

CAPITAL EQUIPMENT PLEDGE

accelerating the
circular economy

Davos, 24 January 2018



PACE

PLATFORM FOR ACCELERATING
THE CIRCULAR ECONOMY

THE CAPITAL EQUIPMENT PLEDGE WAS INITIATED AS PART OF THE PLATFORM FOR ACCELERATING THE CIRCULAR ECONOMY

The **Platform for Accelerating the Circular Economy (PACE)** is a public-private collaboration co-chaired by the CEO of Philips, the heads of the Global Environment Facility and UN Environment, with the Ellen MacArthur Foundation, Accenture Strategy, International Resource Panel and Circle Economy as knowledge partners. The World Economic Forum currently hosts and facilitates the initiative.

The Platform aims to create systems change at speed and scale by enabling partners to:

- Develop blended financing models for circular economy projects, in particular in developing and emerging economies
- Help to create and adjust enabling policy frameworks to address specific barriers to advancing the circular economy
- Bring the private and public sector into public-private collaborations to scale impact around circular economy initiatives

CO-CHAIRS OF PACE

PHILIPS



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IN SUPPORT OF THE PLEDGE



Peter Wennink
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Eelco Blok
CEO at KPN



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Senior Managing
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Elevator Europe



Frans van Houten
CEO at Royal Philips



Vincent Kwaks
CTO at Vanderlande

A COALITION OF FORWARD-THINKING BUSINESS LEADERS

Innovative **service models, smart upgrade** paths and **take-back & remanufacturing** programs help establish a close customer relationship, leading to better and more timely value propositions than transactional sales approaches.

Producers that engage in these strategies are rewarded with **higher margins and more predictable revenue streams**. They can also increase **resource efficiency** dramatically, reducing cost and making resources available to more customers.

These changes are crucial for decoupling growth from resource consumption and providing products for an increasing global middle class.

THE CIRCULAR ECONOMY CAN CREATE VALUE AND IMPROVE COMPETITIVENESS WHILE REDUCING ENVIRONMENTAL IMPACT

A FORCE FOR GOOD

The circular economy is **a system designed to keep products, components, and materials at their highest utility and value** at all times.

It offers **tremendous opportunity** for businesses to innovate and future-proof their operations, improve their bottom-line and competitiveness, all while staying within planetary boundaries.

€ 1.8 TRILLION

Net annual economic benefits from the circular economy in Europe by 2030
(McKinsey, 2015)

€ 90 BILLION

European remanufacturing market potential by 2030
(ERN, 2015)

€ 225 BILLION

B2B internet-of-things market potential by 2020
(Forbes, 2017)

Capital Equipment spans a wide range of sectors and products



Vehicles, & trailers



Office equipment



Machinery & equipment



Medical & precision instruments



Telecom equipment & apparatus



Other transport equipment



Electrical machinery & apparatus

COMPANY PLEDGES

ASML

CONTEXT

ASML believes a circular economy model is essential to ensuring the future success and competitiveness of the semiconductor equipment industry. We are keen to play our part and already have initiatives that contribute to a circular economy. As a result of our products' modular design we ensure products in use at our customers can be upgraded to a higher performance level thereby extending their useful life. After use in the most advanced chip factories we further extend the lifetime of our products by refurbishing systems and repurposing them for other customers and semiconductor environments. A well-maintained ASML lithography system has a useful life that is measured in decades and around 95% of systems produced by ASML over the lifetime of the company are still in use today. With regards to service and upgrade parts, we have started executing on initiatives to ensure modules can be restored and qualified to an as-new condition for re-use within our systems.

PLEDGE STATEMENT

Over the next years, in collaboration with our customers and suppliers, we aim to transform the re-use of parts used 'as-new' in our systems, from pilot to standard way of working and further develop opportunities, initially in our Mature Products & Services business. Hereby we expect a significant decrease in the waste generated in our value chain.





CISCO

CONTEXT

Network and Communication Equipment and Services: Cisco is the worldwide leader in IT. We help companies seize the opportunities of tomorrow by proving that amazing things can happen when you connect the previously unconnected. At Cisco, customers come first. We create long-lasting customer partnerships, identify customer needs, and provide solutions that create customer success. Cisco has been a sponsor of the circular economy since 2011.

PLEDGE STATEMENT

100% Product Return

- Provide product return pickup and transport at no cost for any customer worldwide upon request.
- Establish alternative commercial models that promote product return including: purchase trade-in, banked credit, leasing, and product-as-a-service.
- Offer comprehensive warranty, replacement, service and repair for all products to extend useful product lifetime and minimize obsolescence.
- Repurpose returned product, subsystems, components and commodities, including closed-loop return to new product manufacturing.

