

tvilum



ESG 2023  
ENVIRONMENTAL  
SOCIAL  
GOVERNANCE

# CONTENTS

- Ergonomics in Focus at Tvilum..... 4
- Commitment to Community & Safety..... 8
- Packaging Innovation for A Greener Future .... 10
- Transition to District Heating..... 12
- ESG Data..... 14
- Our Responsibility..... 16
- Reporting Principles..... 17



	2021	2022	2023
Number of employees	<b>895</b>	<b>847</b>	<b>628</b>

No. of packages produced annually in 2023

# 4.8 million boxes of furniture



**tvilum**

Version 1.0  
Published by:

**Tvilum A/S**  
Egon Kristiansens Allé 2  
8882 Faarvang  
Denmark

Phone +45 87 57 36 00

E-mail [tvilum@tvilum.com](mailto:tvilum@tvilum.com)

©2024 Tvilum A/S - All rights reserved

### Our sales OFFICES

- Denmark
- Norway
- Finland
- UK
- France
- Germany
- Italy
- Spain
- US
- Chile

### Our production FACILITIES

- Faarvang (Denmark)
- Kjellerup (Denmark)
- Szczecinek (Poland)

### Our distribution CENTERS

- Faarvang (Denmark)
- Szczecinek (Poland)
- Clarksville (US)
- Los Angeles (US)
- Toronto (Canada)



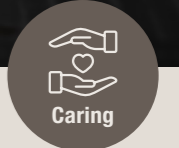
# ERGONOMICS IN FOCUS AT TVILUM

**At Tvilum, the establishment of an Ergonomics Committee under our AMU (Working Environment Committee) underlines our commitment to enhancing workplace safety and employee well-being.**

Recognizing the potential ergonomic challenges inherent in our manufacturing processes, particularly those involving lifting and handling components, this committee aims to foster an environment where ergonomics is prioritized. The primary objective is to cultivate knowledge and routines that support better ergonomic practices.

## Status

The initial focus of the ergonomics group has been on training and visualization techniques to demonstrate optimal work practices. Two ergonomics ambassadors have been trained externally to elevate awareness and focus on ergonomics within the company. Their training covered how the human body functions and the effects of repetitive movements on the body, grounded in Danish work environment legislation.



## Ergonomics Ambassadors

The ergonomics ambassadors play a crucial role in:

### Onboarding New Employees

Primarily on the packaging lines where ergonomic focus is vital. Ambassadors act as buddies to new employees, guiding them through ergonomic best practices and encouraging long-term adherence to these routines.

### Refreshing Experienced Operators

By observing daily operations, ambassadors remind colleagues of good ergonomic practices that may have been overlooked, helping to prevent long-term negative impacts.

### Handling Ergonomics-related Occupational Injuries

Ambassadors are involved in investigating ergonomics-related injuries, providing input for corrective and preventive actions.



**Current Focus of the Ergonomics Group**

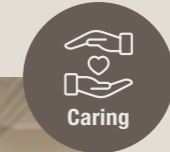
Recently, the group has concentrated on addressing heavy lifting challenges in "the middle" section of the packing department at our East factory in Faarvang.

**"The Middle" Section**

This area is designated for managing excess packaging materials and pallets from two parallel packing lines. Two employees are tasked with sorting and clearing this area, involving significant lifting and handling.

**Ergonomics Group's Efforts**

To address the challenges in "the middle," the ergonomics group conducted interviews with the employees working in this area. This process yielded valuable insights into the health impacts and led to the development of a proposal catalog for ergonomic improvements. The proposals have been presented to managers, and a project plan has been established to implement these measures, with ongoing follow-ups to ensure timely and effective implementation.



**EXAMPLES OF CHALLENGES AND PROPOSED SOLUTIONS**

**Changing the Workflow:**

Adjusting processes to prevent items from accumulating in "the middle."

**Mechanical aid for heavy lifts:**

- Introducing equipment to handling pallets
- Utilizing vacuum technology to reduce manual lifting of protective panels

Through these initiatives, Tvilum aims to create a safer, and more ergonomic workplace, ultimately enhancing employee health and productivity.



Trust  
worthy

# COMMITMENT TO COMMUNITY & SAFETY

**In the spirit of community engagement and safety, our colleague Lasse Soelberg made a significant decision last year — to join the local fire station in Faarvang as a part-time employee.**

Lasse's choice exemplifies Tvilum's broader commitment to supporting local initiatives and fostering a safer environment for everyone.

