





# SUSTAINABILITY

Ensemblier is committed to creating beautiful furniture that will last for generations.

We use only natural materials and consider the eco footprint of each and every product. We ensure that the entire supply chain meets our high standards of thoughtful manufacturing. This means that we:

- Use organic systems that respect the essential rhythms of nature
- Source raw virgin materials that are harvested in harmony with the world's ecosystems under certified, sustainable methods
- Use processes that are non-polluting
- Avoid adding to the billions of tons of waste created each year by committing to the very best materials and practices, enabling our products to retain intrinsic value
- Committed to clear labelling of all our materials and transparent supply chains
- enable consumers to make conscious, informed choices
- Individually number all of our pieces in order to show proof of provenance and enable the product to retain value in the secondary market

The sustainability revolution is here. We must dramatically alter the way we view the world and its finite resources. We must all take responsibility to bring about real change. We see each Ensemblier piece as a step along this path.

## ETHOS

Longevity is at the heart of Ensemblier's ethical standpoint. We create pieces of worth, beauty and quality that can be loved for generations. Just as William Morris strove to create a handmade counterpoint to Victorian industrialisation, we are countering the throwaway consumerist culture that prevails today. This culture puts GDP at the forefront of production, prioritising science and technology above natural cycles and traditional skills.

Mass production of poor quality goods is wreaking untold damage on the planet. Its processes create enormous waste as well as huge suffering, both on an animal and human scale, from intensive farming to the chemical pollution that is a by-product of textile production. Areas subjected to the latter have even been linked to higher than average cancer rates amongst local populations.

Meanwhile, the end product ultimately has little intrinsic value and therefore no secondary market, which means it quickly contributes to the more than two billion tons of waste the world creates each year.

The whole process puts a massive strain on our ecosystems. We need to produce less and learn to respect the essential rhythms and patterns of nature. There is a sacred structure

in nature that we must uphold. “Without the whole in balance, neither in a work of art nor life itself can sustain itself in a durable and healthy fashion,” says HRH the Prince of Wales\*, who this year launched the Terra Carta pledge, which calls on businesses to become quantifiably more sustainable by 2030. Ensemblier has enthusiastically signed the pledge.

## Ensemblier is committed to being an industry ‘disrupter’, to push forth the urgent need for transparency and new ways of thinking.

There is opportunity in crisis and we need to use this time to re-evaluate our principles and readdress our priorities. It’s time to embrace a circular economy, where using buzzwords like ‘sustainability’ and ‘artisan’ are backed up with genuine action.

### METHOD

Ensemblier’s products are testament to the benefits of working with traditional methods. In all our upholstery, individual springs are hand-tied to jute or linen webbing with linen twine; layers of hessian are built up with horse and boar hair, cattle-tail or coir fibre, and stitched in place, followed by GOTS cotton bump, calico and organic wool-felt wadding. These traditional, numerous processes result in a sofa taking around 120 hours to create, and a headboard 16 hours, before being covered in a final fabric. (In comparison, a mass-produced sofa can be constructed in as little as one hour.) We work with twelve workshops across the South of England, which employ between one and twenty people. Some of our pieces involve up to four or five different artisans.

The beechwood frames are made by skilled specialists using dowels or mortise and tenon joints. This not only makes the furniture much more durable than those constructed from MDF board stapled-gunned to lengths of soft wood, it also produces little to no waste.

The upholstery process is also virtually waste free, as where possible we use loose filling. The core materials for these fillings are of the finest quality, so everything is utilised. We are developing a range of wool filled furniture as it is the most sustainable of all natural products, and also has carbon and VOC drawdowns. This will additionally involve organic cotton backed with PLA (a bio-polymer) in sheet form, which cuts production time; this will enable us to offer our products to a wider market. We are also developing a range of sofas and beds that emphasise the use of sprung bases for longevity, and swab cushion wool pads that can be re-carded or recycled. This philosophy is based on an holistic approach to materials, as sheep need to be sheared annually as part of good animal husbandry. Wool also has the unique properties of being biodegradable, anti-bacterial and breathable.

\**Harmony: A New Way of Looking at Our World (Harper), page 101*





## MATERIAL

Inside most modern furniture there is a mix of polyurethane foam; softwood frames that are screwed together rather than mortise-and-tenoned or dowelled; probably MDF, and stapled onto the frame. The foam is spray-glued onto the board, and generally covered in flame-retardant calico and dacron (a polyester-bonded wadding). Even in higher-end furniture, a designer's priority is the finished appearance, branding, with more thought being given to the external fabrics rather than the internal components.

All our cotton is sourced via The Global Organic Textile Standard (GOTS), which is recognised as the world's leading processing standard for organic textiles. It defines requirements to ensure organic status of textiles, from harvesting of the raw materials, through environmentally and socially responsible manufacturing up to labelling in order to provide a credible assurance to the end consumer. Our wool, too, is certified organic while our linens are certified by the Master of Linen, acknowledging European growing and organic methods. We use fast-growing jute, mostly from India, but are now looking to use more flax grown closer to home.

Since 2014 we have been **adverse to clingfilm and single use packaging**, and instead provide calico dust covers for all our products.

