pellets.

Polystyvert proposes a service of collection for PS waste. This service is cheaper and greener than the garbage. Polystyvert also propose very high quality PS pellets. Polystyvert is implementing a circular economy in the PS industry.

Business model

Polystyvert business model is based on a double entry model. We charge to collect the wastes of PS (even if we charge cheaper than the regular waste management companies) and we sell high quality recycled PS. The recycled PS is so high quality that it can be sold close to virgin PS price (10% cheaper) The transportation costs are divided by 10 compared to carry expended PS and the treatment costs are low because this is a cold process. This results in a better margin. Polystyvert wants to export its technologies to foreign markets.

IP and Regulatory situation:

Polystyvert has a patent pending on the separation process and another patent pending on the quality of PS recycled by a dissolution process. The international patents were asked to USPTO in October 2014. The examiner asked for complementary information in April 2016. The international patent report will be made by the examiner in February 2017. Then Polystyvert will enter in national phases in Canada, the US, France and Germany at least.