

karuun®

The hidden treasure



GERMAN
DESIGN
AWARD
GOLD
2016

interzum

Award

Best of the best
2017 & 2019

FINALIST



German
Sustainability Award
Design 2021

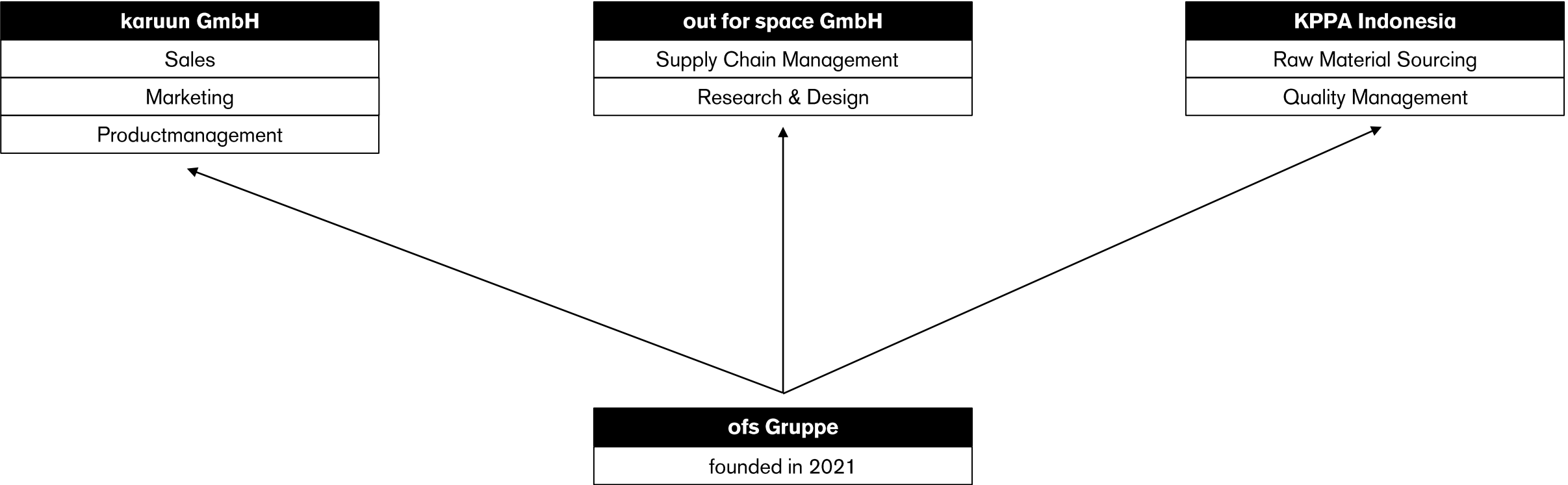
karuun®

out for space



The ofs Group

Our growth and structural development at a glance



The story begins...

Rattan
an almost
forgotten
raw material





Facts

- **type of palm**
with the most subspecies
- **fast-growing**
~5 m per year
- **tropical rainforest**
primary as well as secondary forests
- **~600 species worldwide**
~only 13 in use
- **80 % of market from Indonesia**
falling demand
- **up to Ø 10 cm and up to 150 m long**
depending on type



Sustainability

- **in symbiosis with the forest**
rattan relies on surrounding trees
- **rainforest conservation**
more rattan – more rainforest
- **land use change**
Fairventures Worldwide and GIZ
- **no monoculture**
cultivation only in the rainforest
- **environmentally-friendly harvest**
harvested by hand
- **fast-growing**
harvested after ~10 years

Advantages

- **high elasticity**
thermally deformable like no other wood
- **light**
approx. 400 kg/m³
- **homogeneous structure**
not a common wood grain, parallel fibres
- **no splinters**
due to the long fibres
- **flame retardant**
due to silica
- **environmental background**
alternative to plastic or glass fibres



Disadvantages

- **outdated design**
mostly woven products
- **incorrect applications**
furniture for outdoors
- **forgotten raw material**
due to poor quality
- **low level of development**
no innovations
- **confused with bamboo**
similar skin, but it's not a grass like bamboo

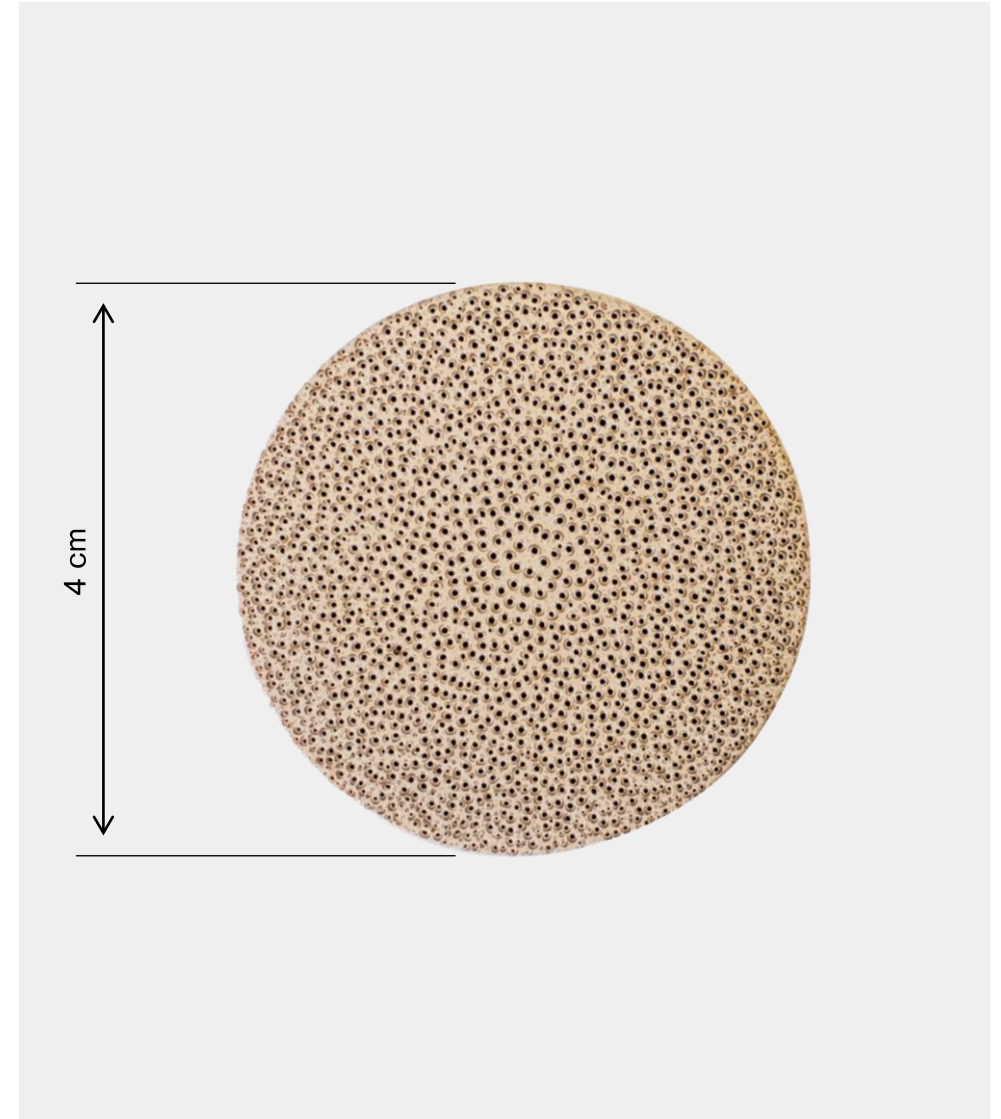


Our production



Our processing technology

The rattan palm can transport water up to 150 m along its capillaries. out for space uses this natural property for a unique, patented finishing process.

