TAIGA

Product ***Sustainability*** Report

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Taiga workspaces are designed in Finland. Materials are carefully chosen and sourced with respect to our design philosophy to create timeless and sustainable products that are meant to last.

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Taiga's workspaces are made to order, and with localised production in the EU. With resource efficient manufacturers, we are able to control our production sustainably according to needs

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We aim for an efficient supply chain that is highly localized. This way, we minimize both emissions from transportation, and provide appropriate delivery times for our made-to-order workspaces.

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Products are assembled on location by Taiga-trained specialists. Workspaces have a long life span and are covered by comprehensive after-sales support.

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Taiga products can be reused and reassembled multiple times. Wearing parts can easily be replaced.

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Information how our life cycle assessment was conducted, and about our dedication to create certified, safe and sustainable products now and in the future.

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Your ***natural*** workspace

The concept of the ‘natural workspace’ has been a touchstone for Taiga from its earliest beginnings. In the words of our Co-Founder and Head of Design, Pekka Eskelinen, ‘... connection to nature prevails in every [Taiga] design’. Our commitment to nature not only extends to our products, but to the world around us. Sustainability and eco-consciousness drive our day-to-day decisions, from product development through to end customer.

We are proud to present this product sustainability report to showcase our work to create sustainable workspace solutions that make people feel good. We view these statistics not as the end, but a landmark on a never-ending journey towards a more sustainable way of working. Decisions we make today will affect many generations to come and we believe in the importance of making informed, conscious decisions. We hope that this document will not only give you an insight into Taiga’s present, but a glimpse of where the journey will lead. We look forward to having you join us on the way.

Sustainable ***Timeless*** Design

Manufactured Using 100% Renewable Energy

Maximizing Renewable Materials

Built to Last Decades

Modular, Moveable & Repairable

Fabrics 100% Recycled Polyester

FSC Certified Wood

Carpet 100% Recycled Econyl

Made-to Order Production

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Timeless Design
Philosophy

For us, timeless design encapsulates a philosophy rooted in Scandinavian simplicity and a deep connection to nature. It embodies enduring elegance, functionality that transcends trends and remains relevant across time.

1. Respect for nature

As we draw our inspiration from Nature, our duty is also to respect it. We do this by designing sustainable products that are meant to last, and can be repurposed multiple times.

2. Minimalist design

The timeless essence of our product provides a platform where technology and different layouts blend harmoniously with the surroundings, embracing innovation without compromising elegance.

3. High-quality materials and craftsmanship

We choose certified, high quality materials, and hold our partners to the highest standards of craftsmanship when bringing our design to life.

4. Circularity

The modular design of our products allows for a long lifespan. They can be moved and reassembled many times, and feature many changeable parts that increase repairability.

5. Purposeful Innovation

We prioritize meaningful updates over frequent changes. Our focus is on ehancing sustainability, maintaining timeless aesthetics, and accommodating customer-driven flexibility in our products

