Sustainability at Dematic
Behind every solution is a promise

or more than two centuries, Dematic has been at the forefront of innovation for our customers. With “firsts” at every iteration of the industrial revolution, we have developed the technologies that have defined the material handling industry — always looking ahead to try to solve tomorrow’s problems by imagining their solutions today.

When it comes to sustainability, the future of our planet depends on the actions all of us take. Dematic, along with our fellow KION Group brands, is making significant continuous improvements to our products, bringing corporate citizenship to the forefront of our people strategy, and working to ensure a healthy planet for future generations.

When we develop Dematic’s work culture, we prioritize our people’s safety, well-being, personal and professional development, and provide productive employment and decent work for all.

When we develop Dematic’s communities through our outreach efforts and volunteerism, we build networks of social engagement that contribute to a future that is inclusive, safe, resilient and sustainable.

Through engagement with Dematic’s customers, suppliers, team members, and other stakeholders, we contribute to the UN’s 2030 Agenda for Sustainable Development for a peaceful and prosperous society and planet.

Together, we power the future of commerce... sustainably.

by HASAN DANDASHLY
President, Dematic
KION Group Executive Board Member

When we develop Dematic products, we deploy design and engineering expertise to create more value for our customers with less waste and energy consumption.
Our unwavering commitment to integrity and compliance

Dematic is a global business, with employees, suppliers, customers, offices and sites around the world. To meet our compliance objectives, we communicate our approach to business ethics clearly and consistently. This proactive approach is led by KION Group, our parent company, and is based on prevention, detection and response.

Our work is extensive: our compliance team – mostly trained volunteers – helps to identify potential risks and encourages a culture of openness across the company. Compliance training is nearly 100% at the leadership level. This means that we can identify risks early at our sites and take action before problems arise.

We review compliance case studies to understand what can go wrong and we regularly communicate our compliance mission internally so everyone at Dematic understands how important accountability and integrity are to every part of our business.
Deploying design and engineering expertise to offer solutions that do more with less
Conveying our commitment

An engineering company at heart, Dematic’s daily work is to find efficiencies and develop the best solutions for our customers. Part of our commitment to sustainable development is to try to find answers to the question: how can our products offer customers improved efficiencies?

Here are just three of the solutions we came up with this year.

01 Revved up
Case and Package Conveyors is one of our core product lines – it operates via electric motors that consume a lot of power.

The question was: Can we lower the power utilization of this product and lifetime operating cost for our customers while having a positive environmental impact?

The answer is “yes.” We achieved 15% savings in power usage, thanks to leveraging novel technologies and tireless laboratory testing. The result was a new product line, released in 2020.

02 Pallefficiency
Next we examined our Unit-Load product family, which handles pallet-sized loads and asked ourselves the same questions about how we could maximize energy efficiency. Again, our engineers and technology partners were able to achieve a remarkable actual performance gain of 40% increased efficiency.

40% increased efficiency

Every new product development is thoughtfully designed to protect users, reduce materials, and minimize energy usage for the application. Examples include smarter software to reduce packing materials and large-scale systems that reduce building footprint requirements by up to 30%.

John Mart
Vice President, Product Management

03 Shhh... We’re working over here
Safe noise levels are an increasingly important factor in workplace health and safety, which is a top priority at Dematic.

As part of our sustainable product innovation efforts we have generated an equipment roadmap for key customers to identify products that meet or exceed our 70 A-weighted decibels (dBA) target noise level. For these product lines, we are developing several noise abatement initiatives, including:

→ Targets on several pieces of equipment for noise reduction technology
→ Noise abatement roadmaps generated for Amazon and Walmart
→ The 9365 Non-Contact Conveyor, which operates below 70 dBA
→ Improved quiet roller technology that will be integrated into new and retrofit applications
→ 3D noise-mapping to provide noise visualization
→ Quiet totes that reduce noise by up to 6 dBA on site
Like most engineering-driven businesses, our traditional focus has been on increasing product performance while simultaneously lowering costs. And now, our alignment with sustainable development means that energy efficiency is our standout priority. We believe these factors will have a significant influence on progressive intralogistics and inventive material handling.