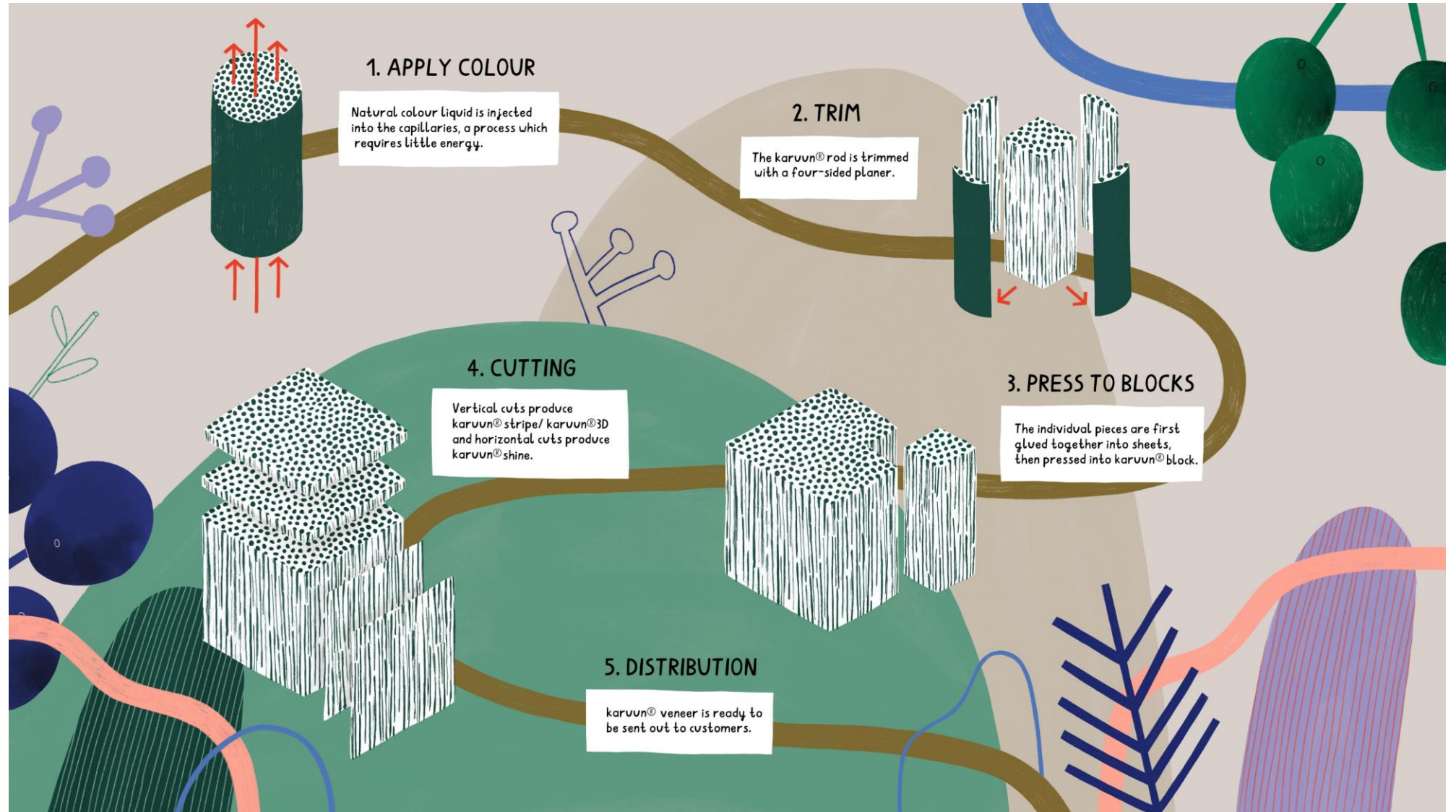




karuun® color

- **custom capillary color**
almost every color and combination possible
- **treatment of the whole cross-section**
coloring not only the surface
- **innovative processing**
color structure maintained after cutting
- **various designs**
from linear stripes to translucent spots
- **seamless appearance**
no glue visible
- **light coloring possible**
naturally light