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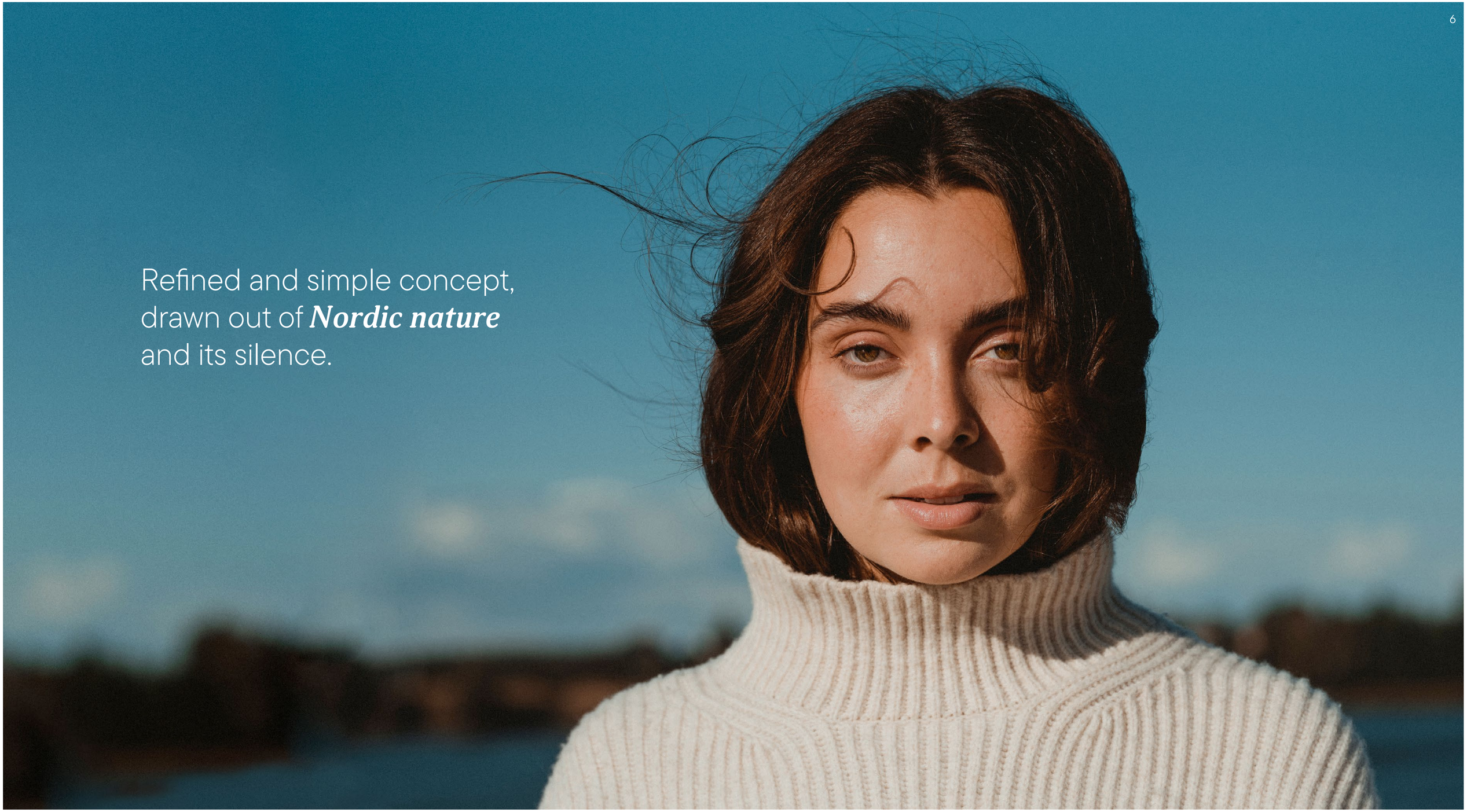

Refined and simple concept,
drawn out of ***Nordic nature***
and its silence.

Certified Materials, ***Responsible*** Sourcing

The journey towards creating a natural workspace continues with careful material selection. Taiga is committed to using the highest percentage of renewable materials. All of our wooden elements are sourced from FSC-certified suppliers, meaning you can trust that our products are created without compromising the environment. Our philosophy of stewardship extends to all of our materials, including our carpet (made from 100% recycled nylon) and our upholstery fabric, which is made from 98% post-consumer recycled polyester. We ensure that the materials we utilize are safe and sustainable, backed by the appropriate certification to demonstrate their quality and safety standards.*

Material Certificates

Laminate	UL Greenguard Gold
MDF	ASTM E1333-14
Plywood	FSC 100%; FSC Mix Credit; FSC Controlled Wood
Carpet	Emission class M1 for building materials
Fabric	Ansi/Bifma m7.1-2011 (2016)
Isover Foam	Emission class M1 for building materials
Ewona Foam	Emission class M1 for building materials
Electrical	CE Declaration of Conformity, RoHS certificates