DELL TECHNOLOGIES

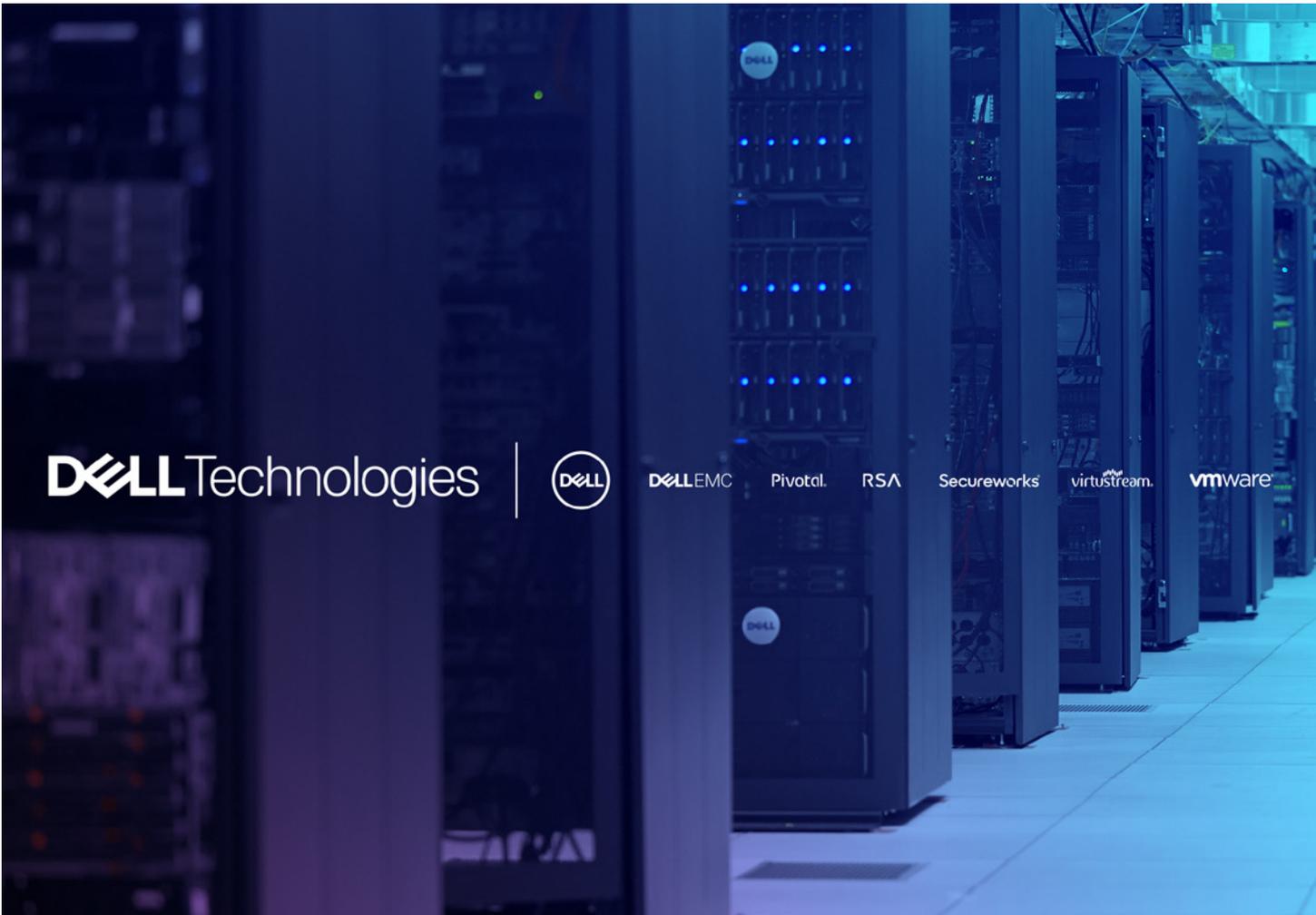
CONTEXT

Dell Technologies empowers countries, communities, customers and people everywhere to use technology to realize their dreams. Customers trust us to deliver technology solutions that help them do and achieve more, whether they're at home, work, school or anywhere in their world. For Dell Technologies, environmental responsibility is about more than creating an eco-friendly product or initiative. It's about incorporating sustainability into everything we do, while using our technology and expertise to innovate on behalf of customers, communities and the planet. Where do we stand now:

- We surpassed our initial 2020 goal for using 50 million pounds of recycled-content materials in products (now extended to 100 million), and continue to grow our closed-loop supply chain.
- Since our baseline year of FY08 (2007), we have recovered a cumulative 1.8 billion pounds of used electronics and are on-track to meet our goal in recovering 2 billion pounds by 2020.

PLEDGE STATEMENT

By 2020, Dell Technologies will close the loop on all used Dell equipment, including capital equipment that becomes available to us. 'Closing the loop', means that we will actively take back equipment of any condition and will assume full control to ensure that all materials are repurposed in a responsible way.