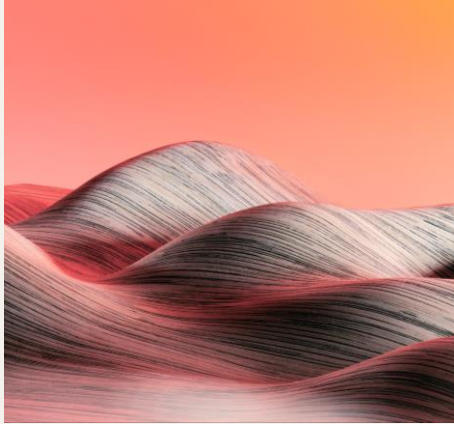
The karuun® production



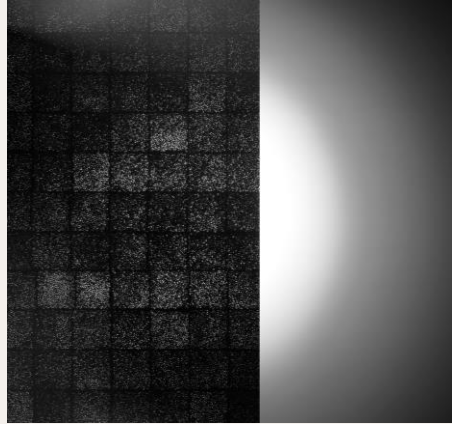
karuun® is natural perfection



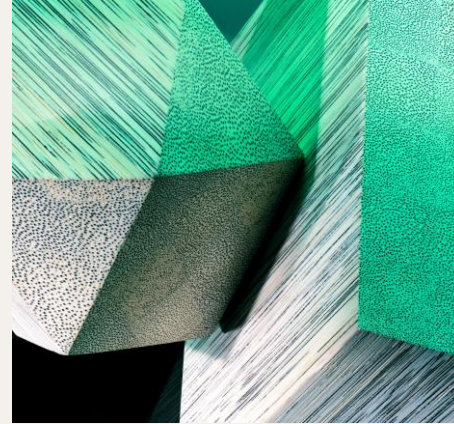
karuun® stripe



karuun® 3D



karuun® shine

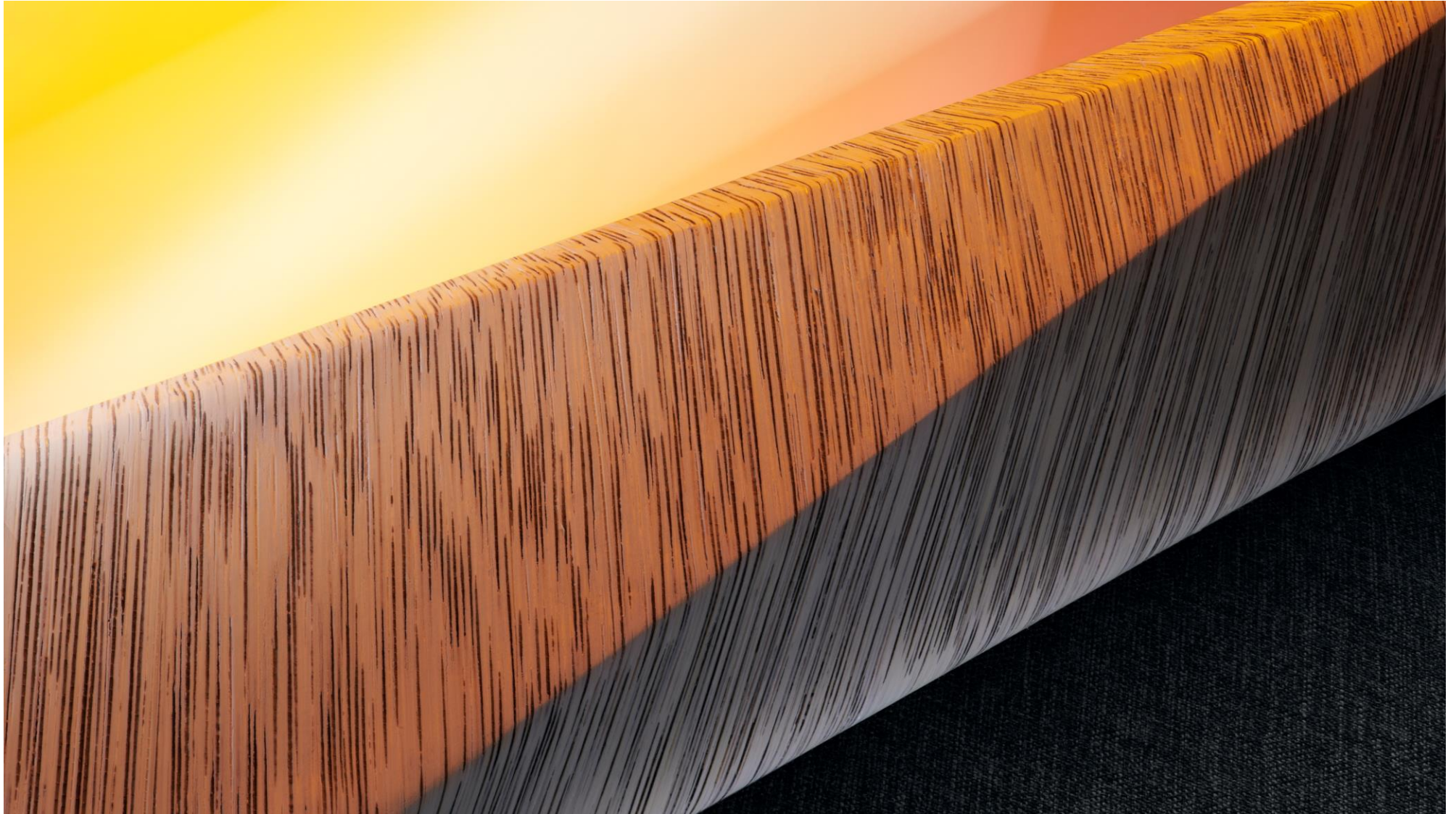


karuun® block



Nature Tech Service

karuun® stripe

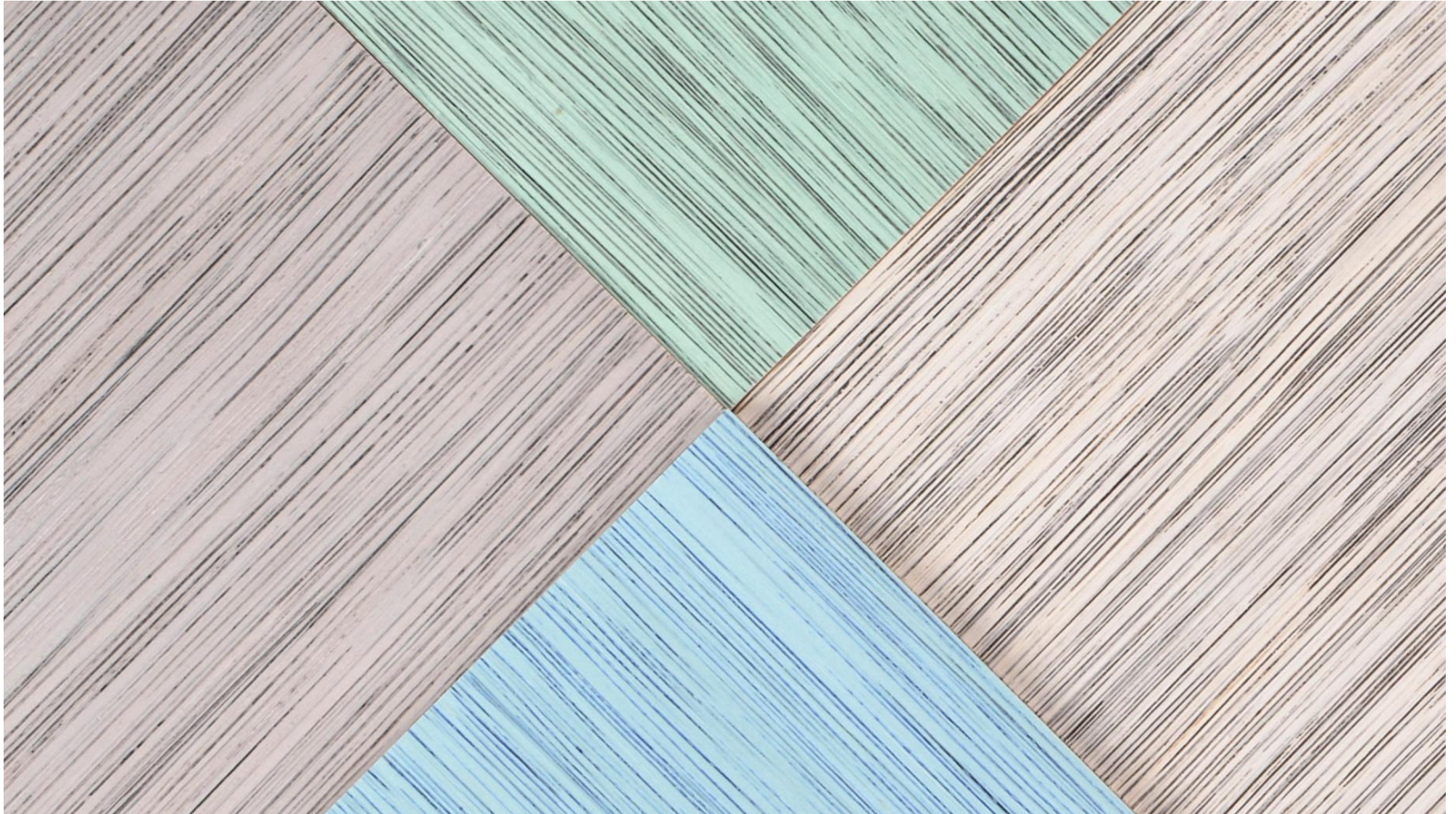


karuun® stripe

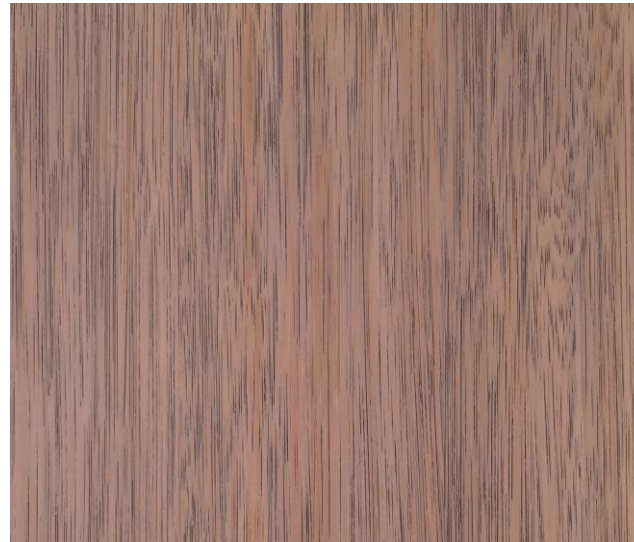
