



SHOW DAILY

DAY 1 - WEDNESDAY



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RIDE.**

THE ULTRA STRONG
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SYSTEM.



VISIT US AT
Hall 8.0, [J18]

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BAFANG



**READY
TO ROLL**

WHAT TO SEE & DO AT THE SHOW:

BEYOND BIKES: HALL 8 | WHAT'S ON TODAY

BOSCH PERFORMANCE LINE SX | GRØNBLÅ CUTS PLASTIC WASTE

AKKU VISION: A SECOND LIFE FOR E-BIKES | MOUSTACHE "J"

CIE PUSHES FOR SUSTAINABILITY | MARKET REPORTS

PRODUCT ROUNDUPS: COMPACT CARGO BIKES | GREEN PRODUCTS | ROAD BIKES

SUSTAINABLE APPAREL | BAGS & PANNIERS - URBAN | URBAN TIRES | FRAMEMAKERS

MID-DRIVE MOTORS | E-BIKE BATTERIES & COMPONENTS | UTILITY BIKES

**BUILD YOUR OWN
E-BIKE**

EVERYTHING FROM A SINGLE SOURCE

messingschlager

E-Mobility Solutions



HALL 12.1 | BOOTH A19

— NEW FRAME CONCEPTS 2023 —



ALU ENDURO BROSE

FULLY SUV CONCEPT BROSE

DARE TO INNOVATE FOR A GREENER FUTURE

Follow us and
plant a tree



For each new LinkedIn follower during EUROBIKE 2023, we will plant a tree. Keep track of our sustainability efforts on our page. Scan the QR code to follow us.

Hall 9.2/C22

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Our bicycle cranks lead the way in sustainability. Manufactured in Portugal, they are produced using 100% green electricity and meticulously crafted from recycled aluminum without any loss in mechanical properties. Utilizing state-of-the-art manufacturing processes, we prioritize stable quality with a fully automatic process while minimizing environmental impact in all production steps. Enjoy a truly eco-friendly ride with Miranda, as our bicycle cranks with all our production processes emit incredibly low emissions of just 1.6 grams of CO₂ per finished crank. Join us in supporting the transition to a more sustainable world.

Miranda
The European Bike Fundamentals.

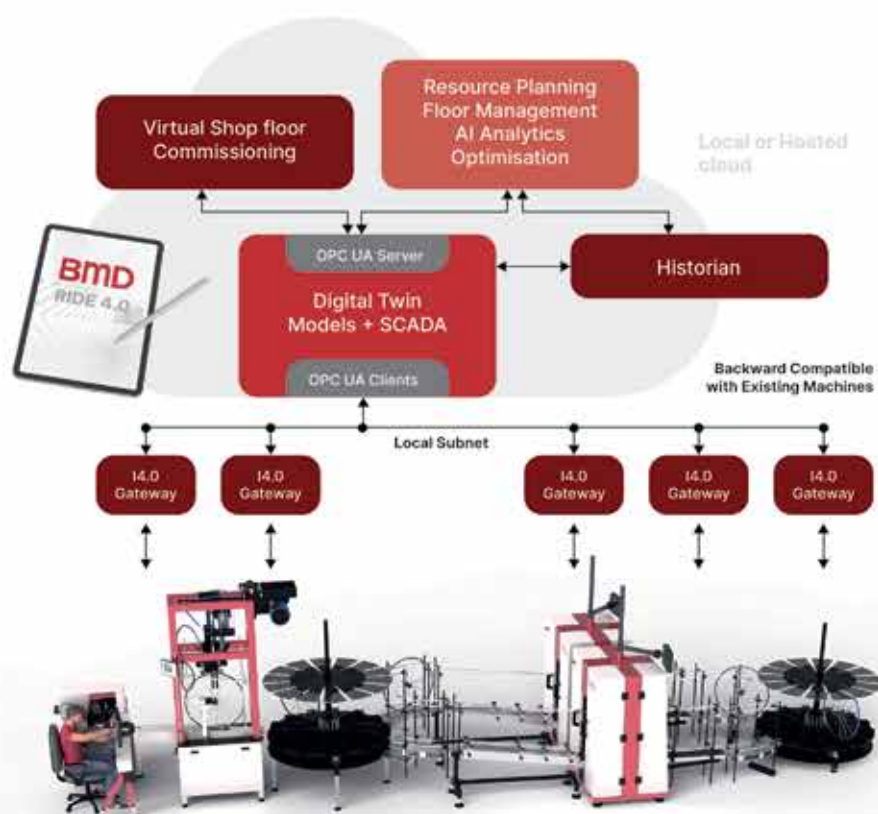
BMD

Visit our fully
operational
assembly line
at our
STAND
in **HALL 9.0**



Come to experience the easy
of bicycle wheel building first-hand
with BMD's range of wheel
assembling machines at Eurobike 2023

BMD RIDE is a factory floor integrated automation solution
providing a real-time accurate reporting on production
processes and insights to inform the decision making process.



Our best technical experts will be there
too to demonstrate and discuss with
you the automated wheel assembly
process with all its challenges and
solutions to ensure consistent quality
and higher production output with
minimum maintenance.

Contact

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RIESE & MÜLLER

Everyday mobility
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Visit us and test our
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Hall 12.0 / A13



TODAY
June 21
FRANKFURT
29°C
MOSTLY CLOUDY



TONIGHT
19°C
PARTLY CLOUDY



TOMORROW
31°C
THUNDERSHOWER



Jörg Mathels of Riese & Müller is interviewed by Markus Fritsch of Velobiz at yesterday's media tour for journalists.

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**SCAN HERE FOR A
COMPREHENSIVE
GUIDE TO EVENTS**

NÜTZLICHE INFORMATIONEN FÜR BESUCHER

Business Center • Multimedia Shop
Torhaus, Ebene 3, ☎ +49 (0) 69 75 75-13 09, Di 12.07. - Do 14.07. 8:30 - 18:00
Fr 15.07. - So 17.07. 9:00 - 16:00

Zimmer-Reservierungen Tourismus
+ Congress GmbH Frankfurt,
Kaiserstraße 56, 60329 Frankfurt, ☎
+49 69 21 23 08 08 Fax: +49 69 21
24 05 12 info@infofrankfurt.de www.
frankfurt-tourismus.de

Geldautomaten Torhaus, Ebene 3
/ Eingang City, Ebene 0/ Eingang
Torhaus(S-Bahn Terminal) / Eingang

Galleria 9.T/Eingang Portalhaus

Postservices Torhaus Service-Center,
Ebene 3, geöffnet von 9.00 bis 17.00 Uhr

Apotheke Apotheke im Hauptbahnhof
B-Ebene Nord Brocks'sche Apotheke
im Skyline Plaza Einkaufsmöglichkeiten
Torhaus, Ebene 3 / Eingang City/ Hallen
4.0, 4.1, 5.0 und 9.0 Süd, 10.0, 11.0

USEFUL INFORMATION FOR VISITORS

Business Center • Multimedia Shop
Torhaus level 3, ☎ +49 (0) 69 75 75-13
09, opened from 9.00 a.m. till 6p.m.

Reservations for Hotels Tourismus
+ Congress GmbH Frankfurt Tourist

Information, ☎ +49 (0) 69/21 23-08
08, Fax +49 (0) 69/21 24-05 12,
E-Mail: info@tcf.frankfurt.de

Cash Points Torhaus, level 3 / City
Entrance, level 0 / Entrance Torhaus
(S-Bahn Terminal) / Entrance Galleria
9.T/ Entrance Portalhaus

Post Services Torhaus Service-Centre,
level 3, opened from 9.00 a.m. till 5 p.m.

