Global Challenges of Postconsumer Plastic

➢ Huge quantities of postconsumer plastic are being generated every year.
  • 24 M tons/yr in Europe.
  • 30 M tons/yr in the US.
  • 246 K tons/yr in Lebanon.

➢ Yet, the disposal and treatment remain challenging.
Existing Solutions

- Landfilling
  - 30% in Europe
  - 75% in the US
  - 48% in Lebanon

- Combustion to Energy, which is still facing major logistic and operational constraints.

- Some uneconomical post consumer plastic treatments are available.
What is ROGP?
ROGP is a revolutionary patented invention that presents a solid and effective solution for this global problem.

The ROGP technology is a composite generated from the rejects of glass and plastic.

ROGP will be a significant turning point in the worlds of building materials, mechanics, and others.
Positive Environmental Impact

- Re-use of non-recyclable plastic waste.
- Minimization of the non-recyclable plastic waste landfilling.
- Minimization of the depletion of natural resources, used in the production of plastic.
- A reliable and durable recycled material.
Current Technologies

- Molding Technology
- Extruder Technology
- 3D printing Technology (in process)
Product Specifications

- Flexural strength: 13.9 Mpa, ref (ASTM D 790M-93)
- Compressive strength: 11.67 Mpa, ref (ASTM D 695M-91)
- Outstanding Abrasive Resistance: loss of 0.21mm after 1000 revolutions, equipment utilized (Tinius Olsen Wearometer C.D.R)
- Absorption Capacity: 0.05% by weight, ref (ASTM D 792-9L)
- Density: 1.022 g/cm3 expressed in Dry Unit Weight, ref (ASTMASTM D-570-95)
- Wet-Dry Test: 0.0176% loss, ref (ASTM D5313)
- Sodium Sulfate/Magnesium Sulfate Soundness Test: zero loss, ref (ASTM D5240)
Target Market - Industries

- Construction & Building Material industry
- Military & Security Companies
- Agricultural Developers
- International Organizations and companies seeking to develop a proactive CSR programs.
Target Market - Geography

➢ Our ROGP is a solution for the global environmental challenge.
➢ We started in Lebanon.
➢ Our plans are to expand within the next 5 years in:
  • Africa (Egypt, Morocco)
  • GCC
  • Latin America (Peru, Brazil)
  • Asia (Indonesia, Malaysia, Thailand)
  • Europe (Spain)
  • North America
  • Australia
Our Strategy
ROGP composite products do not intend to enter the market as a competitor, but more of filling an urgent need for a solution for the global plastic waste problem, while producing a durable and cheap applications for the construction, municipal and agricultural industries.

Our main applications for now are the below:

• Tiles
• Boards
• Bins
• Irrigation channels/water ducts
• Building Facades
• Parking stops and road bumps.
• Public benches
• Product design
Achievements & Progress

➢ Nomination to Queen Elizabeth award for engineering
➢ Azadea in 2016
➢ Diageo in 2017 and 2018
➢ Fatal in 2017 and 2018
➢ Gabriel Bocti in 2017
➢ Lebanon glass recovery project 2017
➢ Municipality of Beirut in 2018
➢ Aec in 2018
➢ MEDS “Cubatto”

Others are in process:
➢ USEK in 2018
➢ Byblos in 2018
➢ Ramco in 2018
Competitive Edge

- Our cost is less by approximately:
  - 70% for tiles
  - 40% for bins
  - 70% for irrigation channels/water ducts
  - 35%-50% for Building Facades

- Significantly competitive product price,

- Auspicious product qualifications.
CUBATTO® Project
Bins
Tiles
Building Facades
Public benches
Irrigation channels
AUB Designer Ping-Pong Table
Thank you!

Q&A