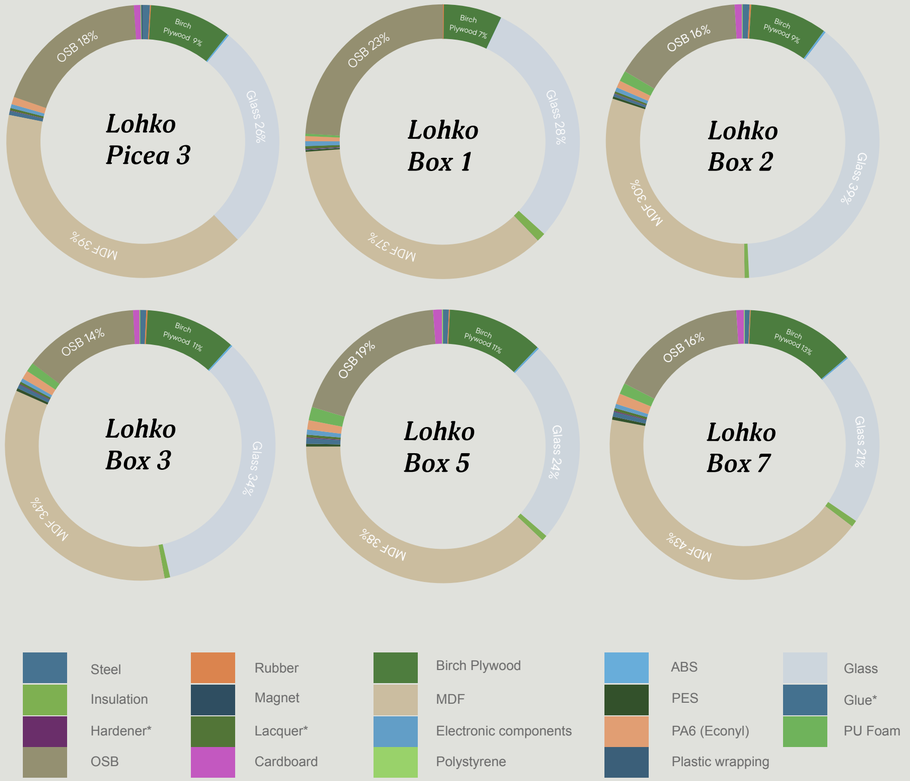
*For more information on certificates, contact us at info@taigaconcept.fi

Materials

Raw Materials
Mass (kg) product and packaging

	LB1	*LB 2*	*LB 3*	*LB 5*	*LB 7*	*Picea 3*
Material	Mass (kg) Product + Packaging					
Total mass (BoM)	307 + 94	569 + 110	652+ 110	859 + 220	1036+ 220	588+ 139
Product Materials						
MDF	134,25	201,5	258,7	409,29	535,9	285,32
Glass	110,6	259,08	259,08	259,08	259,08	190,36
Birch Plywood	25,5	60,76	81	122,14	163,08	68,38
PU Foam	1,1	8,34	8,34	17,08	16,68	131,7
PA6 (Econyl)	2,19	5,69	7,74	11,85	16	6,4
Steel	5	5,33	5,4	7,47	7,77	5,85
Insulation	3,9	3,49	4,9	7,24	9,83	0
Electronic components	2,15	3,25	3,25	6,45	6,45	3,25
Glue*	0,23	2,1	3,55	7,17	7,22	3,49
PES	0,73	1,82	2,48	3,53	4,72	0,003
Lacquer*	1,2	1,69	2,2	3,31	4,41	2,04
ABS	0,12	1,64	1,64	2,34	2,34	1,64
Rubber	0,63	1,33	1,33	1,33	1,33	0,99
Hardener*	0,311	0,4	0,69	1,02	1,36	0,4
Magnet	0,05	0,05	0,05	0,05	0,05	0,05
Packaging materials						
OSB	89,6	103,5	103,5	207	207	131,7
Cardboard	3	5,6	5,6	11,2	11,2	5,6
Polystyrene	1	0,69	0,69	1,38	1,18	0,69
Plastic wrapping	0	0	0	0	0	1,3

Material division
% of product



Manufactured with ***100% Renewable*** Energy

Taiga workspaces are manufactured in Northern Europe. By choosing environmentally conscious partners, we have been able to significantly reduce the impact of our production on the environment.

