

[View this email in your browser](#)



WELCOME TO OUR NEWSLETTER

JULY, 2021



Dear Toraphene Friends and Investors

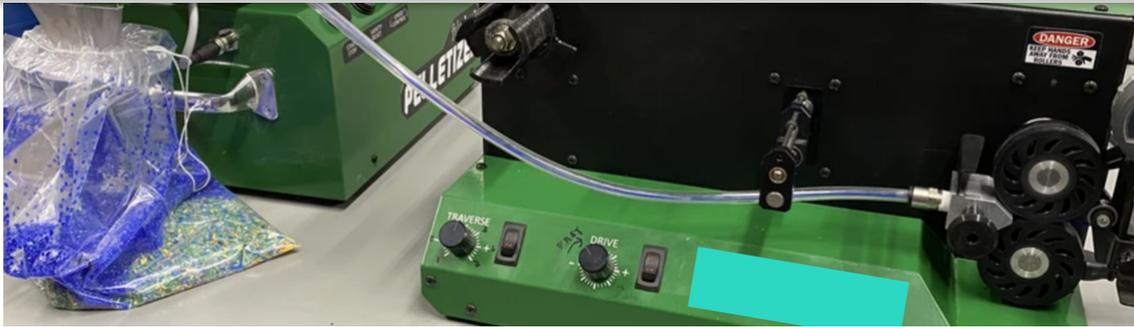
We are providing you with a new update to inform you that Toraphene has been progressing on all fronts and is achieving some important milestones.

Investor Update

After the extensive delay in finalising and closing the administrative portion of our crowdfunding round, we are pleased to report that we have completed the final steps. Crowdcube investors should have received an email directly from the platform on or about June 21, 2021 with instructions on how to access any further information they need, including their EIS3 (tax filing certificate). Others will soon receive individual emails from us in a separate communication, if they have not already received such an email.

Business Update

We are delighted to present some recent developments in the Toraphene plant. Our team purchased and commissioned new equipment to produce graphene- embedded biopolymer pellets for use in the next stage of the manufacturing process. These machines are dedicated to the production of Toraphene Masterbatch pellets, which enables us to increase our output of materials to be blown into thin flexible Toraphene film in volumes of more than 1 million kilos per annum now. This is a significant step as this enables us to move forward with our carrier bag production line while simultaneously using our secondary machinery line to continue our innovation projects.



In other positive news, we have progressed multiple conversations with very interesting prospects and have begun to produce technical samples to demonstrate the extraordinary properties of Toraphene.

Team Update

We've had a major breakthrough in our Toraphene laboratories! Our scientists have experimented with a variety of seaweeds and have successfully produced the world's first seaweed film embedded with graphene. This is groundbreaking news, as seaweed biopolymers are short-chain molecules that are weak and brittle by nature, and offer a very limited barrier to liquids and gases. By uniformly dispersing graphene into the seaweed biopolymers using our proprietary methods, we are able to create a reinforced seaweed film that has enhanced strength, durability and barrier.

We are in the R&D phase with this project and our recent progress paves the way for future iterations as we continue to explore seaweed biopolymers as viable alternatives to single-use plastics.



Market News

You may have come across the recent lawsuit against Coca Cola for false advertising by the [Earth Island Institute](#). Though too soon to draw any conclusions, this is an interesting development underscoring the increasing pressure on corporations to stop launching aspirational sustainability initiatives that appear to mitigate problems, but are actually only ineffective band-aids.

Recycling is currently sold as the sole/complete solution to plastic pollution. For recycling to be a real solution, we would have to be able to recycle the same plastics indefinitely so that there would never be any discarded plastic waste, so one plastic bottle would need to be recycled into another plastic bottle again and again and again.

Though we know recycling will continue to play an important role, unfortunately, even the most durable plastics can be recycled only about a handful of times because the recycling process makes plastics weaker, so additives are used to improve recycled plastics' functional properties. But this has its limits: after just a few recycles, the end product is either too weak or too toxic (thanks to more and more additives) to be used again. So, let's imagine we recycled every piece of plastic in the world as many times as possible. What are we then left with? An enormous amount of plastic waste that is even more toxic than it was before being recycled!

How can you help?

Creating truly innovative solutions is complex, and we focus on product development through close collaboration. Thank you to those who have sent recommendations! We are still seeking to assemble a consortium of non-competing companies that all require a similar solution (such as Toraphene layered barrier packaging or double-layer paper packaging to replace plastic) and that could be interested in collectively developing a specific product with us.

Send any suggestions and/or introductions to us at hello@toraphene.com

Best regards,

Gaute



Copyright (C) 2021 Toraphene Ltd. All rights reserved.

[Unsubscribe](#)