Pharmacy Pharmacy at the main
railway station, level B North
Brocks'sche Pharmacy at Skyline Plaza

Shopping Facilities Torhaus, level 3 /
Entrance City/ Halls 4.0, 4.1, 5.0 and
9.0 South, 10.0, 11.0

IM NOTFALL • IN CASE OF EMERGENCY

Sanitätsstationen • First-aid stations
Halle 8.0 ☎ +49 (0) 69 75 75-65 02

Fundbüro Lost • property office
Torhaus Ebene 0 ☎ +49 (0) 69 75
75-14 48

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from prototyping to production according to your specifications. Environmentally friendly,
tested, certified – and 100% bio-compostable.

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MEET US LIVE AT THE SHOW
Hall 08 - Booth C15

START-UP & INNOVATION DAY
Thursday, 12:35-12:55 p.m. | Stage Hall 8

EUROBIKE Sustainability Track
Friday, 16:00-16:45 p.m | Eurobike Hub

- Plastic-free
- Plant based
- Decomposed in 60-90 days
- From nature, back to nature

GRONBLÅ REDUCE
REUSE
ZERO WASTE

INTERVIEW: STEFAN REISINGER/FAIRNAMIC

THE GLOBAL BICYCLE INDUSTRY'S HUB

After a successful premier in 2022, the world's biggest bicycle show returns to Frankfurt am Main. Show Daily reached out to Stefan Reisinger, CEO of Eurobike organizer fairnamic GmbH, to hear how things are going and what to expect from this year's show.



As CEO of fairnamic, the Eurobike organizer, Stefan Reisinger has been closely monitoring the move from Friedrichshafen to Frankfurt.

With more than 1,900 exhibitors from 62 countries and a footprint of 150,000 m2 in the halls and atriums, this year's Eurobike will be bigger than ever. The new offering for pure OE suppliers is popular, and in Hall 8 the show is extending its perspective beyond bicycles and e-bikes and towards micromobility and e-mobility on more than two wheels.

Show Daily: What was the highlight of Eurobike's debut in Frankfurt,

from your perspective?

Stefan Reisinger: The most important thing was that after all the years in Friedrichshafen the show was still a success after moving to Frankfurt. Getting off to a flying start is crucial, and I think we did just that in 2022: the mood was upbeat throughout the five days and with a few exceptions mainly from Far East the global bicycle industry was attending the show – as its first big meeting after the pandemic.

SD: What are the most important improvements for 2023?

SR: After the first Eurobike show held in Frankfurt, we had a long to-do list. We've decided to focus on optimizing the paths of visitors by offering additional guidance, to amplify our outreach to the city and its population and to skip the expo zones along the river Main to make life easier for everyone.

SD: Are big names returning as exhibitors, or did you see cancellations due to the current slump in business?

SR: We've seen some companies deciding not to participate at this year's show due to budget restrictions, others due to having their production fully booked for well over a year. But there are also



More than just bicycles: the Eurobike show is open for a broader scope of e-mobility.

a number of returning exhibitors that skipped the 2022 show.

SD: From a business perspective, what is the biggest shift compared to last year?

SR: Participation from Asia was lower than usual a year ago due to travel restrictions and is back to normal now. The offer to exhibit for three days only on the second floor of hall 9 has been popular especially with exhibitors from the Far East. In total we have counted 379 exhibitors opting for this package since these companies are pure OE suppliers with no consumer business.

SD: What is your message to visitors and exhibitors at this year's Eurobike?

SR: As the ultimate bike and future mobility show Eurobike brings together enthusiasts, professionals, and industry leaders from around the globe. We invite visitors from near and far to immerse themselves in the exciting world of cycling and light electric mobility. Following the cancellation of almost all travel restrictions, we are very pleased to meet with the entire industry and players from all parts of the world in Frankfurt again. **LVR**

EUROBIKE OFFERS BIGGEST E-BIKE CHARGING HUB EVER

PARK AND CHARGE RETURNS TO EUROBIKE

Eurobike visitors will be able to arrive at the show from far and wide thanks to the ability to park and charge. Czech firm Powerbox [80 D40] will again be setting up e-bike charging stands within the show's secure parking areas. These will provide capacity for over 80 bikes to recharge at a time, with the service to be found next to the Portalhouse by Hall 11.

The firm will also be on hand to talk visitors through its range of charging solutions aimed at municipal and private customers.

"Our charging stations are primarily used by tourists," explains Powerbox's Jakub Ditrich. "Most of our charging locations are installed next to gastronomic attractions or monuments, places where one can spend some non-biking time."

Powerbox is also selling its equipment to businesses looking to provide on-site charging as an

additional employee benefit. "Unlike infrastructure for heavy e-mobility, charging infrastructure for e-bikes and e-scooters does not require much space and engineering," says Jakub. "We work with one phase 230V, 16A cable so a standard power outlet can serve energy for the charging station".

This low power requirement also allows the firm's products to work alongside solar installations. It is also part of the reason the firm has no plans to offer payment functions

on its products, instead believing the service should remain free for the user, something you'll be able to appreciate at Eurobike.

"Our charging stations have been used for several sports and cultural events," says Jakub. "But the installation at Eurobike is the largest charging hub ever installed, as far as I know". With the majority of bicycles sold in the EU now electric, it's the sort of infrastructure you'll see more of soon. **JD**



Powerbox charging is available again at Eurobike



PORTABLE GIMMICK U-LOCK
benlockTM
evo15 Compact up to half size
Folded as storage



LEADING INNOVATED LOCKS



Booth No. **Hall 9.1**
D33

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come see us at
Hall 8.0/O12



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2.3KG

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ISO13849**

MID MOTOR FOR E-BIKE



DRIVE POWER UNIT

ANGEL REVO HALO

NEXT LEVEL COMFORT

OMNICOVER

Halo's Omnicover is made from recycled polyurethane and knitted with metallic threads, offering exceptional durability and water resistance. It offers a balanced level of traction, ensuring a comfortable and secure connection between the rider and the saddle.



HALO FOAM

Made from ETPU, the Halo Foam is lightweight and flexible providing quick rebound and shock absorption over rough terrain and long rides.

EUPHORABASE

Non-petroleum-based hybrid bioplastic using plant-based materials and glass fiber.

VISIT US AT EURO BIKE 12.1/A10



www.velosaddles.com



BOSCH GOES LIGHT, OFFERS MORE OPTIONS

There is no stopping the electrification of bicycles, and Bosch eBike Systems is the market leader in the upper segments of the market. For 2024, this key supplier expands its portfolio to a lightweight assistance drive system, offers OE partners more option in terms of battery sizes and introduces its eShift technology to the new Smart System generation.



Bosch eBike Systems' CEO Claus Fleischer presenting the new mid-motor at the launch.



Bosch's most compact and lightweight mid-motor, the Performance Line SX, still packs a punch.



Bosch is expanding its battery offerings with the CompactTube 400 and the PowerMore 250.

On Monday this week, just before the start of the 31st edition of Eurobike, **Bosch eBike Systems [Hall 12.0 / A17]** invited media and key customers for the launch of a new product category on the Feldberg —Frankfurt's local mountain. While the main focus of Bosch to date has been on optimizing its proven drive units and adding connectivity functions to its new Smart System generation of drive systems, model year 2024 will see the introduction of an all-new product. With the Performance Line SX, Bosch eBike Systems is entering the market for light

support systems. At a weight of 2kg, the mid-motor features a magnesium housing and cranks out a maximum torque of 55 Nm and a peak performance of 600 W – the latter being on par with the larger Performance Line CX units.

Both the system controller and the mini remote of the Performance Line SX are truly minimalist, with more options like the Purion 200 display or the Kiox 300 display being available as well. The CompactTube battery relies on the new 21700 battery cell standard to offer a capacity of 400 Wh at a weight of just 2kg.

For added range the PowerMore 250 range extender can be easily plugged in at the charger port. As for the support modes that the Performance Line SX offers, the eMTB+ mode for mountain bikes focusses on tackling challenging trails on uphill with the extended boost function. The version for e-gravelbikes has a sprint mode that incentivizes riding at high cadence, giving you more support the faster you pedal.