#### **Motivation Behind the Decision**

When asked about his decision, Lasse expressed a desire to become an integral part of the fire station community, which comprises a diverse mix of individuals spanning various ages and experiences. "We share a strong camaraderie, both on and off duty. The unwavering support from Tvilum encouraged me to fully embrace the role of a firefighter. Moreover, the knowledge and skills I've acquired in fire safety are invaluable assets that I can leverage in my work at Tvilum," shares Lasse.

#### **Integration of Work Responsibilities**

Tvilum has implemented a policy allowing employees to respond to fire alarms during working hours. This proactive measure aims to bolster the local emergency response team and ensure the safety of the surrounding community where our workplace is situated. Lasse has exemplified this

commitment, actively participating in 11 emergency responses over the past 12 months. Each time, he has fearlessly boarded the fire truck, driven by the goal of making a positive impact in emergency situations.

#### **A Commitment to Safety and Support**

Lasse's journey exemplifies the personal growth and community involvement encouraged and celebrated at Tvilum. Beyond individual endeavors, it underlines our company's dedication to supporting local emergency services and fostering a safer environment for everyone. By nurturing a culture of responsibility and proactive engagement, Tvilum continues to play a vital role in safeguarding the well-being of our communities.

Lasse's story serves as a testament to the profound impact that individuals can make when driven by a shared commitment to safety and community welfare. As we strive for excellence in all aspects of our operations, let us draw inspiration from Lasse's example and continue to actively contribute to the betterment of our communities.





# PACKAGING INNOVATION FOR A GREENER FUTURE

**In our 2021 ESG report, we addressed a critical challenge in our packaging strategies in the article “Handling Opposing Needs in Packaging Development.”**

This challenge revolves around balancing the demands of e-commerce, which often requires larger and more material-intensive packaging, with the need to reduce packaging size and materials to enhance sustainability.

### Transition to Paper-Based Packaging

Since 2021, Tvilum has consistently worked towards a more environmentally responsible packaging strategy by transitioning from expanded polystyrene (EPS) to paper-based packaging protection. This decision underlines our commitment to reducing our ecological footprint while ensuring the protection of our products during transit.

### Honeycomb Material

The paper-based material we have selected is honeycomb, which effectively replaces EPS. EPS, known for its excellent protective qualities, is a fossil-based material that poses environmental risks if not properly recycled.

In contrast, honeycomb offers a more environmentally friendly solution. Made from paper, a renewable resource, honeycomb can be recycled similarly to cardboard. This makes honeycomb a more eco-friendly option that aligns with our goals of reducing our environmental impact and promoting responsible resource use.