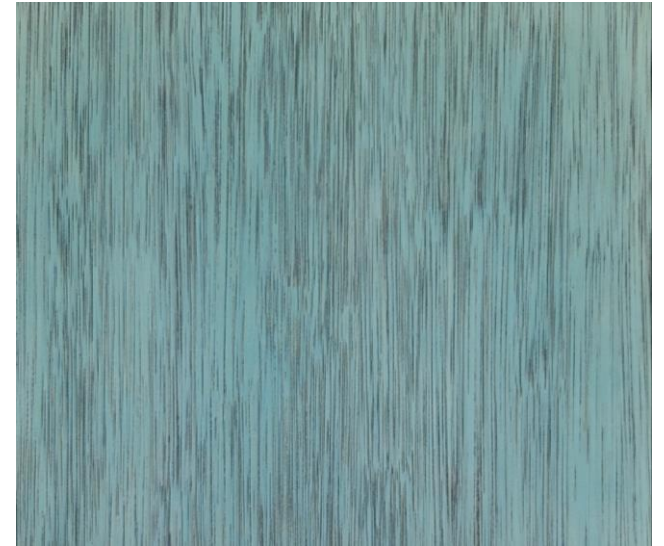
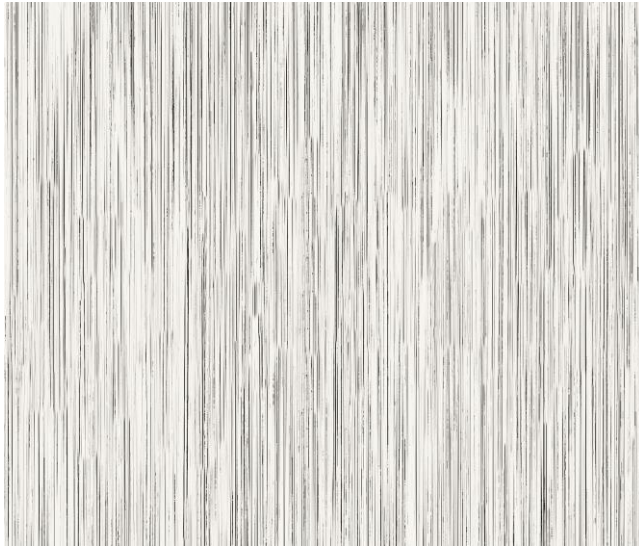
- **very flexible**
due to the long fibres
- **every color in linear structure possible**
thanks to the innovative colouring
- **light treatment with wood stain**
very light colors possible
- **Two-Tone design**
gives you design freedom
- **very light after bleaching**
thanks to the natural color
- **15% light transmission**
at 59° scattering angle with karuun® stripe natura