Since the PowerMore 250 range extender works for all of Bosch's new Smart System assistance drives,

meaning that OE partners get a lot more options in terms of battery capacity, range – and weight of the e-bike. The offerings now range from 400 Wh to 500 Wh, 625 Wh and even 750 Wh, with the range extender adding another 250 Wh. While not all combinations may make sense as a use case, they are possible technically. Reacting to the trend of synchronizing assistance drive systems and drivetrains, Bosch eBike Systems brings its eShift functionality to the Smart System for the 2024 model year, starting with Rohloff, Enviolo and 3x3 as its first partners. This is all the more relevant as even the Active Line and Active Line Plus drives will become smart next year. **LVR**

HYENA
SMART E-BIKE SYSTEMS

HALL.8 K16 | DEMO AREA No.B03



Natural. Efficient. Highly Connected.

THE LIGHTEST DRIVE SYSTEM

WHATS ON TODAY:

WEDNESDAY 21 JUNE



SCAN HERE FOR A COMPREHENSIVE GUIDE TO EVENTS

09:00 a.m. - 10:00 a.m.

**EUROBIKE HUB, Portalhaus
MEDIA & CREATOR LOUNGE
BREAKFAST**

This year, the Media & Creator Lounge presents itself with a new name and a new location.

What has remained, however, is the Media & Creator Lounge Breakfast as a joint start into the day.

09:00 a.m. - 06:00 p.m.

Freigelände F11

GRAVEL LOUNGE

The Gravel Club and Gravel Collective open their Gravel Club Lounge for small talk about gravel biking and bikepacking and interesting workshops. Furthermore, the Gravel Club Lounge is a meeting point for gravel rides and you can enjoy refreshing drinks and delicious coffee there.

09:30 a.m. - 05:30 p.m.

DEMO AREA

TEST TRACK powered by Brose

With the Test Track, EUROBIKE offers the opportunity to try out the latest bike models in the fresh air and experience real riding fun.

10:00 a.m. - 06:00 p.m.

CAREER CENTER

The CAREER CENTER as a platform for career opportunities in the bicycle and mobility sector is aimed at supporting companies in their search for trainees and young professionals in times of shortage of skilled workers. In addition to workshops, training sessions, shows and the jobwall, panels and presentations on the big stage complete the format.



10:00 a.m. - 05:00 p.m.

**ACADEMY STAGE
EUROBIKE ACADEMY**

The EUROBIKE ACADEMY is from experts for experts and presents exciting talks and conferences on the newest innovations, business solutions and trends in the cycling industry. How can companies present themselves better online, what digital solutions are available and what design innovations are currently revolutionizing the market. Find the answer to those questions and more at the EUROBIKE ACADEMY STAGE in hall 8.

11:00 a.m. - 01:00 p.m.

Hall 8.0, Stand D21

Joey Kelly visits My Esel

The world's first e-gravel with a wooden frame will be shown for the first time and can be tested together with Joey Kelly.

11:45 a.m. - 12:15 p.m.

HP Velotechnik Hall 8.0, Stand B57

Track cycling superstar Kristina Vogel is cycling again!

Paraleptic since 2018, Kristina Vogel gets back on a bike for the first time: the "Hands-On-Cycle" from HP Velotechnik. After the handover with co-supporter Shimano, there is time for short interviews

01:00 p.m. - 03:30 p.m.

**EUROBIKE HUB, Portalhaus
BUSINESS SUCCESSION**

The new format business succession is aimed at parties interested in business handovers in specialist trade. During the Sellers' Workshop for potential sellers the topics that will be discussed range from the initial situation of the business all the way to contract negotiations. The

Buyers' Chat on the other hand is aimed at interested parties who are thinking of acquiring a bicycle shop. Personal conversations the expert provide an opportunity to clarify questions related to the specific acquisition.

01:00 p.m. - 01:45 p.m.

FUTURE MOBILITY FORUM

EUROBIKE OPENING

The opening of this year's EUROBIKE will not only herald the start of the trade fair with a record number of exhibitors, but also the diverse and varied supporting program, which will inspire trade visitors, start-ups, founders, companies, manufacturers and trade fair visitors alike. The EUROBIKE CONVENTION will take place directly afterwards. With a simultaneous translation the EUROBIKE Opening will be in German and English.

01:45 p.m. - 05:30 p.m.

FUTURE MOBILITY FORUM

EUROBIKE CONVENTION

At the EUROBIKE CONVENTION 2023, the big and critical questions of the industry will be discussed, and we will look beyond both national and industry borders to work together on a smart tomorrow. With a view to the two pillars of smart cities and the smart industry, various players from business, politics, local government, science and the press will discuss digital solutions and the responsibility of the industry with regard to climate protection, mobility transition and industrial policy. The EUROBIKE CONVENTION will be in English with a simultaneous German translation.

02:00 p.m. - 06:00 p.m.

**EUROBIKE HUB, Portalhaus
INVESTORS LOUNGE**

The Investors Lounge is the platform for financial investors who are interested in high-growth companies from the bike, sports and mobility industry or are already invested in them. On June 21 and 22, 2023, we present an ideal opportunity for dialogue together with our partner Ralf Kindermann from Kindermann Value Creation GmbH. In addition to exciting presentations, insights and networking, we offer you exclusive personal support and specific trade fair tours.

02:00 p.m. - 03:00 p.m.

Sports & Performance Stage

This Stage is the first place to go for anyone interested in improving their sports performance in cycling. This requires not only the right equipment, but also an understanding of your own body and the right mental attitude.

02:00 p.m. - 03:00 p.m.

Symmetrie 2 (Hall 8.1)

Launch - li:on bikes with Marcel Kittel and Tony Martin

World premiere at Eurobike! Cycling stars Marcel Kittel and Tony Martin present the future of mobility for kids and youngsters. li:on bikes redefines safety, innovation and design for young cyclists.

03:00 p.m. - 05:00 p.m.

Hall 9.1 "Esprit"

Industry Promotion Meeting

Introducing Tianjin's business environment and advantages of bicycle industry chain.



YOU DREAM IT. WE MAKE IT.

HALL 9.1/A17

BESUCHE DAS HOUSE OF BRANDS AUF DER EUROBIKE



» Halle 11.1 | Stand A38

WORK
WITH US



MEET & GREET
HIGHLIGHT PRESENTATION
BIKE PRE-ORDER
LINE-UP 2024
COFFEE & SNACKS

GET
THE BEST
BRANDS
FOR YOUR
BIKE STORE



BESV
Premium e-bikes

Blackburn

CAMELBAK

CAPSULED

CORIMA

FASTHOUSE

FERODO



GIRO

GOALZERO



HORNET

K-EDGE

KOMPERDELL

KRYPTONITE

LOOK

LUMOS

nw
northwave

Park Tool

PIRELLI

PROFILE DESIGN

Segway-Ninebot

selleitalia

sportourer

THURMETALL

TRELOCK

EUROBIKE HALL GUIDE

Halle 8.0	E-Mobility + LEVs, Urban Mobility, Infrastruktur, Logistik, Mobility Solutions, Future Mobility Forum, AWARD Ausstellung, LIGHT ELECTRIC MOBILITY AREA, START-UP AREA, CARGO AREA, SERVICE AREA
Halle 9.0	Fahrräder/E-Bikes
Halle 9.1	Teile/Zubehör, Komponenten, Bekleidung, Accessoires
Halle 9.2	Supplier Area (Mi.-Fr.)
Halle 11.0	Fahrräder/E-Bikes
Halle 11.1	Teile/Zubehör, Komponenten, Bekleidung, Accessoires, SPORTS- & PERFORMANCE AREA, Sa.-So.: BIKE BOUTIQUE
Halle 12.0	Fahrräder/E-Bikes, CAREER CENTER
Halle 12.1	Teile/Zubehör, Komponenten, Bekleidung, Accessoires
Portalhaus	EUROBIKE Hub, Media & Creator Lounge, Medienpartner, Fachpressestand

