



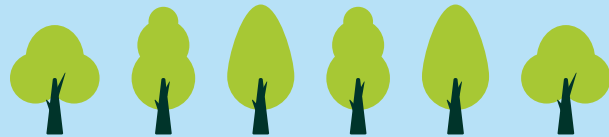
The Institution of Engineering and Technology



Leather is made from animals,



but people also make mock leathers from plastic. Treekind is different – it's made from plants, is free from plastic and is completely biodegradable, meaning it will leave no waste when anything made from it is eventually thrown away.

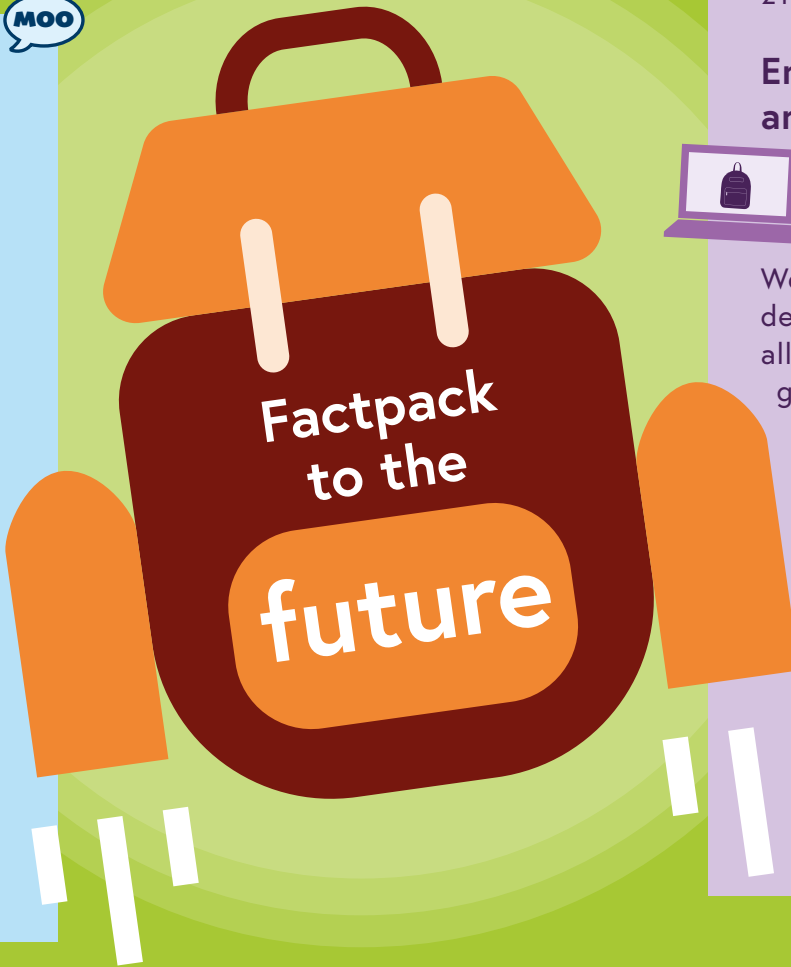


Mira Nameth invented Treekind 4 years ago

and has been working on it ever since. She then started her company Biophilica in 2019. A very talented team is now working to help more companies use Treekind for all kinds of things – from shoes to bags and even chairs.



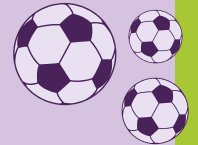
MOO



Did you know: HYPE. makes over 1,000,000 backpacks every single year, made out of 1.5 million m2 of fabric. That's enough to cover more than 210 football pitches!

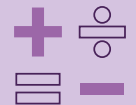


Engineers and scientists are essential at HYPE.



Engineers work with us in our factories to make all our machines work correctly to make our backpacks and clothes. We design our products with specialist design technology – from making our allover prints to plotting the shapes of the garments and accessories.

Our fabrication teams have to do important maths every day to make sure all our products are made correctly and in the most eco-friendly ways so we don't waste any fabric! Product and technical designers develop and test our products every day. They also test our fabrics to make sure they are right for how we're going to use them.



BIOPHILICA

To find out more, visit

[engineer-a-better-world.org/get-involved](http://engineer-a-better-world.org/get-involved)

#BackpackToTheFuture



1

### Most children like you predict that in the future

we'll see outfits that decompose (leaving no waste behind) and some kids even think we'll be able to buy a hat that lets you play video games with your mind!

### Three top fashion innovations from the last few years which have been developed or invented using STEM include...

**SEWBOTS:** Robots are currently being created which will make our clothes in the future. These robots will help make clothes in more places, which will be better for the planet as our fashion won't need to be moved across the world. They will also be more efficient, meaning less energy is needed which means less pollution.

2

**Virtual Try On:** Big brands are now using software which will let you try on clothes online - like having your own changing room at home. This will help you get the fashion you love in the right size, so you won't have to send things back to the shop. Trying on clothes online reduces pollution as fewer things will have to be returned because they don't fit – and fewer returns mean less polluting transport is needed.



3

**Digital fashion:** Fashion is now moving into your favourite computer games and virtual worlds. Decentraland and Meta now let you buy and sell clothes and accessories that your character can wear to show your style everywhere you go – in the real world or online!

### Most kids say...

they don't understand how science and fashion are connected, but hopefully this fact-pack shows you how important they are to each other!

### Kids also say...

it's more important for clothes to be good for the planet or help make people healthier than looking cool. Do you agree?



To find out more, visit

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