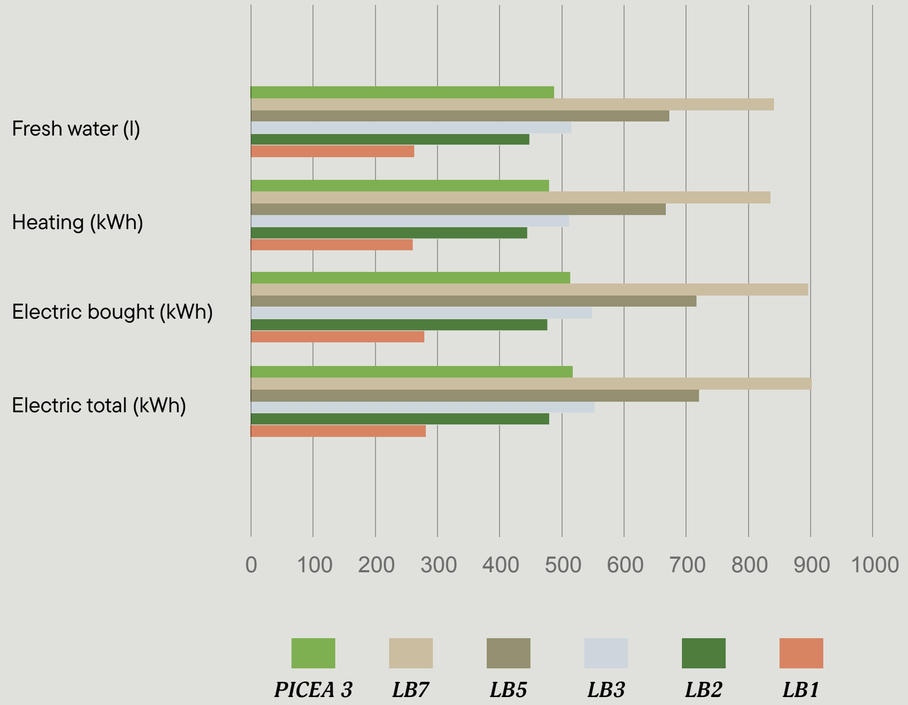
We have chosen our main manufacturer based on our shared approach and values when it comes to the environment. They ensure power is sourced from renewable sources, holding a certification* showing their electricity is purchased from solar farms. This is supplemented by their own roof-top solar panel system. This electricity powers the core processes of our manufacturing. Our main manufacturer receives raw materials and forms them into our unique ‘sandwich’ structure. Compiled elements are then shaped into their final forms by a CNC machine. Sanding, painting, and varnishing processes follow, using only non-toxic materials in controlled environments. All the tools and machinery used in the process draw their power from the 100% renewable energy. As such, manufacturing has a very small impact on our carbon footprint.

*For more information on certificates, contact us at info@taigaconcept.fi

The use of water and electricity by manufacturing process

	LB 1	*LB 2*	*LB 3*	*LB 5*	*LB 7*	*Picea 3*
Consumption per product						
Electric total (kWh)	281	481	553	721	902	517
Electric own solar panel (kWh)	2	3.4	4	5.1	6.4	3.7
Electric bought (kWh)	279	477	549	716	896	513
Heating (kWh)	260	445	512	667	835	479
Diesel (l)	0.2	0.3	0.34	0.52	0.56	0.4
Fresh Water (l)	262	448	516	672	841	488
Distilled Water (l)	0.3	0.4	0.5	0.7	0.8	0.47

Electricity 100% renewable




Designed in ***Finland***
Made-to-Order in
Northern Europe

Distribution
Minimizing Travel & Emissions

We closely monitor the length of our supply chain and strive to keep it as short as possible, focusing on suppliers in close proximity of our main manufacturer.