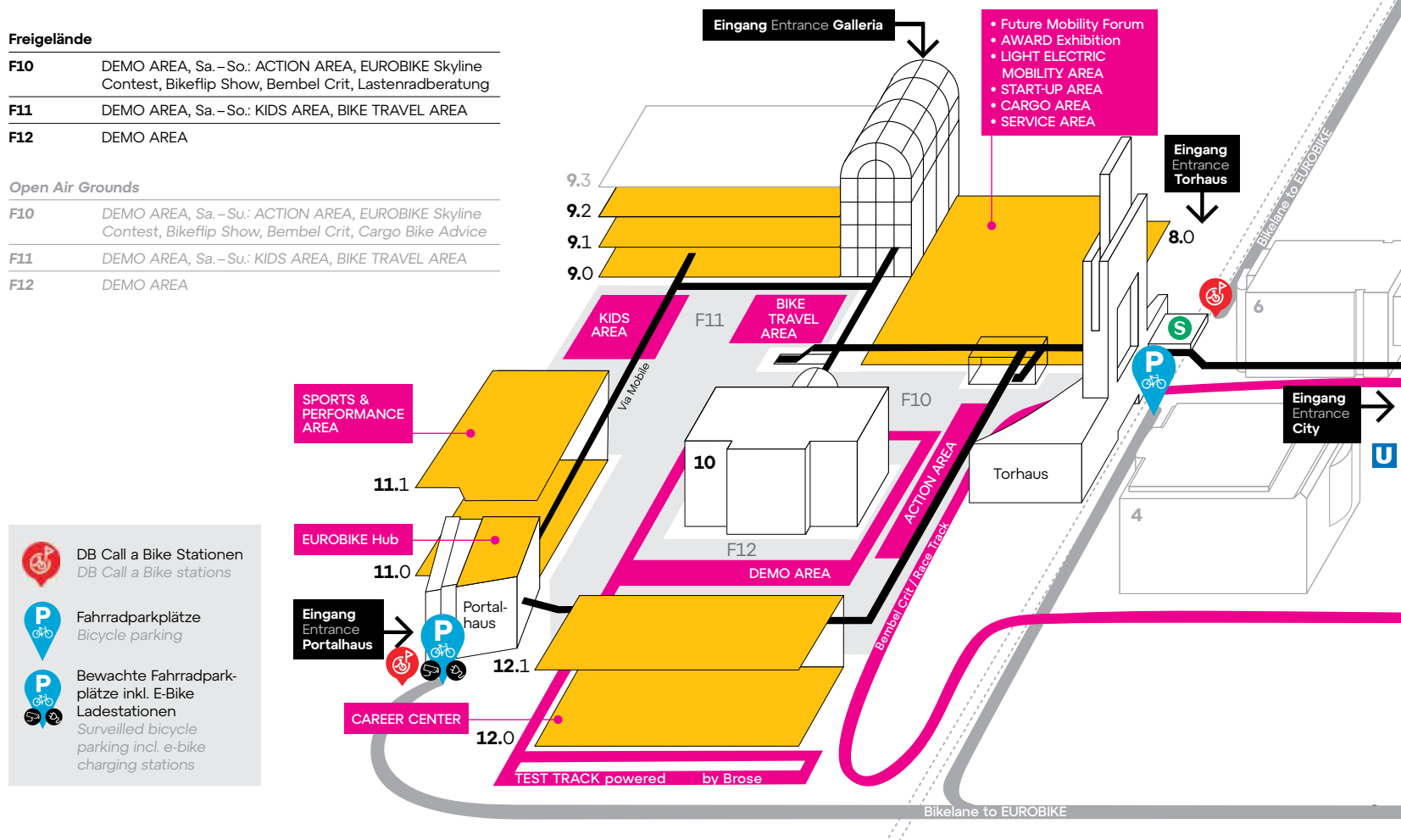
Freigelände

F10	DEMO AREA, Sa.-So.: ACTION AREA, EUROBIKE Skyline Contest, Bikeflip Show, Bembel Crit, Lastenradberatung
F11	DEMO AREA, Sa.-So.: KIDS AREA, BIKE TRAVEL AREA
F12	DEMO AREA

Open Air Grounds

F10	DEMO AREA, Sa.-Su.: ACTION AREA, EUROBIKE Skyline Contest, Bikeflip Show, Bembel Crit, Cargo Bike Advice
F11	DEMO AREA, Sa.-Su.: KIDS AREA, BIKE TRAVEL AREA
F12	DEMO AREA

Hall 8.0	E-Mobility + LEVs, Urban Mobility, Infrastructure, Logistics, Mobility Solutions, Future Mobility Forum, AWARD Exhibition, LIGHT ELECTRIC MOBILITY AREA, START-UP AREA, CARGO AREA, SERVICE AREA
Hall 9.0	Bikes/E-Bikes
Hall 9.1	Parts/Equipment, Components, Fashion, Accessoires
Hall 9.2	Supplier Area (Wed.-Fr.)
Hall 11.0	Bikes/E-Bikes
Hall 11.1	Parts/Equipment, Components, Fashion, Accessoires, SPORTS- & PERFORMANCE AREA, Sa.-Su.: BIKE BOUTIQUE
Hall 12.0	Bikes/E-Bikes, CAREER CENTER
Hall 12.1	Parts/Equipment, Components, Fashion, Accessoires
Portalhaus	EUROBIKE Hub, Media & Creator Lounge, Medienpartner, Trade press stand



Anreisemöglichkeiten zur EUROBIKE

Travel options to EUROBIKE

Die EUROBIKE findet auf dem Gelände der Messe Frankfurt statt. Die Messe Frankfurt, zentral in der Mitte Europas gelegen, erreichen Sie schnell über optimale Verkehrsverbindungen – ganz gleich von wo du startest: In der Innenstadt, am Hauptbahnhof, am Flughafen Frankfurt oder auf der Autobahn oder ob Sie zu mit dem Fahrrad, zu Fuß, mit dem ÖPNV oder anderen Verkehrsmitteln anreisen.

EUROBIKE takes place on the grounds of Messe Frankfurt. The Messe Frankfurt, centrally located in the middle of Europe, can be reached quickly via optimal transport connections – no matter from where you start: In the city center, at the main train station, at Frankfurt Airport or on the highway, or whether you arrive by bike, on foot, by public transport or other means of transport.

Eine Übersicht finden Sie hier:



Hear you find an overview:



Kostenlose Anreise mit dem ÖPNV für Fachbesucher

Free travel by public transport for trade visitors

Alle Fachbesuchertickets, die online erhältlich sind, berechnen sich kostenlos Hin- und Rückfahrt zur Messe in Bussen und Bahnen im Gebiet des Rhein-Main-Verkehrsverbundes. Bitte beachten, dass diese Tickets nur ausgedruckt und in Verbindung mit einem gültigen Ausweisdokument gültig sind. Weitere Informationen dazu finden Sie auf Ihrem Ticket.



All trade visitor tickets, which are available online, entitle the holder to free return travel to the fair on buses and trains in the area covered by the Rhein-Main-Verkehrsverbund. Please note that these tickets are only valid when printed out and accompanied by a valid identification document. You will find further information on your ticket.

Anreise mit dem Fahrrad

Arrival by bike

Guthaben für die DB Call a Bike Nutzung
Mit unserem Mobilitätspartner DB Call a Bike stellen wir Euch mit einem Code für ein Guthaben für die Nutzung von Call a Bike in Frankfurt vom 21. – 25. Juni 2023 zur Verfügung. Einfach am Bahnhof, nach Messeschluss oder nach einem schönen Abend am Mainkai auf's Bike umsteigen.