Here are just four of the actions we’ve taken on this journey over the past year.

01 Smarter software

We’re creating more intelligent software to increase energy efficiency.

We are in the midst of advancing a new interface design for our automation systems to enable upstream controllers to manage energy efficiency. It’s currently in the development stage, but showing great potential in automating energy efficiency within our products.

02 Lighter equipment

We are investigating ways to reduce weight in our products.

An increasing number of the products we design and build are mobile — like Automated Guided Vehicles and Robotic Systems — so finding ways to reduce their operational weight is one way to increase power efficiency. We are investigating ways to reduce the weight of our products in order to save energy.

03 Automatic sleep mode

Finding ways to save energy when it’s not needed.

When products like the Dematic Multishuttle® are idle between orders we want to ensure they’re not wasting energy, even if just for a brief moment. We’re continuously improving the automatic sleep modes that shut off power consumption until their service is required.

04 Reusing brake energy

Engineering improved power solutions into our product lines.

Dematic’s Storage and Retrieval Machines (SRMs), which consist of a stacker crane with telescopic fork, can weigh anywhere between 1.5 and 5.0 tons depending on whether they are handling cartons, totes or entire pallets. When they decelerate, we can use the motors to act as electrical generators that can be transferred to adjacent aisles where another crane consumes the energy as it accelerates.
Reducing our footprint

Reducing our impact on the environment is central to our sustainable product development efforts. We listen to our customers to ensure we leave a healthy planet for future generations.

01 Reduced lifecycle emissions

Our sustainability efforts are focused upon taking a detailed look at the lifecycle of our products. Lifecycle analyses help us to detect hotspots and create strategies to improve product development, sourcing of materials, production processes, distribution and final disposal of product parts at the end of their working life.

In the past year, we initiated a complete lifecycle analysis of four of our most popular conveyor product lines:

- Model 2320 Meter Belt
- Model 9265 Live Roller Accumulation Conveyor
- Model 9190 Live Roller Curves and Junctions
- Model 2421 FlexSort RL E High-Rate Slat Sorter

02 Recycling

A more economical footprint can also mean lower operational costs for our customers.

03 Dematic suppliers

In 2020, Dematic initiated supplier sustainability.

Working with EcoVadis, a business sustainability rating platform, we set out to get at least ten of our suppliers to join us on the platform. By November 2020 we reached our goal. Through EcoVadis, we were able to share sustainability ratings with over 18% of our suppliers.

25%

By 2022, KION Group wants 25% of its spend to be allocated to suppliers who share their sustainability ratings on the EcoVadis platform.

04 Collaborating to innovate

We are partnering with our suppliers to create action plans that align with EcoVadis guidelines.

Our sustainability efforts to lower our carbon footprint and greenhouse gas emissions have come a long way. Collaborating to innovate means that regardless of the size of any of the vendors in our supply chain, we have the opportunity to learn from each other.

“...”

25%

By 2022, KION Group wants 25% of its spend to be allocated to suppliers who share their sustainability ratings on the EcoVadis platform.

99%

Over 99% of the materials that go into our products are 100% recyclable.

We avoid the use of complex, composite materials that are difficult to recycle.

“...”

Our customers have been asking for products with lower CO₂ footprints, which is an excellent sign that sustainability is evolving as a top priority for our shared future.

Nathaniel Vanhekken
Business Development Director, Customer Service

We use EcoVadis, a global rating platform, to assess our corporate social responsibility. They provide holistic sustainability ratings that cover a broad range of non-financial management systems including environmental, labor and human rights, ethics, and sustainable procurement.

We use SimaPro for reporting, carbon and water footprinting, product design, generating environmental product declarations, and determining KPIs. They provide a modeling environment for our products, including interface and database management, and support for the lifecycle inventory databases.
Prioritizing our employees’ health, safety, and personal and professional development
Empowering our people for success

The key to Dematic’s success is our people. We listen, offer feedback, encourage leadership development, and cooperate to make Dematic a great place to work.

Dematic’s employee Well-Being Program helps our people prioritize physical, mental, and financial well-being.

→ Physical well-being
  Our physical focus includes free fitness and nutrition counseling as well as virtual cooking classes, which were popular during lockdowns.