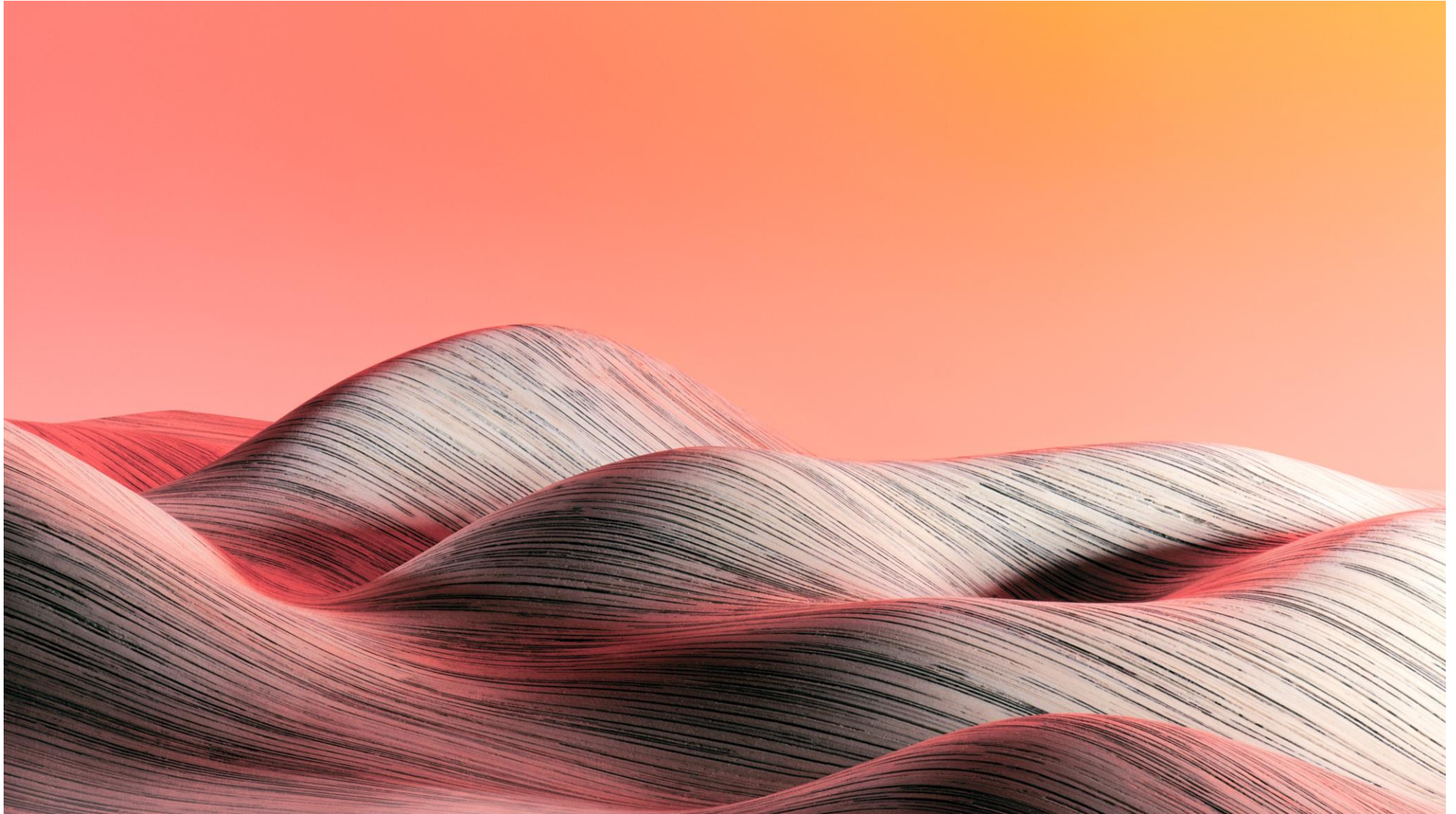
Two-Tone Optik



Two-Tone Optik



karuun® 3D

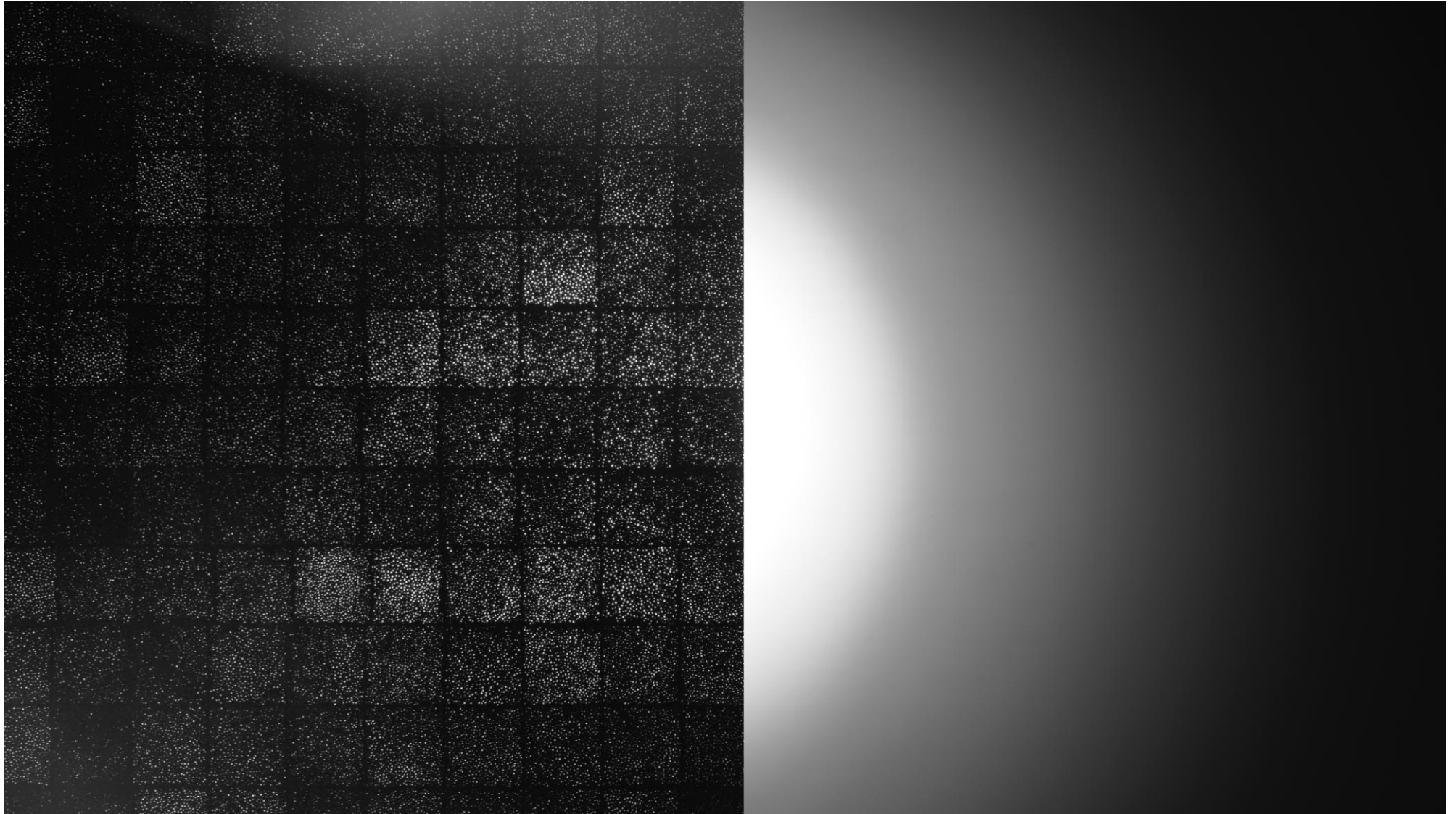


karuun® 3D

- **incomparable 3D shaping**
with a special viscose fabric
- **small to large spherical objects**
from buttons to seat shells
- **light**
alternative to fibreglass
- **surface or substructure**
post-forming or moulding
- **alternative to plastic**
extremely deep drawing possible



karuun® shine

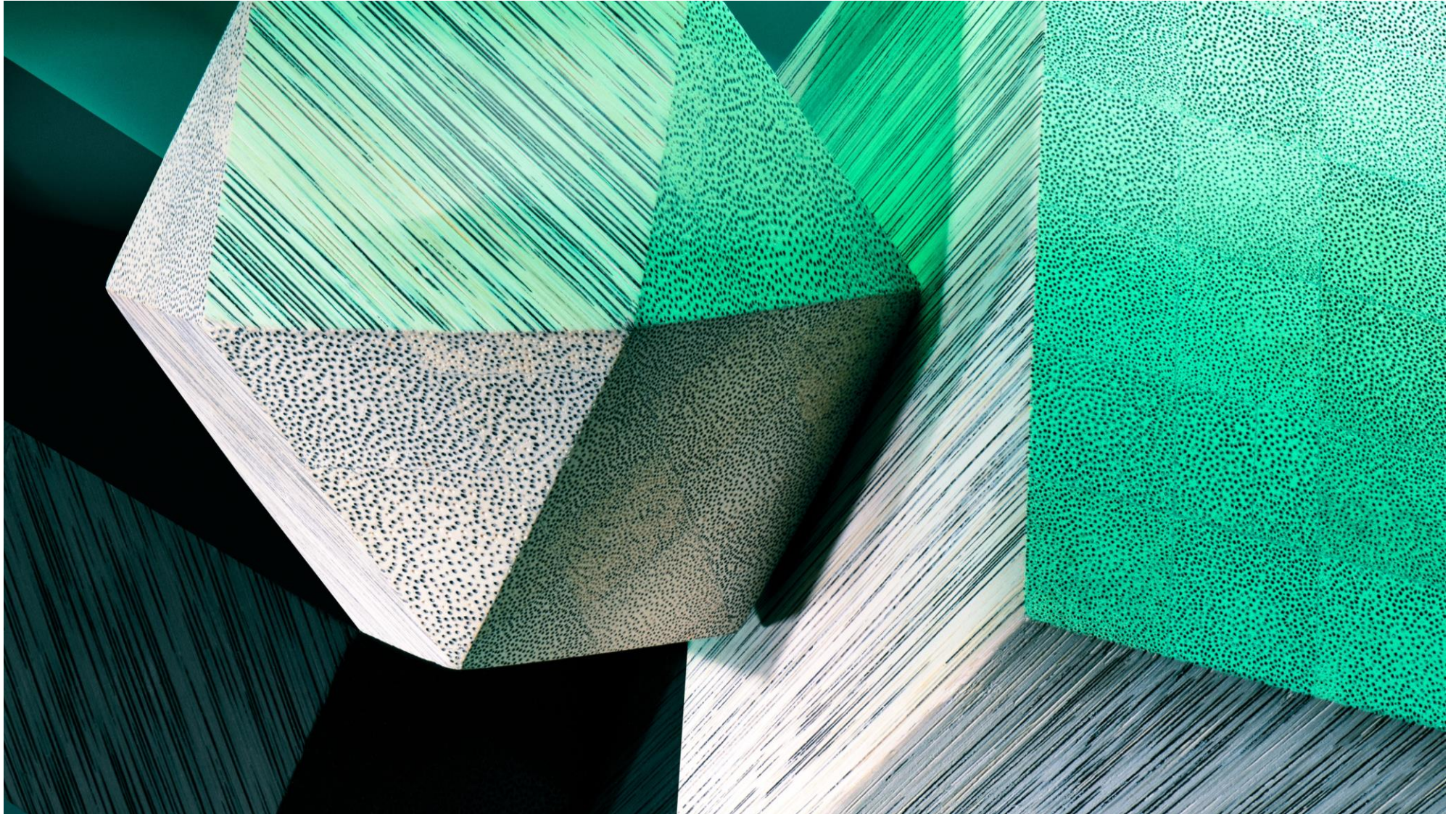


karuun® shine

- **permeable to air and light**
open capillary structure
- **50% light transmission**
with natural optic
- **acoustic**
sound insulation due to irregular small holes
- **pleasant to the touch**
hard, smooth and durable
- **formable**
despite being end-grain



karuun® block



karuun® block

- **light**
400 kg/m³
- **easy processing**
with any cutting tools
- **milled or turned at different angles**
its unique properties are thus particularly well accentuated