The beech hardwood and birch plywood we use is certified by the FSC (The Forest Stewardship Council), an international non-profit organisation that promotes responsible management of the world's forests, while our down and feathers are European certified as non-live plucked. Since 2014 we have been adverse to clingfilm and single use packaging, and instead provide calico dust covers for all our products; these are now made from recycled organic cotton. For the provenance of each of our products, we detail where the specific materials were sourced and how they were produced.

We never use synthetic materials because of the chemicals required to produce them, but also because of the chemical flame-retardants (FRs) required for synthetic materials to be signed off under manufacturing regulations. Take polyurethane foam: approximately 97 per cent of all modern manufactured furniture uses foam. In the world of modern upholstery, techniques that use foam are significantly cheaper than their natural counterparts; not only does the foam have a limited lifespan of eight years, but typically 11 per cent of the foam is made up of flame-retardant chemicals.

Studies have shown that the migration of these chemicals is particularly prevalent in the first six to twelve months from manufacture. These are known endocrine disruptors, and are absorbed through inhalation, injection and dermal absorption. When disposed of or dumped, these chemicals seep into our soils, rivers and oceans. Tests have shown animals and fish to have high levels of PBDEs (polybrominated diphenyl ethers, a type of FR) in their systems, all of which goes into our food chain. These chemicals are so globally prevalent that they have even been discovered in polar bears.

These toxic compounds clearly have no place in a healthy home. In the US, the Environmental Protection Agency (EPA) has ruled that production of five flame retardants be severely limited or prohibited this year, but disposing of them is also problematic. The UK alone disposes of 22 million pieces of furniture per year. It is estimated that there is around 15kg of FRs in a typical mattress, and around 10kg in a typical sofa, meaning that around 350,000kg (350 tonnes) of FRs are disposed of by landfill and incineration per year in the UK.

Even without FRs, burning polyurethane foam produces hydrogen cyanide and carbon monoxide, which becomes carbon dioxide (CO<sub>2</sub>) on exposure to atmosphere. Globally, 4.5 million tonnes of CO<sub>2</sub> are released to atmosphere per hour (1 ton is approximately the weight of a car). It has been established that CO<sub>2</sub> is directly effecting climate change, and it is estimated that there are only seven years left of the world's carbon budget before an increase of 1.5 degC global warming is reached. The result of this will likely be more wildfires, tropical cyclones and heat waves. Countries must lower emissions while actively promoting and subsidising legitimate ways of carbon drawdown.

**‘The health of soil, plant, animal and man is one and indivisible’** says Lady Eve Balfour, founder of the Soil Association.

### THE FOOTPRINT

Ensemblier aims to impact the environment as little as possible. This means sourcing raw materials that are harvested in harmony with the world's ecosystems, and where possible using recycled materials, as well as minimising the amount of waste being put back into these same systems. We want to observe the delicate balance of our climate and the structure of our soil.

Everything in our universe is dependent on the climate, and everything is dependent on the soil. “The health of soil, plant, animal and man is one and indivisible,” says Lady Eve Balfour, founder of the Soil Association.

The textile industry is a huge contributor to pollution and landfill, from the high-intensity farming used in the production of yarn to the use of chemical-laden synthetic dyes and finishing techniques. These all circle back into our soils, our ecosystems and our food chain.

At Ensemblier, we work exclusively with small-scale, organic farms because we believe that intensive farming methods are detrimental to our livelihood and health. The levels of nutrients in our soil have dropped significantly since new farming methods evolved in the 1960s. The chemicals used to promote forced yields in both arable and agricultural farming alter the make-up of the soil and its micro-organisms, and affecting this balance has an impact on the earth's climate. There is increasingly firm, expert opinion that the future of farming must embrace bio-economy methods that reduce the use of chemicals, rely less on monoculture and cut emissions of the greenhouse gases that add to climate change.





## WASTE

We need to stop and think about how the internal components of products contribute to the more than two billion tons of waste the world creates each year. If these were made to last from natural, sustainable materials, it would make a very significant difference to the planet and our health. Consider mattresses: on average, people change their mattress every eight years; this means that in the UK an estimated nine million mattresses are disposed of every year, each with around 15kg of flame-retardant chemicals. Add this to the circa five million sofas, and it makes for grim reading.

In essence, sustainability means producing a bio product that is a renewable growth of the original capital. To this end, Ensemblier will always recover or revive a piece made by us. We will restore and re-card our sofas and mattresses, in the same way that companies such as Ercol did in the 1970s.

Using truly sustainable materials will improve human welfare through the protection of natural capital. A great example of this is wool, as sheep are instrumental in returning nutrients back to the soil. Limiting production of new materials altogether is also at the heart of sustainability, and Ensemblier is dedicated to cutting back its use of virgin materials as much as realistically possible. For instance, we are looking to source and repurpose old horse hair and other materials that can be washed and re-carded as our upholstery base layers.

How do we make smart purchases in a culture of convenience when we're starved for information, yet fed news about the omnipresence of dangerous chemicals? In the interior industry often a designer's priority is the finished appearance of a room rather than the actual components of furnishings. Our designers need a better understanding in matters of materiality, manufacturing and upholstery, and should be willing pass on these details to clients and customers. This is what Ensemblier does.

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