→ Mental and emotional well-being
  We also focus on mental and emotional well-being with an employee assistance program that includes mental health counseling.

→ Financial well-being
  We’re focused on helping our employees with financial well-being by providing financial assessments and advice. This is a complimentary offering for our US-based employees, with plans for global expansion.

Dematic Women’s Network (DWN)

The Dematic Women’s Network connects, empowers and inspires women to achieve success on their own terms through targeted personal and professional development opportunities.

The Dematic Women’s Network also demonstrates our commitment to diversity and inclusion.

Inaugurated in 2017 in North America, the network expanded globally in 2021 with a dedicated budget, quarterly speakers, regional events and training across the Americas, EMEA and APAC/China.

Our pillars:

→ Leadership
→ Mentorship
→ Development

Black Organization Leadership Development (BOLD)

With a mission to reinforce Dematic’s inclusivity and strengthen its role as a corporate citizen, BOLD engages Dematic’s diverse talent pool with a focused professional development approach. Representing African American employees and engaging the wider community, BOLD demonstrates the benefits of diversity through learning about and leveraging cultural differences. We believe that through BOLD, Dematic will foster a unique competitive advantage built on a connected and diverse workforce.

BOLD has the power to connect Dematic to its African American team members and vice versa, and consequently accelerate the career advancement paths for a more diverse workforce at all levels.

Wanda Jackson-Davis
Senior Vice President, Global Procurement
Powering the future of community

Our community outreach pillars

➔ Stronger communities
➔ Education and workforce
➔ Environment and sustainability

2020: Community outreach goes global

In 2020, Dematic’s contributions spanned the globe and were targeted to organizations that were particularly in need this past year.

Some of the causes around the world we supported include:

➔ The Italy Coronavirus Hospital Fund
➔ Australia Bushfire, Drought Relief, Red Cross, Rural Aid and NSW Wildlife Information, Rescue and Education Service
➔ Food delivery for UK NHS key workers, with Thomas Franks
➔ Atlanta Women’s Foundation

Dematic and FIRST Robotics

FIRST Robotics is an international high school robotics challenge where teams of students, coaches, and mentors work for six weeks to build robots capable of competing in that year’s game. Over 645,000 students from 110 countries took part in the 2019–2020 season. Students who participate in FIRST are more than twice as likely to enroll on an engineering course in their first year of college; and over 75% of participants are in a science, technology, engineering, or mathematics (STEM) field as a student or professional.

Dematic made a $50,000 commitment in support of FIRST Robotics Competitions in 2020 and were pleased to announce the recipients of our inaugural scholarship program for high school students pursuing careers in STEM-related fields. Three outstanding students — Drew Pang, Kristen Schang and Geoffrey Xue — were each awarded a $5,000 scholarship toward a post-secondary degree or technical certification.

650 Hours

Dematic’s North America Solution Development team donated over 650 hours to their local communities using Dematic’s allocated volunteer time off benefit. Each team member contributed the full eight hours of volunteer work to local efforts throughout the year, including:

➔ Local park clean up
➔ Habitat for Humanity
➔ Food banks

500 Hours

Dematic employees donated 500 hours though our partnership with the FIRST Robotics Competition, which not only helps to inspire STEM leaders from around the world to be technology leaders, but is also an investment in Dematic’s pipeline of future employees.
Our people are driving sustainable change

Every year around the world, local challenges impact our people and our families. Dematic employees have launched a growing number of initiatives aimed at contributing to and helping their local communities. We are proud to support these efforts.

Mid-1990s
Sponsoring a FIRST Robotics Team
Dematic employees begin to support FIRST, a robotics program designed for North American middle and high school students, to develop their leadership and STEM skills.

2017
Dematic Women’s Network established
With a plan to connect, empower, and inspire women to achieve success on their terms through targeted personal and professional development opportunities, Dematic Women’s Network is established.

2019
Community Outreach Programs
We begin facilitating donations to non-profit organizations favored by our employees. Dematic has donated more than $235,000 in employee-requested grants since inception.