The distances in our supply chain are kept as short as possible - from the sourcing of raw materials to shipping the products to our clients. With a highly localized supply chain - we aim for an efficient supply chain, to try to minimize both emissions from transportation, and provide appropriate delivery times for our made-to-order workspaces. The products, including all the components, are gathered at our main manufacturer. From there, they are shipped to the client using the most suitable method of transportation.

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Transporation

A2: Transportation of A1 raw material

	LB 1	*LB 2*	*LB 3*	*LB 5*	*LB 7*	*Picea 3*
Total lorry payload-distance (kgkm)	460 617	854 287	1 023 600	1 380 353	1 745 150	879 782

Based on annual orders 10/2022-10/2023

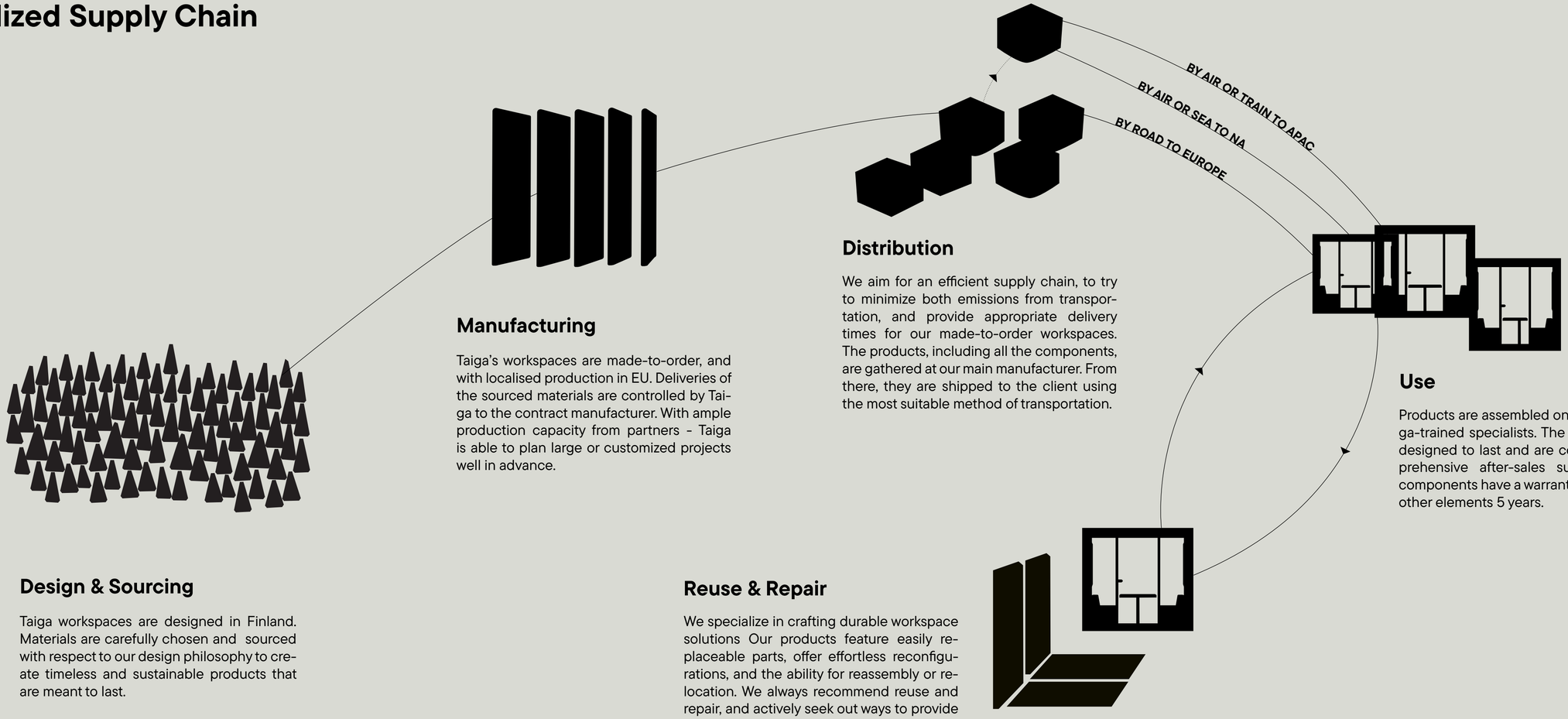
A4: Transport to supplier

	LB 1	*LB 2*	*LB 3*	*LB 5*	*LB 7*	*Picea 3*
Average payload-distance* (kgkm)	708 415	1 206 750	1 355 980	1 918 897	2 233 435	1 292 983

Based on annual deliveries 10/2022-10/2023

* (Including packaging materials)

Localized Supply Chain



Design & Sourcing

Taiga workspaces are designed in Finland. Materials are carefully chosen and sourced with respect to our design philosophy to create timeless and sustainable products that are meant to last.

Taiga chooses partners that share these values, and has controlled contracts for all main materials.

Manufacturing

Taiga's workspaces are made-to-order, and with localised production in EU. Deliveries of the sourced materials are controlled by Taiga to the contract manufacturer. With ample production capacity from partners - Taiga is able to plan large or customized projects well in advance.

Distribution

We aim for an efficient supply chain, to try to minimize both emissions from transportation, and provide appropriate delivery times for our made-to-order workspaces. The products, including all the components, are gathered at our main manufacturer. From there, they are shipped to the client using the most suitable method of transportation.

Use