DELLTechnologies



DELL EMC

Pivotal

RSA

Secureworks

virtustream

vmware



HP INC.

CONTEXT

HP creates technology that makes life better for everyone, everywhere. Through our portfolio of printers, PCs, mobile devices, solutions, and services, we engineer experiences that amaze. We are reinventing how products are designed, manufactured, used, and recovered as we shift our business model and operations toward a more efficient, circular and low-carbon economy. Working with our supply chain partners and others, we are reducing the environmental impact of our products and services at every stage of the value chain. Through industry-leading repair, reuse, and recycling programs, and product-as-a-service business models, we aim to keep products and materials in circulation for as long as possible, while driving further closed-loop innovations. In 2016 alone, we repaired 5 million units of hardware and recovered 102,800 tonnes of hardware for recycling, which is being applied to our goal to recycle 1.2 million tonnes of hardware and supplies by 2025, since the beginning of 2016.

PLEDGE STATEMENT

In 2018, HP will continue to transition our company and our customers to a circular “make, use, reuse” approach that seeks to close the loop for our products, including capital equipment such as our digital industrial printing presses. This commitment includes ongoing efforts to decouple business growth from consumption by developing solutions that reduce reliance on increasingly scarce raw materials. We will measure progress using a “product materials use intensity” metric. We will continue to shift to service-based models that provide real value to customers while reducing waste and costs, extending product lifespans, and increasing reuse and recycling. And we will innovate by developing disruptive technologies, like 3D printing, that will transform how whole industries design, make, and distribute products while accelerating a materials-efficient economy.