2020
COVID response
In Italy, local employees raised €10,000 for a local hospital to secure PPE for its workers.

2020
Wildfire response
Employees raised A$20,370 in response to the Australian wildfires, which was matched dollar for dollar by Dematic ANZ. A further $20,000 US was donated by Dematic Corporate.

2020
BOLD launch
Employees create the Black Organization Leadership Development program to provide an inclusive environment for African Americans and other people of color within Dematic.

2019
CEO Awards launch
To encourage a culture of recognition, we celebrate Dematic leadership for the critical results they achieve in support of our overall business strategy.

2020
Inaugural FIRST Scholarship
FIRST students pursuing a STEM degree or certification received $5,000, and five students received $1,000 in support of furthering their education.

2020
DWN goes global
The targeted personal and professional development network for women at Dematic launched globally in 2020 with local chapters in each of our regions.

2021
March Charge
The March Charge fitness challenge campaign in the Asia-Pacific region raised AUS$3,326 for the Cancer Council in Australia.

2020
Fundraising
In Northern Europe, Dematic employees used the spirit of the holidays to help raise funds for local causes.
A culture of health and safety

Dematic is committed to properly and effectively protecting our employees from workplace injuries in all our locations.

In the past year, we have initiated the implementation and certification process for ISO 45001. This safety standard sets out requirements such as an emergency response plan, environmental and safety training, and much more to establish an effective management system.

→ Dematic Global Installations, Canada Operations and Dallas Warehouse will be certified ISO 45001 by the end of 2021
→ North America Customer Service will be certified in 2022
→ All Dematic operations will be certified by the end of 2022

10 Years
Amount of time with zero injuries in our Salt Lake City facility.

In 2019, our manufacturing facility in Salt Lake City, Utah began the process to implement ISO 14001 (Environmental Management) and ISO 45001 (Health and Safety Management), achieving both certifications in February 2020.

Our Salt Lake City facility also set a remarkable health and safety benchmark by reaching ten years without a lost-time injury.

21% Risk reduction
We targeted a 20% risk reduction in 2020 by using a new operational risk scorecard.

9.3
On a scale of 1–10, based on how the company has handled the coronavirus pandemic, how likely are you to recommend Dematic as a place to work?

Due to pandemic restrictions, we had to design new and unique ways to program and troubleshoot remotely. In one instance, we flew drones through customer facilities. For jobs that we typically would have brought in 100 engineers, we found ways to have one local team member on the ground. And we found ways to conduct remote learning sessions for our local new hires. At the end of the day, we exceeded our targets and were able to deliver to our customers with a much more remote workforce.

Meraj Anas
Senior Vice President, Product Engineering

*Results from the global internal survey, June 2020
Using our knowledge and our people to make changes for our environment
Protecting our environment

01 ISO 14001
We care about reducing our environmental footprint.
Not only is it the right thing to do, being environmentally proactive improves our relationships with our customers, the public, and the communities in which we live and work worldwide. So in 2020, we implemented an Environmental Management System (EMS) according to the incredibly rigorous international standard of ISO 14001. That means our policies, processes, plans, practices and records of how we interact with our environment follow a framework designed to ensure that our EMS will be a success.

Charlie Payne
Vice President, Environment, Health and Safety

02 A local leader: reducing waste at our UK headquarters
Dematic employees and suppliers all over the world are investing in local initiatives that support sustainability goals.

In 2020 our UK headquarters removed all non-recyclable coffee cups and bottled water (both plastic and glass) and installed filtered still and sparkling water taps. Together with our caterers, we introduced environmentally-friendly packaging and eco-bins for its disposal. This enabled us to reduce our total waste by 25%, in comparison with 2018. This year we are working towards a Green Kitchen Accreditation with our UK caterer, Thomas Franks.

Due to all of the initiatives Dematic employees introduced, we were able to:

- Save 87 trees and 6,654 kg of CO₂
- Generate 7.74 megawatt hours of electricity from waste incineration
- Ensure that no waste was sent to landfill throughout the campaign

03 Environmental training
We have introduced environmental best practices into the workplace worldwide.
Our environmental training is designed to inform employees on what Dematic is doing to address environmental concerns, as well as offering guidance to employees on what they can do to support our shared ecological goals across these areas:

Environmental training areas:
- Environmental basics
- General environmental management
- Waste management
- Energy management
- Material selection and the supply chain

10% Reduction in emissions by 2022
We have set an ambitious target of reducing our global greenhouse gas emissions by 10%. Our focus is what’s known as Scope-2 emissions, which come from purchased or acquired electricity, steam, heat and cooling.

