THE JOURNEY TO CARBON NEUTRALITY– TIME TO SCORE

The vision of calculating the carbon footprint of individual fabrics came to life at the PERFORMANCE DAYS and Functional Fabric Fair by PERFORMANCE DAYS exhibitions in Munich, Portland and New York fairs earlier this year; this is the second stage, with an objective that by next year (2023) the products featured in the PERFORMANCE FORUM will have a quantified number attributed to them.

Scan below for more information on previous Focus Topics:

THE EFFECT OF CARBON

The effect of carbon is the most well-known side of the Climate Crisis, something that has been highlighted by Cop 26 (in 2021) and COP 27 (November 2022). It is part of the overall picture of changing climatic conditions which includes detail of: EcoToxicity, BioDiversity Loss, Poverty, Eutrophication, Water Crisis, Health, Education, Resource Scarcity, Inequality, Affordable Goods & Services, Air Pollution & Overconsumption.

Carbon is an element; it does not disappear from the planet but can combine to form other compounds. It easily forms Greenhouse Gases like carbon dioxide & methane, thus the principle of photosynthesis is a key aspect to its storage away from GHGs. When carbon dioxide enters this natural process the carbon is separated so that oxygen can be returned to the atmosphere, whilst the carbon is sequestered. In terms of vegetation this is within the foliage & roots of the plants; when the process is applied through a chemical process the carbon is solidified.

REGENERATIVE AGRICULTURE

There is renewed focus towards using the natural photosynthesis method as part of the ReGenerative Agricultural process as this method also safeguards other aspects of the farming system. ReGenAg is a style of farming that was common before the introduction of chemical fertilisers & growth restrictors that became popular from the 1950s onwards.

ReGenAg uses livestock to eat down the crop after the fruit of it has been gathered, with the resulting mature being deposited directly onto the soil for the health boost of the next crop. The key to ReGenAg is to have more mature plants with much growth above the soil as this is directly counter-balances as longer roots (which facilitate more carbon storage); thus the need is not to graze down the grasses too much. It is estimated that the rebalance is to have just 25% of the current livestock population as this will ensure that there are enough local foodstuffs available without the requirement to grow extra feedstock elsewhere.

One of the incoming subjects for debate is whether more land should be focused on growing fibers for materials whilst the planet has around 1 billion people living below the nutritional poverty line. The planet is able to cope with some readjustment of resources, but the Earth Overshoot Day chart reveals that humankind is using up resources at a greater rate than can be replaced.

Thus carbon is the focus that is easiest to quantify, but The Journey to Carbon Neutrality is the start of a wider effort to work within the planetary boundaries described by the principle of Doughnut Economics as set out by Kate Raworth.