Nachhaltige Anreise: Wir helfen bei der Wahl des Verkehrsmittels

SteigUm.de zeigt anhand vieler Beispiele, welch immenses Einsparpotential in der Anreise zur Messe steckt, wenn alle Besucher das Auto stehen lassen und nur für die letzten Kilometer in Frankfurt aufs Fahrrad umsteigen.

Einfache Navigation mit Biketour.Guide von SteigUm.de

Die Fahrrad-navigations-app Biketour.Guide steht für Messebesucherinnen kostenlos als Premiumversion zur Verfügung. Damit kommen Sie sicher vom Hauptbahnhof zum Messegelände und von dort zum Mainkai.

Bewachtes Fahrradparken:
Am Eingang Portalhaus findest du eine Fahrradparkanlage. Fahren Sie mit dem Rad direkt an den großen, bewachten Fahrradparkplatz inklusive Service-Station und genießen Sie den Messetag mit dem Wissen, dass Ihr Fahrrad sicher verwahrt direkt vor der Türe auf Sie wartet.

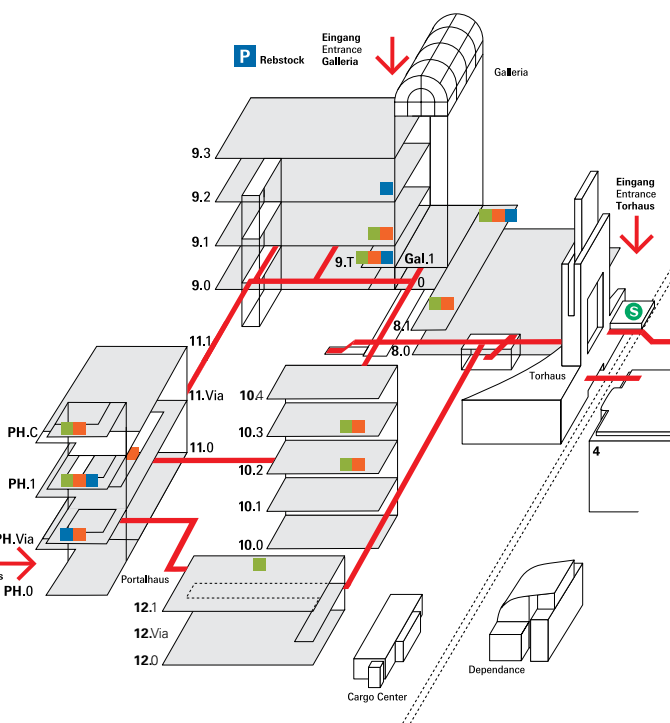
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EUROPEAN MARKET REPORT 2022

MIXED SIGNS FROM EUROPE'S MARKETS

Over the last 12 months there's been a lot of talk about a tough macroeconomic environment — inflation, eroding consumer sentiment and high inventory levels. Still, the data from key markets in Europe for 2022 are not all bad. The main reason: e-bike sales are still gaining market share.



The e-bike is king, with most bicycle manufacturers focusing their R&D efforts and budgets on models with electric assistance drive systems. From road bikes to gravity-oriented mountain bikes and even kids bikes, hardly any segment has been left untouched by this trend. For families in urban areas, cargo bikes with an electric motor have become a real alternative to a car, with cities handing out subsidies to facilitate the purchase of such bicycles. Thanks to the rise of leasing models, the demand for e-bikes remained high despite the bad state of the economy in countries such as Germany, Belgium and the Netherlands.

According to provisional data from Eurostat, the number of e-bikes imported into the EU last year grew to 1,185,695 units, an increase of 14.8 percent year-on-year. At the same time, key domestic e-bike suppliers such as Portugal also hit new e-bike export records. The limiting factor for the growth of e-bike sales seems to be the availability of batteries and electronic assistance drive systems, with the big suppliers hitting peak capacity in 2022. Bosch eBike Systems could not produce enough of its in-tube Powertube batteries to meet demand, throwing a spanner in the works of production planners across Europe in the spring of 2022.

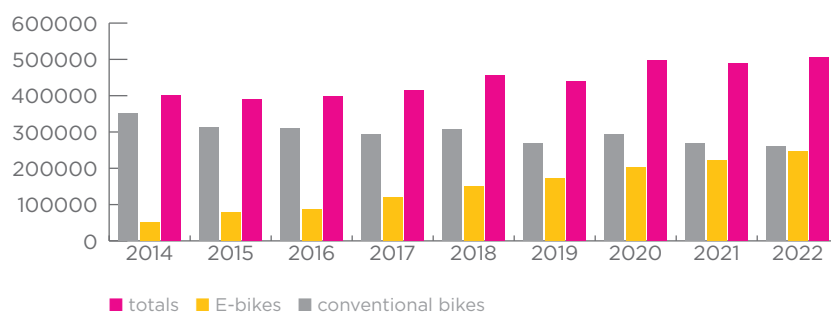
As a general pattern the higher average prices of e-bikes and their growing market share have become an important factor in keeping the bicycle industry on a growth trajectory in 2022 in many European countries – if not in units, then in turnover. Two things need to be kept in mind however: first of all, some of the growth in turnover has to be contributed to inflation and rising prices. And secondly, comparisons on a year-to-year basis need to be taken with a grain of salt given the many disruptions that came with the pandemic. Expanding the perspective from 2021 back to pre-pandemic 2019 helps to give a clearer picture.

A prime example for e-bikes keeping the bicycle market on a growing trajectory is **Germany** as the largest market in Europe. While the overall number of bicycles sold in Germany in 2022 dropped by 100,000 units to 4.6 million, the number of e-bikes sold grew by 10 percent to 2.2 million, putting their market share at almost 48 percent. Conventional bikes saw a drop of 11 percent in sales to 2.4 million units, with the average sales price growing to € 500 while the average sales price for e-bikes grew to € 2800. Based on these numbers Germany's Zweirad Industrie Verband (ZIV) estimates the overall revenue of these bicycle sales to reach € 7.36 billion – a new record. 76 percent of these sales went through brick and mortar stores, with D2C players accounting for another 21 percent.

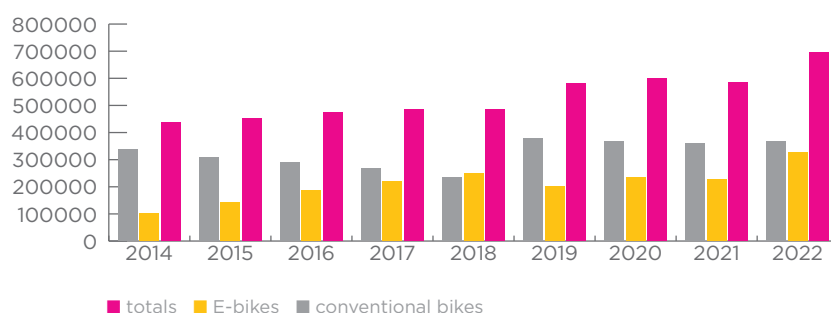
According to statistics collected and analyzed by Arge Fahrrad, **Austria** posted even better numbers for 2022. The overall number of bicycles and e-bikes sold grew by 3.2 percent to 506,000 units. Demand for e-bikes was unfazed by inflation, as sales in this category grew by 11 percent year-on-year to 246,728 units – making for a market share of 48.75 percent. Due to their significantly higher average price, e-bikes even accounted for 74 percent of the turnover resulting from bicycle sales. This turnover grew by an impressive 35 percent year-on-year to € 1.39 billion. According to Arge Fahrrad, the sales of accessories, components and spare parts accounted for another € 200 million, setting new records for the bicycle business in Austria.