We only have one Earth
Like every company, we should play a constructive role in helping to address the challenges facing our environment.
Empowering today to build solutions for a better tomorrow
Pneumatics have been a key component of Dematic conveyor systems for decades. They’re relatively inexpensive to source and install, and when price was the primary customer concern, they were an ideal solution. Today, total lifecycle cost is increasingly important to customers. When considering energy requirements and the occasional leak, the result is that pneumatics are not clean infrastructure. Now we are developing replacement conveyor lines that are energy-efficient and pneumatic-free — with increased functionality to work in frozen environments.

Dematic has a long history of developing solutions that power our world, because we are always thinking about tomorrow. We are working with customers, suppliers, and our communities to ensure a successful future, and build a culture where people can apply themselves to solve the biggest challenges we face, together. Our commitment is to enable and empower everyone we connect with to create sustainable advances for our customers and our society.

Ambitions for 2021

This sustainability report is the first of an annual series we are creating to convey our commitment to improve our products, safeguard our planet, support our people and help our communities. It presents our genuine efforts to live and work with integrity, to align our efforts with the UN Sustainable Development Goals and to achieve a better and more sustainable future for all.

Never stop innovating

Dematic Multishuttle

The Technology and Innovation team in Germany will be working on ways to bring one of our most popular products into the circular economy. Our goal is to verify that the materials used are safe for people and the environment.

01
Designing for tomorrow

We are focusing significant efforts on redesigning one of our most popular products by using the Cradle to Cradle philosophy. Cradle to Cradle design is inspired by nature; the aim is not only to minimize negative influences, but to leave a positive ecological footprint.

Looking at the Dematic Multishuttle, we asked ourselves: can we improve the design to receive an environmentally-friendly product when it comes to materials and recyclability?

To answer this, we started analyzing the materials we use to determine their carbon footprint, whether they present any risk to people or the environment in their sourcing, and the recyclability of the materials. We are working with a certification and analysis partner in Germany called EPEA to assist us in this important endeavor.

02
Developing behavior-based safety

In 2021 we are looking at the issue of safety and shifting the focus to one of encouragement and self-diagnosis.

Our new behavior-based safety program will enhance our current safety controls and provide immediate feedback and instructions on how to complete tasks safely, using a no-blame approach. We will focus on coaching opportunities to help workers understand and make necessary changes to help prevent workplace injuries. We are committed to helping improve safety performance through communication and interaction between teams and leaders at all levels.

03
Creating pneumatic-free conveyors

Pneumatics have been a key component of Dematic conveyor systems for decades. They’re relatively inexpensive to source and install, and when price was the primary customer concern, they were an ideal solution.

Today, total lifecycle cost is increasingly important to customers. When considering energy requirements and the occasional leak, the result is that pneumatics are not clean infrastructure. Now we are developing replacement conveyor lines that are energy-efficient and pneumatic-free — with increased functionality to work in frozen environments.

Developed in part by the German innovation partner for environmentally friendly products and processes, EPEA (Environmental Protection Encouragement Agency), Cradle to Cradle stands for the safe and potentially infinite circulation of materials in cycles. To adhere to it would mean that all constituents of a certified product are chemically harmless and recyclable.
Dematic is an intralogistics innovator that designs, builds and supports intelligent, automated solutions for manufacturing, warehouse and distribution environments for customers that are powering the future of commerce. With engineering centers, manufacturing facilities and service centers located in more than 25 countries, the Dematic global network of 10,000 employees has helped achieve more than 6,000 worldwide customer installations for some of the world’s leading brands.

Headquartered in Atlanta, Dematic is a member of KION Group, one of the global leaders in industrial trucks and supply chain solutions, and a leading provider of warehouse automation.

Power the Future of Commerce.

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