Products are assembled on location by Taiga-trained specialists. The workspaces are designed to last and are covered by comprehensive after-sales support. Electric components have a warranty of 2 years, and other elements 5 years.

Reuse & Repair

We specialize in crafting durable workspace solutions Our products feature easily replaceable parts, offer effortless reconfigurations, and the ability for reassembly or relocation. We always recommend reuse and repair, and actively seek out ways to provide the best support for these efforts.

Assembled on location
by ***Taiga-trained*** specialists.

Using *Taiga* Workspaces

The flexibility inherent to Taiga's modular workspaces not only fosters adaptability but also contributes to a sustainable approach to office design. The products are designed to facilitate reconfiguration and reassembly, meaning we can reduce the need for traditional renovation, and promote a more circular approach.

Taiga products are assembled on location by Taiga-trained specialists. Workspaces have a long life span, estimated to be over 15 years.

Products are covered by warranty, and comprehensive after-sales support - and we are constantly assessing and developing processess to extend the life of our products.

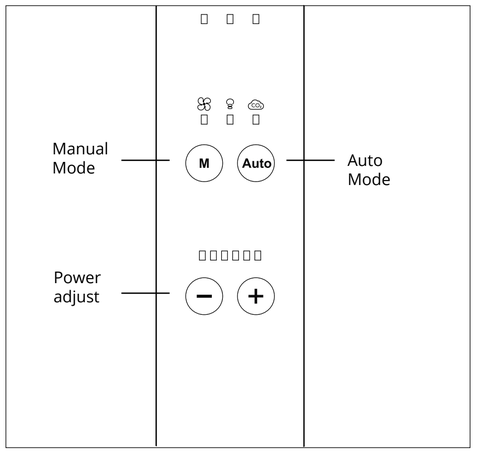
Warranty

5 year - Glass and elements
2 years - Electrical components

Energy-efficient Functionalities

Our goal is to maximize the energy efficiency of our products. The motion sensor feature ensures efficient power management over the lifespan of our products. Unoccupied booths will automatically revert to standby mode when no activity is detected.

The workspaces on default, are on automatic mode - optimizing lights and ventilation. Users can also opt for a manual mode, which gives freedom in manually adjusting the functionalities.



Energy Consumption

Since Taiga's inception in 2015, we've provided workspaces to offices worldwide that remain actively in use today, with none reaching end-of-life status. Our energy consumption data is based on our consultants' conservative lifespan estimate of 15 years, a standard lifespan for furniture in public spaces. However, we are confident that Taiga products have the potential to exceed this projection.