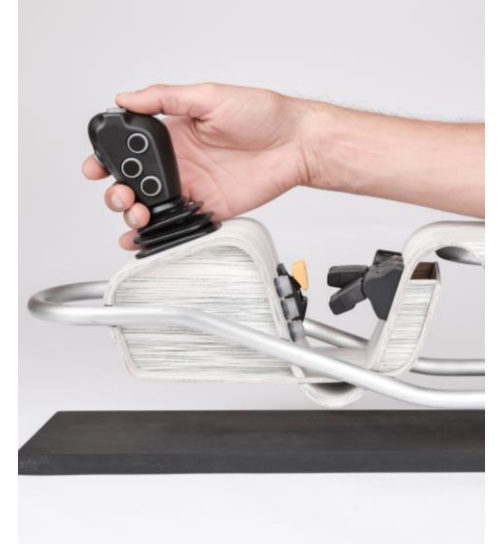
Nature Tech Service



Nature Tech Service

Development in harmony with nature.
Creating innovative products with karuun®.

- **Design**
comprehensive consulting from
conception to completion
- **Implementation**
customer-specific support
and implementation
- **After Sales**
support for partners in all aspects of care and
maintenance



karuun® as a solution for your industry



Green Mobility

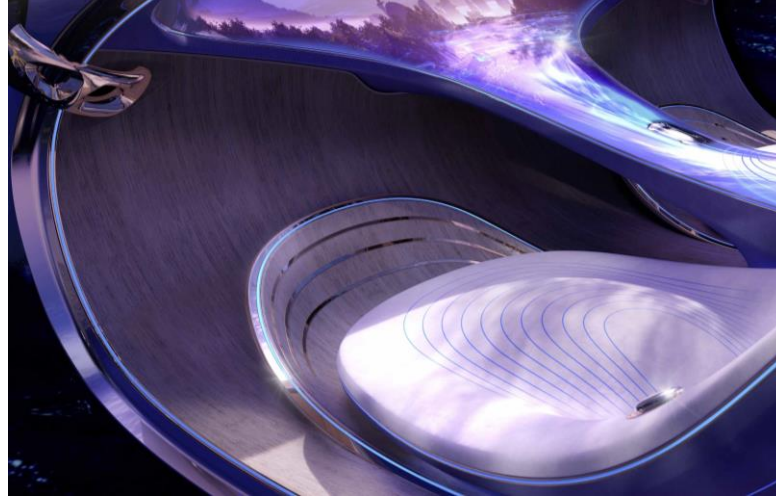


Sustainable Architecture



Replace Plastic

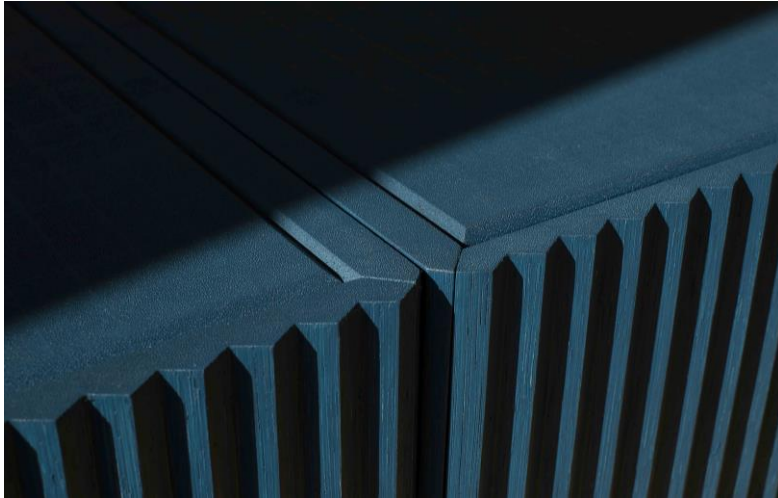
Green Mobility



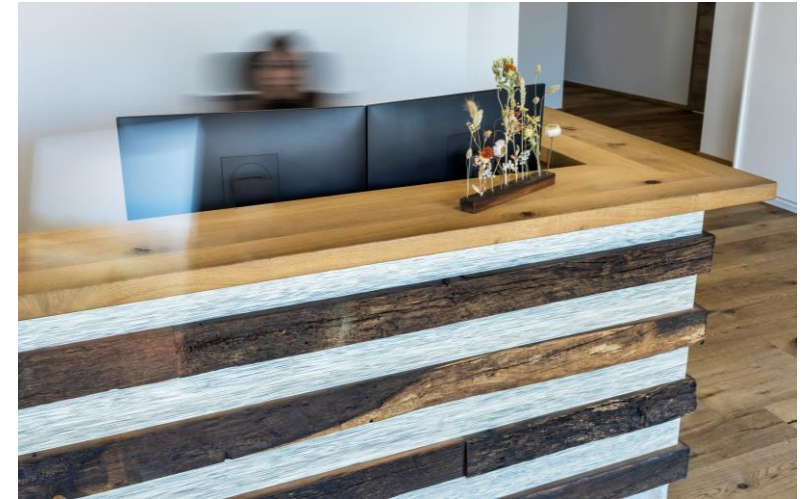
Green Mobility



Sustainable Architecture



Sustainable Architecture



Replace Plastic



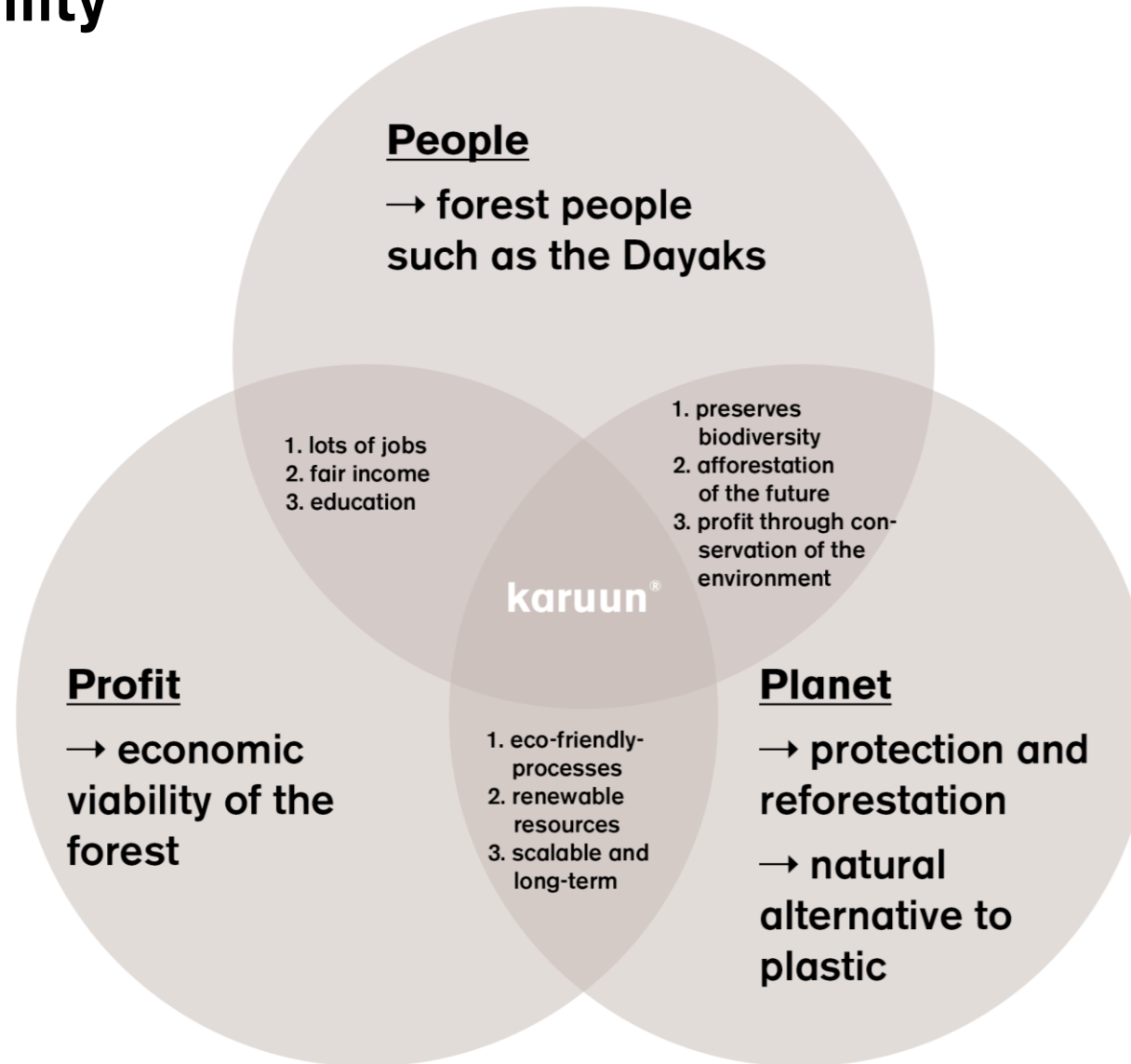
Replace Plastic



For people and nature



3P's of sustainability



The karuun® cycle



karuun[®] farmers



Pak Situ

1.8	200	Jan
Test area	Seedlings	2018
Hectare	Amount	Planted



Pak Peterson

1.3	300	Jan
Test area	Seedlings	2018
Hectare	Amount	Planted



Pak Wandri

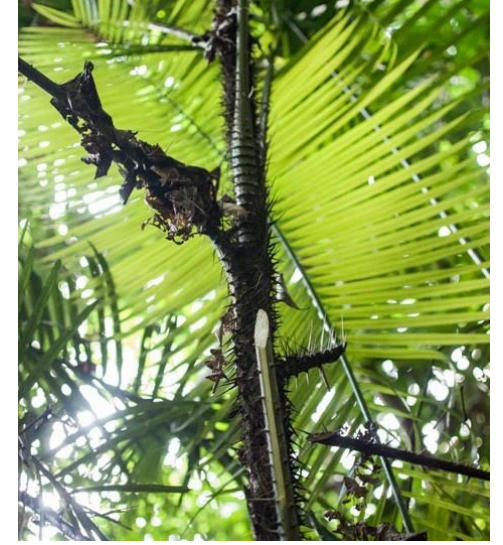
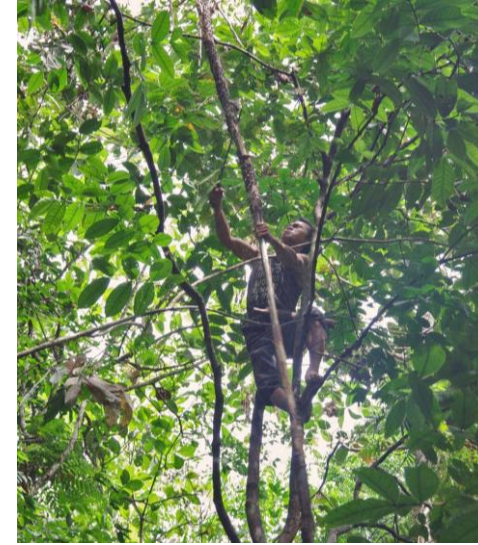
3.6	400	Dez
Test area	Seedlings	2019
Hectare	Amount	Planted