While Switzerland is known for its buying power and was less affected by inflation since it's not part of the eurozone, the bicycle market contracted for a second year in a row in 2022. The number of conventional bicycles and e-bikes sold dropped by about 2 percent to 483,562 units. But while the sale of conventional bicycles dropped

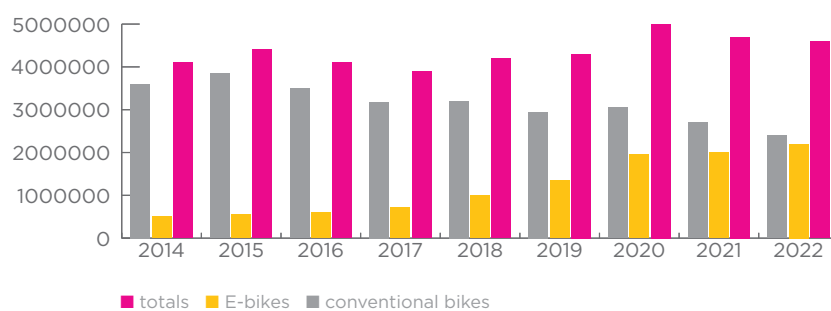
Bicycle market Austria 2014 - 2022



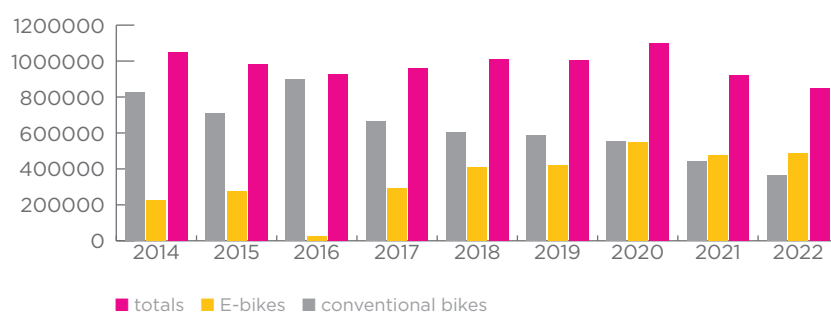
Bicycle market Belgium 2014 - 2022



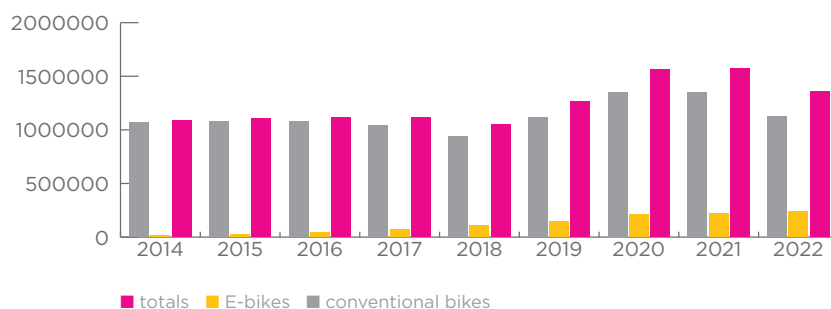
Bicycle market Germany 2014 - 2022



Bicycle market Netherlands 2014 - 2022



Bicycle market Spain 2014 - 2022



by a hefty 14 percent year-on-year to 264,832 units, e-bikes fared a lot better and saw a rise in sales of 17 percent to 218,730 units, putting the market share of e-bikes at 45 percent. Market insiders agree that the slight drop in sales in 2021 was caused by supply chain issues and a lack of goods, while the drop in 2022 is attributed to lower consumer sentiment.

Somewhat surprisingly for such a flat country, the Netherlands is the European country with the highest market share for e-bikes. According to Dutch industry association RAI Fietssen, the overall number of bicycles and e-bikes sold in 2022 stood at 855,000, a drop of 7 percent. Still, the turnover grew slightly by 0.9 percent due to the high average price of e-bikes. Since the sale of e-bikes grew by 2 percent to 486,000 units and speed pedelec sales grew by 9 percent to 4,370 units, the market share of e-bikes grew to 57.35 percent by units and to a massive 80 percent by revenue. According to RAI Fietsen, brick and mortar stores stood at a market share of 74 percent, while online sellers lost 16 percent of their turnover in the first year after the lifting of pandemic-related restrictions.

As for countries showing dynamic growth, **Belgium** and **Italy** stand out. According to the mobility federation Traxio, a total of 695,871 units were sold in Belgium last year, up 19 percent year-on-year. While the number of conventional bicycles sold grew by 2.6 percent to 367,791, sales of e-bikes were up by a hefty 45 percent to 328,080 units, resulting in a market share of 47.2 percent. In Italy, the turnover resulting from selling bicycles

grew by 18 percent to € 3.2 billion according to the industrial federation Ancma. As for the units sold, the number was down by 9.2 percent to 1.772 million. Of these, 1,435 million were conventional bikes – 15 percent less than in 2021. The sales of e-bikes grew by 14 percent to 337,000 units. This puts the market share at a relatively low 19 percent.

Apart from the market share of e-bikes already having grown to 28 percent the situation is very similar in

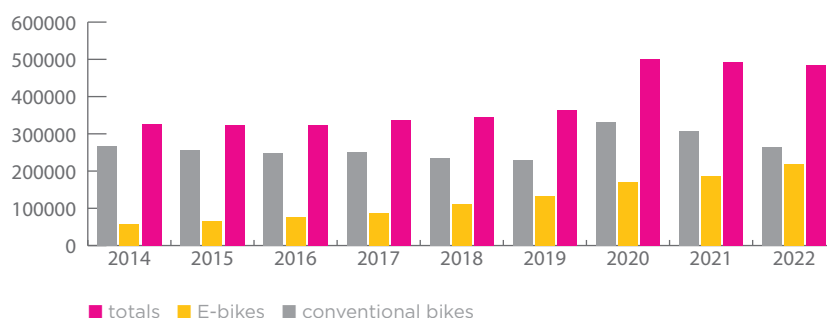
France. According to the Union Sport & Cycle the overall bicycle market grew by 5.2 percent in value to € 3.6 billion, with the sale of bicycles growing by 7 percent and accounting for € 2.4 billion. Of the 2.596 million units sold, 1.858 million were conventional bicycles – a decrease of 13 percent year-on-year. Sales of e-bikes on the other hand grew by 12 percent to 738,000 units, more than making up for the losses in conventional bikes. According to sales numbers published by **Spain's** AMBE

association, the bicycle market in Spain was down in units by 13.6 percent to a total of 1.357 million. E-bikes bucked this trend, as sales were up by 5.7 percent to 238,183 units and their market share grew to 17.4 percent.

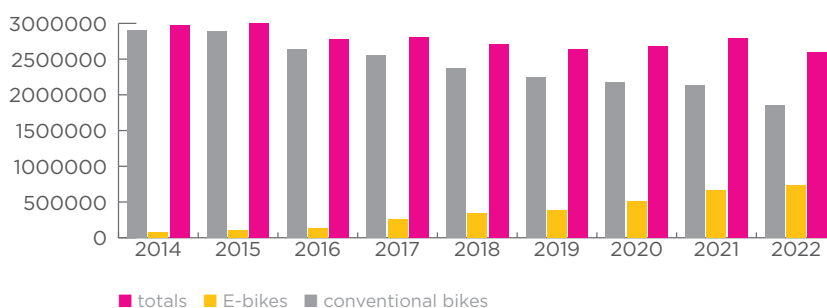
The **United Kingdom** has been in some heavy waters post-brexite, and the bicycle business was no exception. According to the Bicycle Association (BA), sales of conventional bicycles fell by 22 percent to 1.88 million units in 2022, marking a 20-year low and dropping well below pre-pandemic levels. While e-bike sales saved the day in many other markets, they dropped by 6 percent to 155,000 as well. With a market share of a meagre 7 percent in units, the United Kingdom's e-bike market has not seen significant growth since 2020. The turnover from sales of bicycles and e-bikes totaled \$1.137 billion, a drop of 15 percent year-on-year. Parts, components and accessories added \$ 598 million to the turnover – a drop of 22 percent.