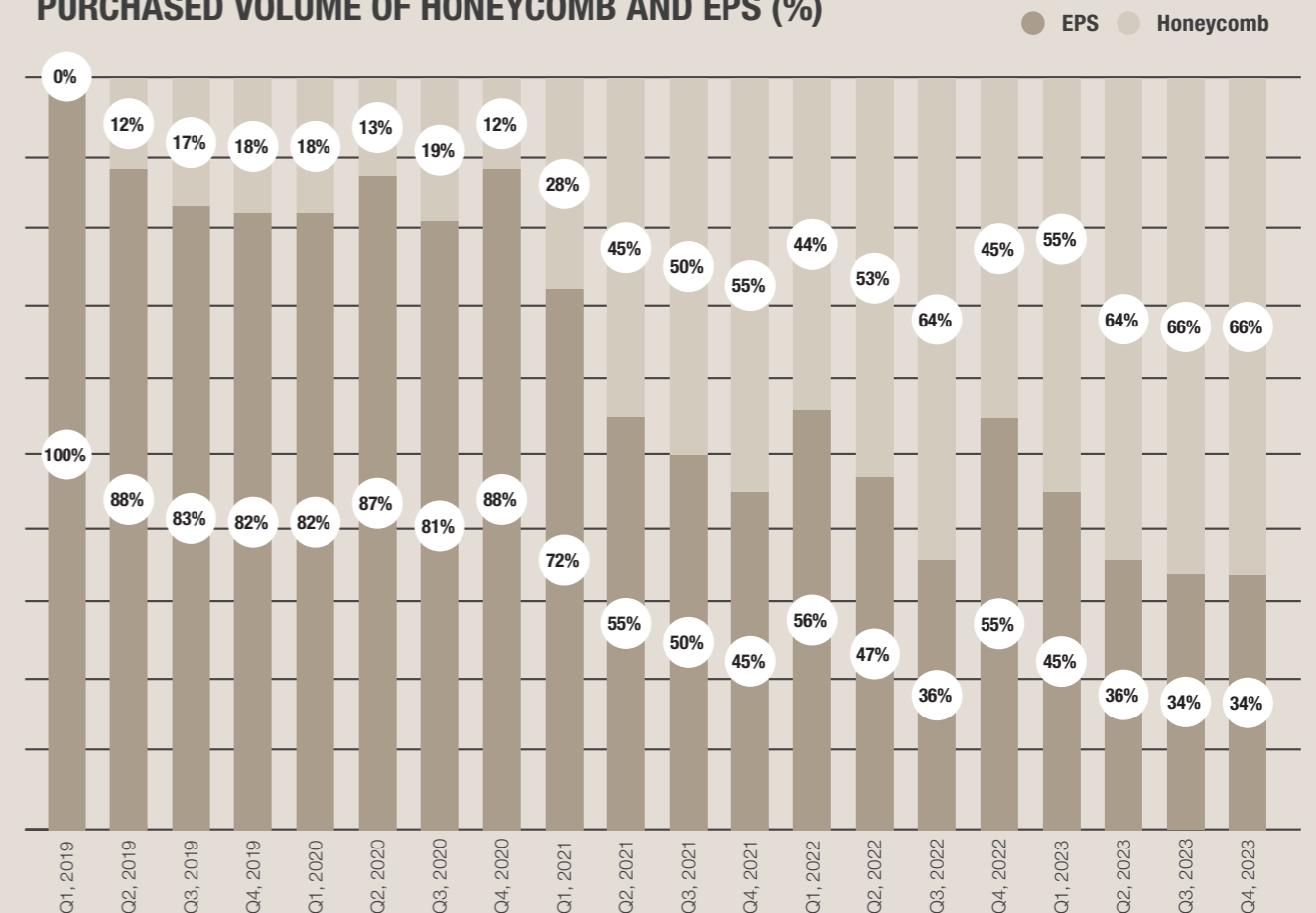
### Phasing Out EPS

The figure below illustrates our ongoing efforts and progress in phasing out EPS in favor of honeycomb year by year. This transition enhances the recyclability of our packaging materials and demonstrates our commitment to adopting environmentally responsible practices in every aspect of our operations.

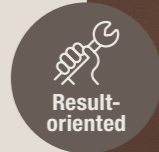
By continuously replacing EPS with honeycomb, Tvilum is taking significant steps towards achieving a greener future. This initiative not only meets the evolving needs of our customers but also reduces the environmental impact of our packaging processes.

Tvilum's transition to honeycomb packaging material represents a major milestone in our environmental, social, and governance (ESG) strategy. By eliminating EPS and adopting a more environmentally responsible packaging solution, we are actively contributing to a greener future. This effort aligns with our environmental goals.

**PURCHASED VOLUME OF HONEYCOMB AND EPS (%)**



# TRANSITION TO DISTRICT HEATING



**Tvilum operates several locations in Central Jutland, Denmark. Historically, acquired locations have relied on oil burners for heating, contributing significantly to our CO<sub>2</sub>e emissions.**

Unlike our main furniture production facilities, which use wood chips from leftover production for heating, acquired locations did not initially adopt such environmentally friendly practices.

### Action Taken in 2022

In 2022, Tvilum took a decisive step towards environmental responsibility by connecting these locations to municipal district heating. This initiative is a crucial part of our strategy to reduce our environmental impact.

### Elimination of Oil Burners

The transition from oil burners to municipal district heating has been a significant success. By eliminating the use of oil burners, we have effectively removed approximately 100 tons of CO<sub>2</sub>e from our Scope 1 emissions.

### Integration of Municipal District Heating

While the adoption of municipal district heating has introduced 30 tons of CO<sub>2</sub>e to our Scope 2 emissions, the overall environmental impact remains positive.

### Annual CO<sub>2</sub>e Savings

This initiative has led to net annual CO<sub>2</sub>e savings of up to 70 tons. This reduction underlines our commitment to eco-friendly practices and our ongoing efforts to minimize our carbon footprint.

### Conclusion

Tvilum's transition to municipal district heating in Central Jutland represents a major milestone in our Environmental, Social, and Governance (ESG) strategy. By eliminating oil burners and reducing our overall CO<sub>2</sub>e emissions, we are actively contributing to a more sustainable future. This effort aligns with our environmental goals.