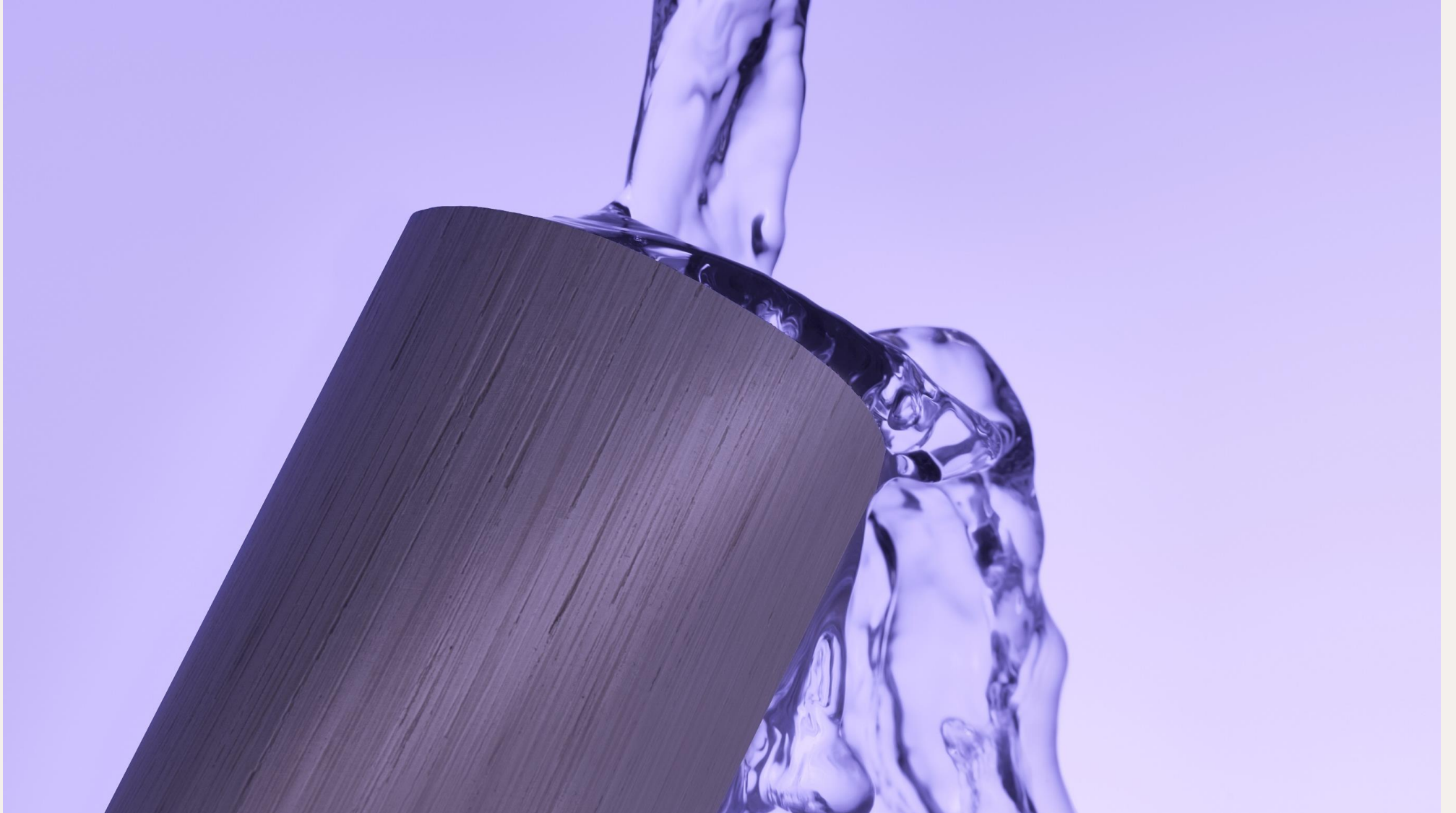
Pak Garson

3.1	400	Jan
Test area	Seedlings	2019
Hectare	Amount	Planted

Planting and harvesting



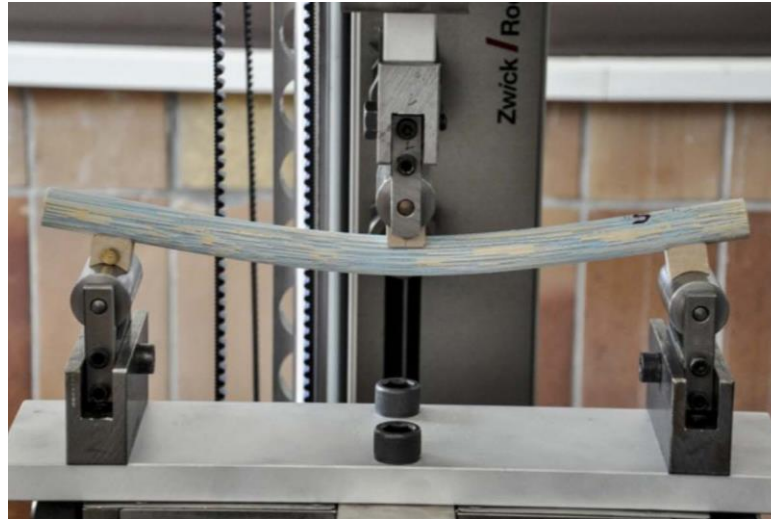
karuun® **Research** **& Design**



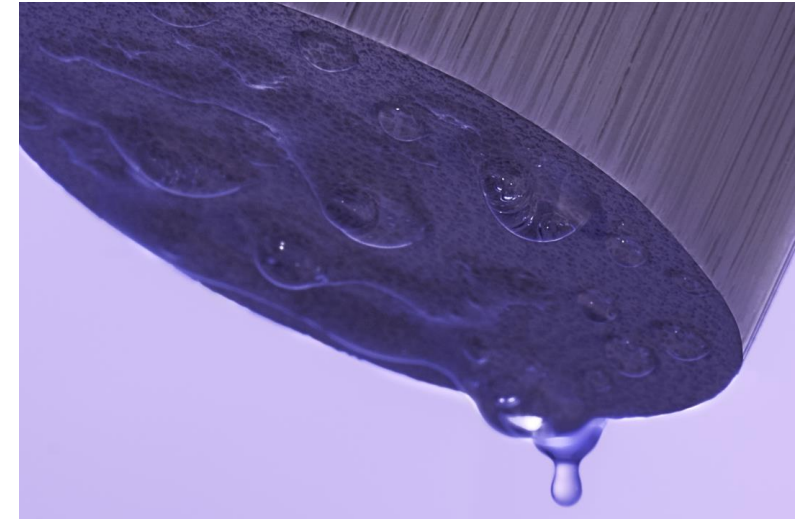
karuun® materials in development



karuun® conductive
Enhancing conductivity

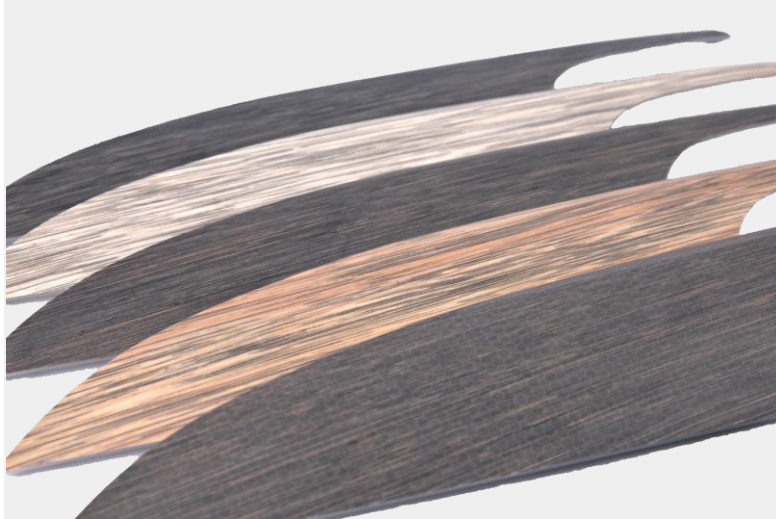


karuun® solid
Enhancing hardness and stiffness



karuun® proof
Enhancing durability and weather-resistance

karuun® materials in development



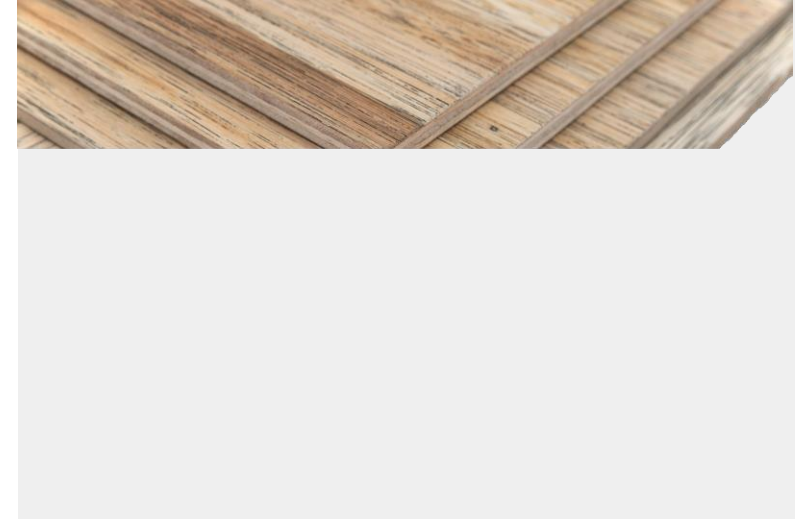
karuun® biobased

Sustainable development with
natural films and adhesives



karuun® individuality

Infinite flexibility in color design



karuun® panel

Lightweight and in most diverse
variations

Thank you.