In 2023, there is no lack of indicators pointing at a sustained cooling of the markets: key suppliers such as Shimano and Fox Factory have reported a dip in their Q1 numbers for 2023 already, as have large Taiwanese bicycle manufacturers such as the Giant Group, Merida Industry and Ideal Bike Corporation. The fact that Fitch has downgraded the Accell Group's outlook to negative due to high inventory levels and cash flow issues is pretty telling as well. It also indicates that the current imbalance caused by a slump in demand and overstock is not an issue that will disappear within the next couple of quarters. **LvR**

Bicycle market Switzerland 2014 - 2022



Bicycle market France 2014 - 2022



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TAIWANESE TEXTILE MAKERS SHOW OFF FIBER TECH

Vegan silk and yarns integrating cocoa shells and other forms of waste are among the materials jointly displayed by a dozen Taiwanese suppliers for the activewear industry at Eurobike.



Fabric with Stormega technology from Singtex Industrial.



Secao by Grandetex Development is a yarn that uses waste from cocoa culture.



Vegan silk is a cellulosic fiber from the linters of the cotton plant, marketed by Be Be Cotton Knitting.

They are part of **Taiwan Textile Select [Hall 9.1 / G64c]**, one of the projects implemented by the Taiwan Textile Federation (TTF) to support the industry. Taiwan is a leading supplier of textile fibers with an integrated supply chain, resources for the development of performance fibers as well as eco-friendly solutions.

They are offering products such as vegan silk, a cellulosic fiber from the linters of cotton plant, marketed by **Be Be Cotton Knitting**. It has eco-friendly properties, as a biodegradable fiber issued from natural and renewable resources.

Another such resource from Taiwan is Secao by **Grandetex Development**, a yarn that is based on waste

from cocoa culture. The company indicates that the cocoa shells used for its yarns come from Taiwanese farmers, which helps to supplement their revenues. "Secao can speed up the decomposition, not only solve the problem of agricultural waste but also reduce the burden to the environment," Grandetex states.

The shells are exposed to sun, then crushed and stirred through hydrolysis, to break up the cellulose. After a drying process, the substance turns into powder, which Grandetex uses for its yarns. It takes about 100 kilos of cacao shells to make ten kilos of biodegradable cacao powder.

Sustainability is a prominent topic for participants in Taiwan Textile

Select. The TTF indicates that many of the fibers and fabrics from these suppliers use recycled polyester, nylon or yarns integrating waste.

San Fang Chemical Industry boasts that it's using such environmentally friendly materials for Aerofilm, a high-performance thermoplastic polyurethane adhesive strip. Fabrics made with Aerofilm are said to be breathable, comfortable, durable and stretchable, among other properties.

Other technologies apply to fabric structure, such as Stormega from **Singtex Industrial**. The company from New Taipei City explains that it "uses fabric structure to create a hollow layer, combined with softshell

to create a unique 3D micro-climate temperature-adjusted single-layer woven fabric."

Singtex claims that the structure "effectively captures and maintains body temperature without the need for fleece." It adds that the tightly woven construction of the fabric ensures durability and water resistance.

The TTF has brought these companies together as part of the Textile Export Promotion Project (TEPP), a three-year program started this year, which involves 36 Taiwanese textile manufacturers.

No fewer than 144 fabrics are on display in Frankfurt. Their details are outlined in digital displays, using QR codes. The participants in TEPP are split into three groups, specialised in outdoor sports, urban casual and safety protection. Twelve of the companies taking part in Taiwan Textile Select at Eurobike are from the urban casual group.

The declared goal is to increase the Taiwanese industry's recognition as a sourcing hub for buyers across international markets. It wants to turn into "the Silicon Valley of the global textile industry" by supporting product innovation, green technology and market insights. ■ **BS**



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GERMANY'S BIKE INDUSTRY WORKFORCE GROWS 30% IN THREE YEARS

Research by Zukunft Fahrrad shows strong performance across retail, manufacturing and tourism. The cycling lobby group will hold its first forum on innovative services at Eurobike on the second day of the show.



Zukunft Fahrrad CEO Wasilis von Rauch

The period between 2019 and 2022 saw the workforce behind Germany's bicycle industry grow significantly, according to a study released in June by the Zukunft Fahrrad bicycle industry association, produced in association with Transportation Thinktank T3. The lead author was Dr. Frederic Rudolph.

The research found that within the core industry sectors of manufacturing, retail and services, employee numbers in Germany have increased by around 30% since 2019. This positive data comes despite the obvious challenges faced during the period.

Specialist cycle retail in Germany now employs more than 30,000 people, an increase of almost 30% in the last three years. Sales in specialist retail have also grown by around 60% during the same period. In manufacturing, the number of workers has increased by about 17%.

One driver for the strong retail figures is the growth of company bike leasing. Here, employment has almost quadrupled since 2019. The Federal Association of German Leasing Companies reports over 600,000 new bikes were leased in 2022 alone.

The good news expands to other segments of the cycling industry too. German cycle tourism has also added more than 60,000 new jobs since 2019, meaning that more than 260,000 people are now employed in the sector. Zukunft Fahrrad believes this is clear evidence that investment in the cycle route network is now paying dividends and leading to more users.

"Above all, the latest figures on the development of the German bicycle industry show one thing, that the sector has boomed in recent years in both employment and turnover," explains Wasilis von Rauch, CEO of Zukunft Fahrrad.

"Germany has a very strong trade and has further consolidated its position as a leading market for innovative, high-quality bicycles," says von Rauch. "Groundbreaking services such as subscription models or company bike leasing have been successful and are an inspiration for our European neighbours. Now politicians have to keep the pedals turning and implement sustainable support measures for the bicycle industry so we can continue to wear the yellow jersey."

The Zukunft Fahrrad association, which commissioned the research, was founded in 2019 by companies from the German bicycle industry. It seeks to facilitate sustainable change in mobility through effective lobbying.

At this year's Eurobike show, it's organising the first Zukunft Fahrrad Forum. This space for industry dialogue covers all innovative services related to bicycles. This inaugural edition will focus on corporate mobility. All are welcome to attend the event, which takes place on 22nd June from 10 am to 1 pm in Hall 8 on Stage 2. **JD**

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TAIWAN Textiles
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Taiwan Textile Select Hall 9.1, G64c

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GRØNBLÅ TACKLING PLASTIC WASTE WITH CIRCULAR SOLUTIONS

If Grønblå makes rapid progress with its green technology, European bicycle manufacturers could soon have their own composting machine to sustainably dispose of biodegradable packaging. They would just throw used bags made from compostable material into the machine, to turn out a substance that could eventually be used as fertilizer.



Running tests to better decompose compostable material with enzymes.

That is the scenario envisaged by Jayu Yang, former chief executive of Haro Bikes. The entrepreneur has invested in a laboratory and created **Grønblå [Hall 8.0 / C15]**, a company that is working on circular solutions to reduce plastic pollution and save resources in the bicycle industry. Grønblå has come up with plant-based and compostable materials that are marketed as alternatives for many single-use plastics. They're used to make products such as water bottles, plastic

bags, hub or fork protectors, and they can degrade into organic carbon and water.

But Grønblå's broader purpose is to combat microplastics pollution and to help build up a loop, where used parts and packaging are turned into reusable resources. This would involve many stakeholders in the supply chain, from component manufacturers to brand owners and retailers.

Grønblå is at Eurobike and Yang will discuss her work and solutions at tomorrow's start-up and innovation day (June 22). She will take part in the pitch session focusing on green tech solutions and circular economy. The issue of single-use plastics may have particular resonance among European manufacturers, since they are integrated into the European Union's environmental policies. Single-use plastic cutlery, plates, straws and other items have already been banned in the EU since July 2021. Yang will also speak on the topic of "Fighting the plastic flood" at the Future Mobility Forum on Friday.