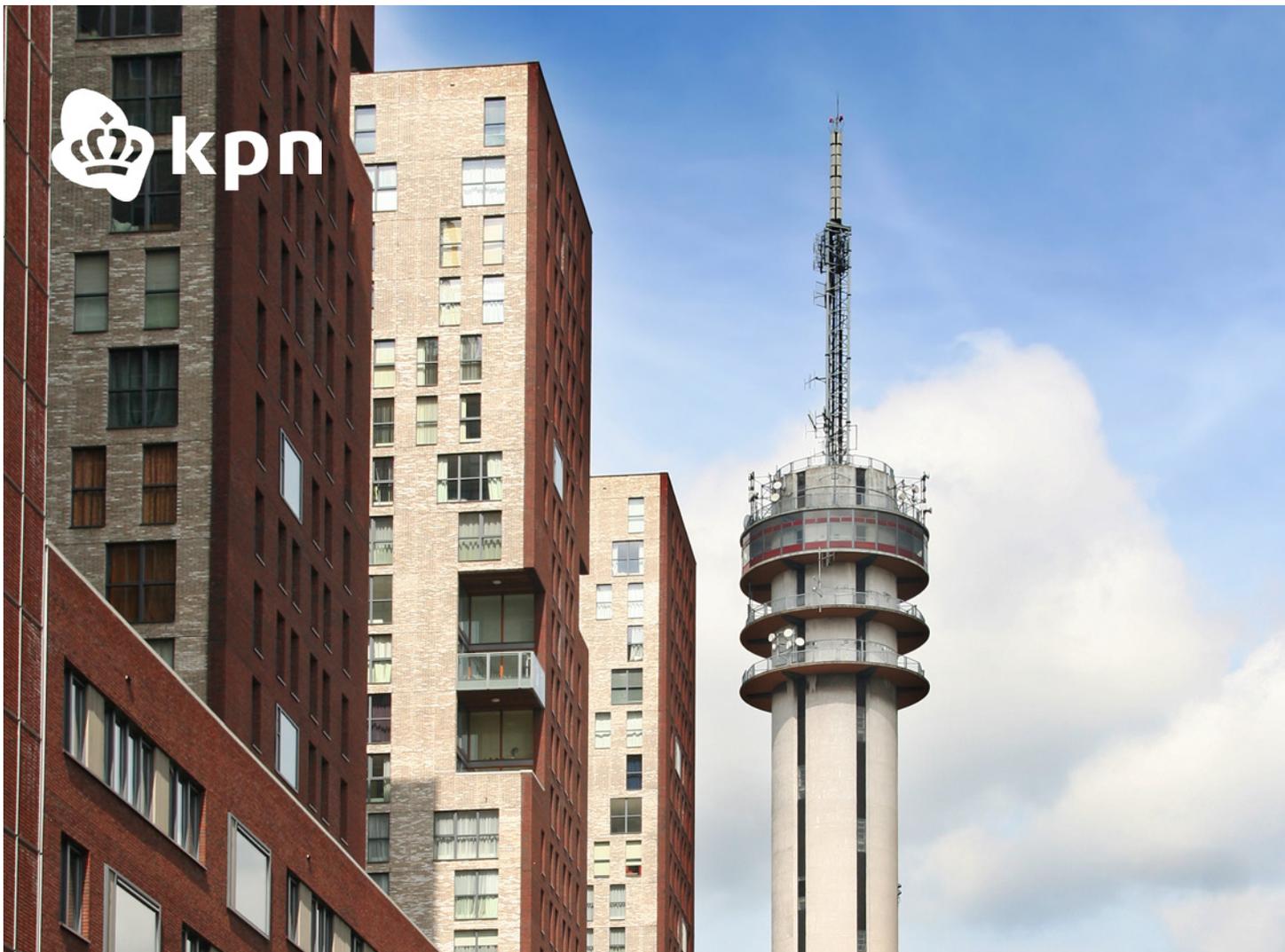
KPN

CONTEXT

At KPN we make life more free, easy and more fun by connecting people. We are passionate about offering secure, reliable and future-proof networks and services, enabling people to be connected anytime, anywhere, whilst at the same time creating a more prosperous and cleaner world.

PLEDGE STATEMENT

KPN is implementing a program to further integrate circular economy principles within KPN to reach its ambition of having close to 100% circular operations by 2025. This ambition is in line with the Dutch government's ambition to reduce raw material use by 50% by 2030. For major parts of our business and throughout the lifecycle of our equipment and products we are looking for circular solutions, focusing on reducing the use of scarce virgin materials, optimizing and extending the lifetime of our products and ensuring a high-end second life. This will reduce residual waste to an absolute minimum in our operations. Our scope will include network equipment, office facilities and customer premise equipment.





MITSUBISHI ELEVATOR EUROPE

CONTEXT

With over 65 years of experience, Mitsubishi Elevator Europe is the leader in high-quality elevators and escalators and corresponding services. Mitsubishi Elevator Europe is part of the Mitsubishi Electric Group, which is part of the Japanese Mitsubishi conglomerate. Mitsubishi Elevator Europe aims to realize the best and most sustainable vertical mobility solution for its customers and end-users. In combination with the growing need for a circular economy, Mitsubishi has developed M-Use®.

PLEDGE STATEMENT

As part of the 'Environmental Vision 2021' of the Mitsubishi Electric Group, by 2021 Mitsubishi Elevator Europe will:

- Fully close the loop on all M-Use® elevators that become available to us. This means we will take full control to ensure that all components of returned M-Use® elevators will be recycled and/or reused in a responsible way.
- Aim to acquire 50% of its total revenue from M-Use® sales.
- Reduce CO2 emissions from our product usage by 30% (base year: fiscal 2001).
- Reduced CO2 emissions from our production by 30% (base year: fiscal 1991).
- Successfully create products and services that contribute further to the 3Rs (reduce, reuse and recycle) throughout the product lifecycle.

PHILIPS

CONTEXT

Royal Philips is a leading health technology company focused on improving people's health and enabling better outcomes across the health continuum from healthy living and prevention, to diagnosis, treatment and home care. As a leader in innovation, Philips takes an approach which integrates systems thinking and looks beyond the linear 'take, make, dispose' model to a circular model of regenerative product design, new business models, reverse logistics and enabling technologies. As part of its "Healthy people, Sustainable planet" strategy, Philips has a target to deliver 15% of total revenues from circular solutions by 2020. Over the last decade, Philips has returned some 7.000 tons of refurbished medical imaging equipment to the market and incorporated 6.000 tons of recycled plastics into its new consumer products.

PLEDGE STATEMENT

By 2020, Philips will fully close the loop on all large medical systems equipment that becomes available to us, and that we will continue to expand these practices until we have covered all professional equipment. By 'closing the loop', we mean that we will actively pursue the trade-in of equipment such as MRI, CT and Cardiovascular systems and we will take full control to ensure that all traded-in materials are repurposed in a responsible way.



VANDERLANDE



VANDERLANDE

CONTEXT

Vanderlande is the global market leader for value-added logistic process automation at airports, and in the parcel market. The company is also a leading supplier of process automation solutions for warehouses.

To minimise the ecological footprint of the company's and our customers systems and maximise the effectiveness of its operations, Vanderlande utilises a three-phase programme to support its interests. Each phase is an amalgamation of themes, ambitions, initiatives and a corresponding timeline. Themes include Cradle to Cradle® and circular economy principles aimed to offer truly circular services. With this in mind, it is already analysing tangible prospects to upgrade products, facilitate refurbishments, offer leases on a pay-per-use basis, and explore other business models, as managed services. Vanderlande plans to progress steadily through each phase, and will gradually enhance the capabilities of all employees in realising this common goal.

PLEDGE STATEMENT

By 2020 Vanderlande will successfully launch new solutions and services that fully close the loop by utilizing innovative business models e.g. like the recently launched FLEET concept. We will report our progress in this journey based upon GRI reporting principles utilizing ISO 14001 to set our management goals and targets.



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