The electricity usage of Taiga's workspaces are modelled using a balanced approach. We estimated that the light would be on eight hours a day, five days a week, for the products fifteen-year lifetime. We also estimated the power consumption of the fan, using 8 hours on low, 8 hours on medium and 8 hours on high for the model. The fan was presumed to be operating 24/7 for the product's lifetime. We also included an estimate for the power used to clean the products, as this is the only maintenance they require during their lifetimes. It's important to note that this estimate is a major variable affecting the energy consumption data of the workspaces and operational energy consumption will vary based on use patterns.

Energy Consumption (kWh)

	LB 1	*LB 2*	*LB 3*	*LB 5*	*LB 7*	*Picea 3*
Use (15 years)						
Operational Energy	683	2276	2276	4552	4552	683
Lighting active for 8 hours,						
5 days a week						
Operational Energy	2102	2102	2102	2102	2102	2102
Ventilation active 24/7 at three levels.						
8h on low, 8h on medium, 8h on high						
Maintenance	The maintenance of the product includes and estimation of regular cleaning (vacuuming), which contributes to minimal energy consumption, around 3.03 kWh for each product during a 15 years lifespan.					
Cleaning (vacuuming)						

Reuse & Repair
Extending the life of our workspaces

Modular by design, Taiga workspaces are moveable and repairable. Many moving parts are easy to replace - extending the life of our products. Timeless design and carefully considered functionality further ensures the usability of our products far in to the future - providing a platform for unique needs and rapidly developing technology.

Taiga workspaces don't just have one life, but they can serve various purposes and spaces during their life time. We are experienced in relocating products from one place to another, and together with our partnership network, we aim to ensure that our workspaces find a new place in case of a relocation.

Our high-quality workspaces hold their value, and are sometimes sold on secondary markets. While developing our maintenance services, we are also looking into ways to further increase the circularity of our products.


Made to last – reusable and repairable
modular solutions with a long lifespan.

Carbon
Footprint

The results from the Life Cycle Assessment we have conducted give us both reasons to be proud and ambitious. The numbers indicate that we are among the industry leaders in product sustainability. Though we are pleased to see our commitment to nature reflected in our numbers, we know that there is always room to improve.

The main contributors to our upstream, or pre-manufacturing emissions are the production of MDF and glass, and the transport required to bring the raw materials to our main partner. We can do more to reduce the footprint from transport to our partners and improve the end-of-life processes for our product. By focusing on circular economic principles we could see a reduction in our lifecycle emissions.