## CO<sub>2</sub>e

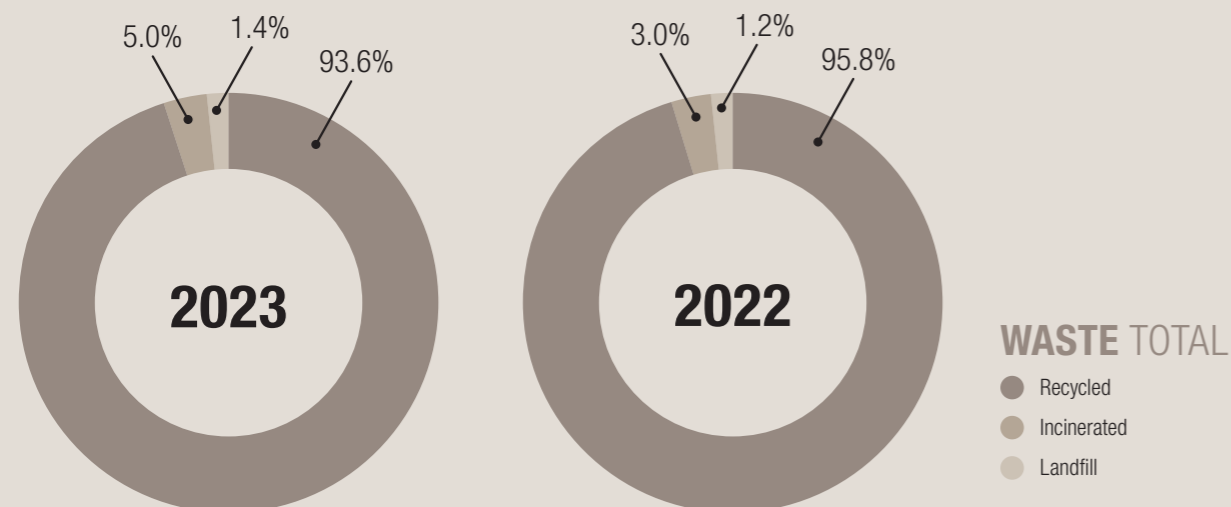
**CO<sub>2</sub>e (Carbon Dioxide Equivalent):** Measures total greenhouse gas emissions, expressed as the equivalent amount of carbon dioxide, including gases like methane and nitrous oxide.

**CO<sub>2</sub> (Carbon Dioxide):** Measures only carbon dioxide emissions.

**Key Difference:** CO<sub>2</sub>e includes all greenhouse gases, while CO<sub>2</sub> focuses solely on carbon dioxide.

### ENVIRONMENTAL DATA

	2022	2023	Commentary 2023
<b>Scope 1 CO<sub>2</sub>e emission (tonnes)</b>	383.29	219.81	The CO <sub>2</sub> e emission in 2023 dropped further. It was driven by different initiatives like change to district heating, which contributes heavily to the reduction. But also the changeover to electric vehicles added to the drop.
<b>Scope 2 CO<sub>2</sub>e emission (tonnes)</b> - Location based - Market based	4.524.1 9.152.7	3.876.1 7.226.1	This is a result of increased district heating and reduced electricity consumption.
<b>CO<sub>2</sub>e emission from waste generated in own operations (scope 3, cat.5)</b>	352.3	351.8	Closure of production site has affected the figures for 2023 negatively, where normal operations have been reduced.
<b>Electricity consumption (MWh)</b>	19.272.7	14.582.6	The yield of electricity to produce one pcs. of furniture was reduced as well as general lower activity level.
<b>% of kWh consumption under ISO 50001 certification</b>	99.1	99.1	International sales offices and warehouses remain to be certified.
<b>kWh power usage per colli</b>	3.2	2.8	The site that had significantly higher avg. Kwh/kolli was closed during 2023 and the remaining sites ran more efficiently.
<b>% of total spend on wood that is FSC/PEFC certified</b>	90.4	90.8	During 2023, several Polish State forests stopped their FSC certification which forced a shift to PEFC certified sources from some vendors. The total share of certified CoC was slightly increased.
<b>% of total spend on packaging materials that is FSC certified</b>	67.4	72.8	The share of FSC certified packaging materials kept increasing. See more on our shift from EPS to Honeycomb in related article.