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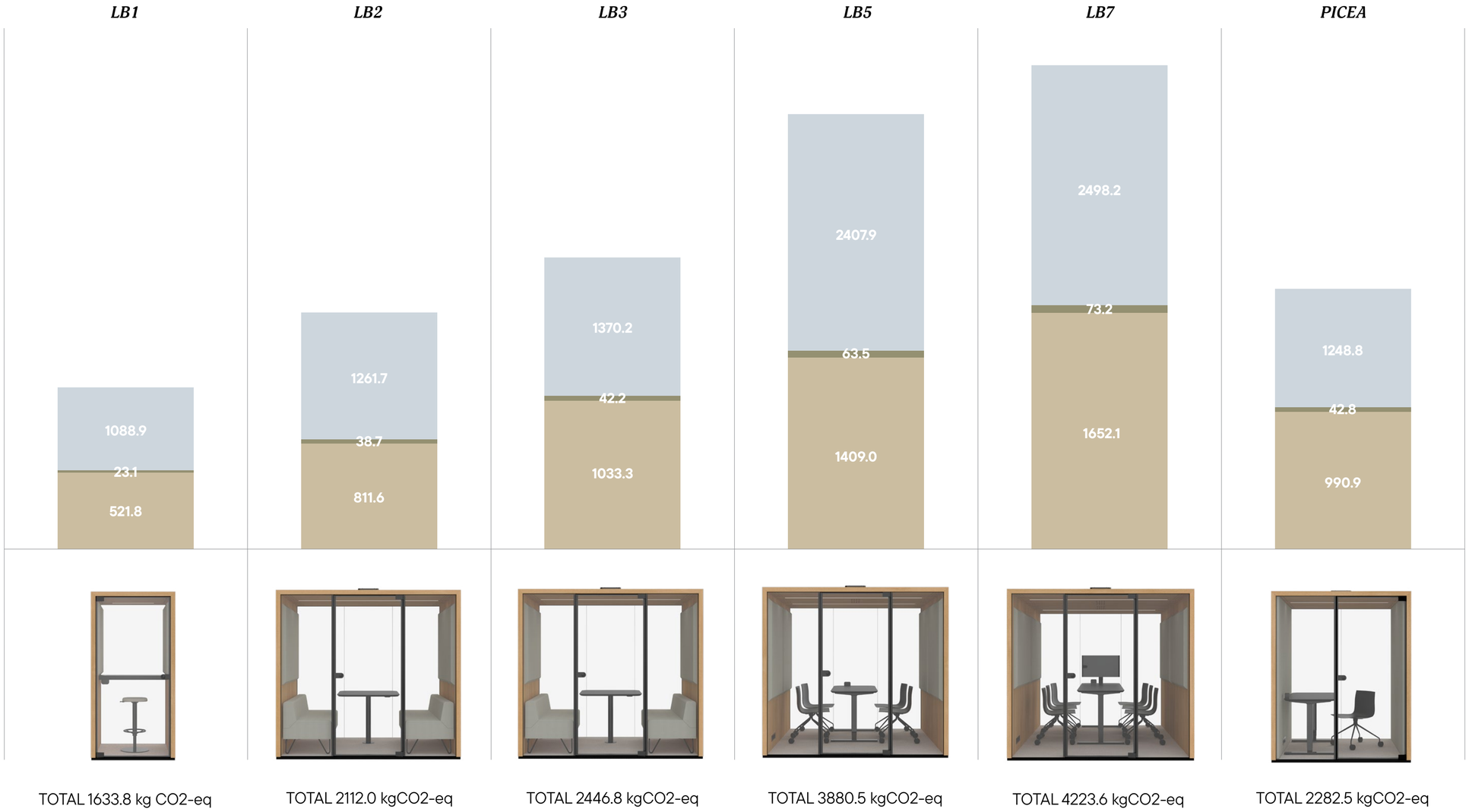
Carbon Footprint

Upstream, Core and Downstream CO2-eq emissions



*Results calculated using the IPCC 2021 GWP100 Methodology

*Carbon footprint data excludes furniture except LB1 table

TOTAL 1633.8 kg CO2-eq

TOTAL 2112.0 kgCO2-eq

TOTAL 2446.8 kgCO2-eq

TOTAL 3880.5 kgCO2-eq

TOTAL 4223.6 kgCO2-eq

TOTAL 2282.5 kgCO2-eq

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Taiga's ***Lifecycle*** Assessment

Conducting a Life Cycle Assessment (LCA) was a reflective progress for Taiga. It started with analysing our purchased materials, down to the smallest elements, to get a clear cross section of our products. Then we investigated our supply chain, totalling up the kilometres that our materials have to travel to become a Lohko Box. Manufacturing and internal logistics emissions were the next to be calculated, along with our shipping to our customers. The LCA goes on to consider the energy consumption of our product during its use phase and the emissions that would be generated, were that product to be wasted at the end of its 15-year life span.

To calculate the predictive data, our consultants used electricity and waste data from the Ecoinvent database, with additional data from the European Union, as well as SimaPro, one of the leading LCA tools. Interpretation of the data used showed us that it was overall good. The thorough interpretation gives us confidence that the results delivered are a true representation of our products' impact on the environment.

Reference:
LCA Box and Picea Series
By Comatec Ruth Keisala and Aleksi Surakka 20.12.2023