### SOCIAL DATA

	2022	2023	Commentary 2023
<b>Number of employees (FTE)</b>	847	628	The reduction of workforce is a result of optimizations and reduced activity level.
<b>Number of work related accidents with lost time</b>	32	10	The decrease in the number of accidents and thus the number of absentee days, is the result of increased focus on safety.
<b>Number of days off due to work-related accidents</b>	274	101	
<b>Number of near-misses reported</b>	368	212	
<b>Number of observations reported</b>	949	984	
<b>Employee turnover ratio %</b>	20	32.3	Increase due to reduced activity level and optimizations.
<b>Sickness absence % (only Faarvang and Kjellerup East)</b>	4.86	4,9	
<b>% of employees being performance assessed</b>	97	99	Performance assessment is introduced on all sites - not all shifts have been assessed by end of 2023.
<b>Women in board of directors %</b>	0 of 5	0 of 4	
<b>Women in senior management %</b>	2 of 7	3 of 7	

### GOVERNANCE DATA

	2022	2023	Commentary 2023
<b>Number of fees and fines imposed to any part of Tvilum Group whether paid or not</b>	0	0	
<b>Value in DKK of fees and fines imposed on Tvilum whether paid or not</b>	0	0	
<b>% of employees being trained in Tvilum Whistleblower scheme</b>	100	100	
<b>Number of written complaints received</b>	1	0	





**Policies**

At Tvilum, our policy is to conduct all business activities responsibly, ensuring people’s health, safety, and well-being, preservation of the environment, and quality of our products and services. Our ethical business practices are an integral part of our corporate culture.

**Human rights**

Our company strives to ensure that all suppliers comply with the obligation they received and signed when becoming suppliers to Tvilum. As we consider the most significant risk for breaches of human rights to be within the supply chain, the importance of the Code of Conduct is continuously stressed in dialogues with suppliers.

**Labor**

We believe that workplace safety, well-being and employment discrimination represent the main areas of labor-related risk that we need to manage in our operations. Thus, these two areas are where we pay the most attention to safety measures, personnel policies, and close dialogue between management and employees.

**Environment**

At Tvilum, we use energy to turn wood into furniture that leaves back residual waste. All resources are critical for a sustainable environment. We consider the key environmental risks to be external. Hence our company is continuously monitoring changes in the external environment to the best of its abilities. To set up operational guidance within the areas, we have implemented policies regarding energy consumption, waste and a purchasing policy for wood and wood-based products.

**Anti-corruption**

Sourcing is the activity where corruption is the most reoccurring risk. Therefore, the topic is stressed in the Supplier Code of Conduct, and when we perform supplier evaluation, risk of corruption is one of the criteria applied. Internally, towards our employees, our stance towards corruption is expressed in the employee handbook, and employees have the opportunity to report cases anonymously to management or a third party without the risk of repercussions.

**Gender representation**

The current status of gender representation is seen in the ESG data pages. Our target is to have a 33% mixed-gender representation in the board by 2028.

**Governing ESG**

Our ESG efforts are signed off and approved by the Tvilum Supervisory Board. The strategic prioritization, ESG policies, investments and resource allocation, and KPI follow-up are coordinated by our ESG board.

**Scope**

This report covers the reporting period of January 1st to December 31st 2023.

**Boundaries**

This report covers all majority owned subsidiaries i.e. companies, that Tvilum Group directly or indirectly have owned and controlled more than 50 % of the voting rights or that it otherwise controlled during the entire reporting period:

These companies are included:

- Tvilum A/S
- Tvilum LLC warehouse
- Tvilum Poland Sp. Z o.o.

**Materiality assessment**

Our ESG strategy is based on a materiality assessment conducted in 2020, based on internal and external data and stakeholders. The graphical overview of the outcome can be found on [www.tvilum.com](http://www.tvilum.com)

**METHODOLOGY**

Indicator	Factor	Comment	Reference	Publication
Scope 1 emissions	Fossil and biomass fuels Refrigerants Biomass		UK Department for Environment, Food and Rural Affairs (DEFRA), 2023	UK government GHG conversion factors for company reporting
Scope 2 emissions	Carbon emissions from power purchased	In Denmark	Energinet DK, 2022	General deklaration og Miljødeklaration (Generic declaration and environmental declaration)
Scope 2 emissions	Carbon emissions from power purchased	In Poland	Association of issuing bodies (AIB), 2022	European Residual Mixes
Scope 2 emissions	Carbon emissions from power purchased	In USA	U.S. Environmental Protection Agency	eGrid
Scope 3 emissions	Carbon emissions from waste generated in own operations	All countries	UK Department for Environment, Food and Rural Affairs (DEFRA), 2023	UK government GHG conversion factors for company reporting

# tvilum

**Tvilum A/S**

Egon Kristiansens Allé 2  
8882 Faarvang  
Denmark

Phone +45 8757 3600

E-mail [tvilum@tvilum.com](mailto:tvilum@tvilum.com)

[www.tvilum.com](http://www.tvilum.com)



**MADE IN DENMARK**



**MADE IN DENMARK**