Yang said she started questioning the industry's use of resources when she was at Kenstone, a manufacturing partner for several high-end bicycle brands. "I didn't feel really

comfortable that we're making money by making more, and I feel that we probably have to be responsible for what we produce," she said. Yang set up Grønblå two years ago in partnership with Dr. Shu Yuan Yang, a biology graduate from Yale. Their initial task was to replace plastic packaging with alternative materials. Approached about plastic packaging, North American manufacturers sometimes suggested recycled plastic as a sustainable option. However, Yang argues that the available volume is insufficient, recycling can require energy and generate waste, and it doesn't solve the issue of micro-plastics.

A key obstacle for the adoption of Yang's compostable alternatives is cost. The price of a fossil-based plastic bag is about three times cheaper, but she adds that the economic impact isn't significant for bike manufacturers. It could be seen as an investment, not least because the use of more sustainable resources is aligned with consumer demand. Grønblå has started working with five bicycle parts makers in Taiwan, who will use its compostable packaging for shipments to European and North American

manufacturers. The plan is to pick up the packaging waste from the manufacturers for subsequent composting.

At the same time, Grønblå is developing a composting machine to be installed in production plants. It could process compostable packaging along with other organic waste – such as leftovers from the staff canteen, or from plants. The target is to have the machine ready in the first quarter of next year. The process uses heat and humidity to quickly turn the organic waste into "pre-composting" material. This more compact substance will then be sent to composting facilities. However, the lab is also working on a microbial solution to speed up composting, and to achieve it at lower temperature. Yang said they have already found some enzyme candidates.

The cooperation of dealers and the establishment of logistical systems will be crucial to achieve a closed loop. Yang said that much of the industry's plastic waste is created in the after-market, but there aren't any efficient systems to recover this waste from thousands of dealers as yet. Grønblå is exploring potential partnerships with other stakeholders who already have collection networks in place. ■ **BS**

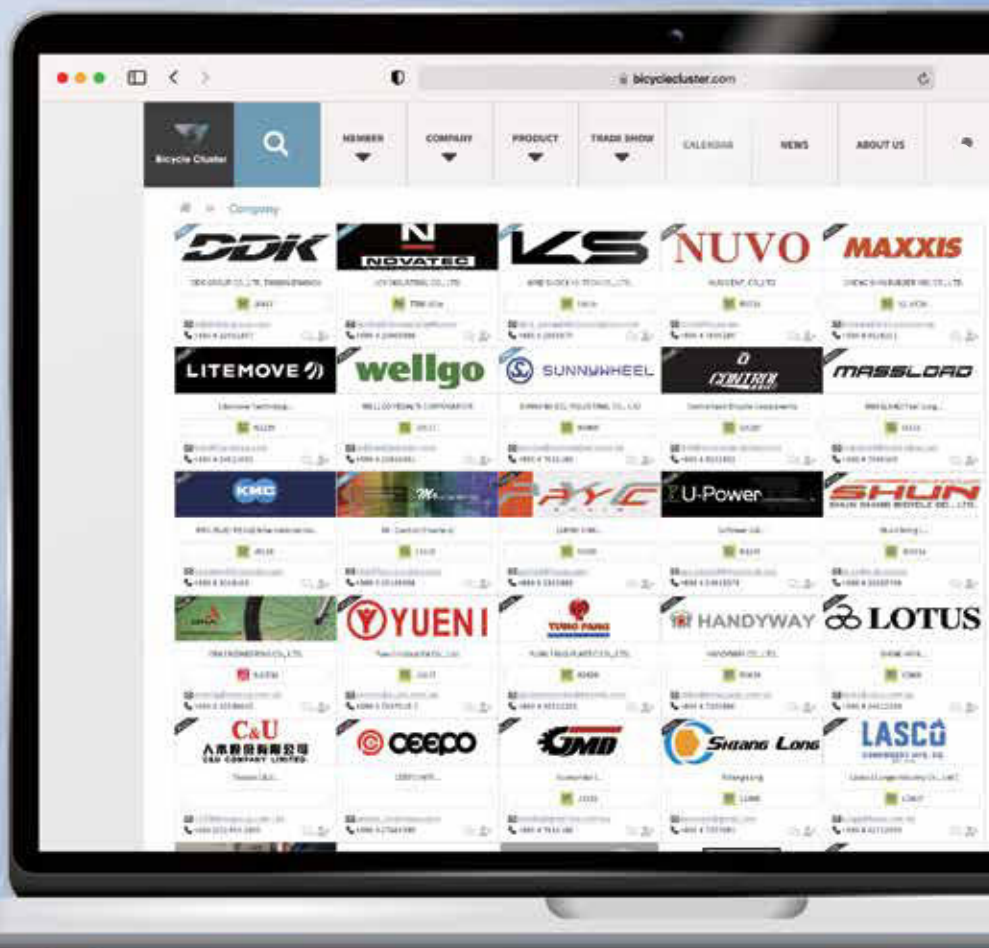


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UNIQUE GRAVITY DIE-CAST PROCESS

MOUSTACHE'S STRIKING "J" E-BIKE CONCEPT

With the J concept, Moustache Bikes has engineered a remarkable aluminum frame made in France, for e-bikes with an advanced geometry that makes them easy to handle.

Moustache's French-made J bike with advanced geometry



Grégory Sand, one of the French company's founders, explains that "J" is not just another e-bike. It uses a two-part aluminum frame with no welding, which integrates motor, battery and suspension. Sand added that the J's suspension system and geometry make it particularly comfortable. "You're almost flying," he gushed.

The model has been three years in the making, as **Moustache [12.0 / A08]** worked with French manufacturing partners to create a highly

technical frame. worked with French manufacturing partners to create a highly technical frame. "The process of making this frame is completely unique," said Sand. Moustache used a gravity die-casting process, for a frame made from a single cast of aluminum. Along with the motor and battery, it integrated internal reinforcements. The construction enabled Moustache to produce "an open and full-suspension frame as stiff as a closed frame." Another

integral part of the concept is that J comes with several options, making it suitable for commuting and more athletic pursuits.

J stands for Jour Nouveau. Meaning "new day," it's a nod to the brand's habit of naming its bikes after the days of the week, as well as the innovation in the bike. The bikes are molded in Vitrolles, near Marseille, then machined in Poligny, in the Jura, and powder coated in Schirmeck, in the Alsace. The bikes are assembled at Moustache's own plant in the Vosges.

Sand launched Moustache in 2011 with Emmanuel Antonot, formerly at Lapierre. They saw electric assistance as an opportunity to encourage more people to leave their car in the garage. For the same purpose, Moustache's bicycles have gear systems that are particularly easy for beginners to use. The J is central to Moustache's expanded presence at Eurobike this year. It comes as the company is investing in its team and distribution in Germany and Austria. Steffen Krill has recently been appointed market manager for the two countries, after more than 20 years in the industry.

Moustache is investing in its own

infrastructure as well. Work is under way at its plant in Thaon-Les-Vosges, for an enlargement of about 30% to 15,000 square meters to be finalised at the end of this month. The factory should be fully powered by solar panels, and it will be equipped with a rainwater recovery system and electric charging stations. Moustache's plant takes care of assembly, and the firm has been gradually taking over more outsourced tasks, such as the production of its own wheels.

The partnership with French suppliers for the J fits with Moustache's goal to try and make its supply chain shorter and more sustainable. The construction uses a primary aluminum alloy from French and Italian suppliers, refined directly from the raw ore. All waste and excess materials are recycled by remelting. Sand said that the company was envisaging a take-back scheme that would make it easier to recycle used bicycles, several years down the line. The powder coating painting process doesn't use any solvents.

Sand said that Moustache turned out more than 60,000 bicycles and chalked up sales of a little more than €130 million last year. ■ **BS**

Corporate Sustainability Reporting Directive

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HALL 8: BEYOND BIKES

EUROBIKE WIDENS ITS SCOPE BEYOND BICYCLES

Eurobike is positioning itself as an exhibition for future mobility, and it's starting to attract exhibitors from outside the bike industry. Most of these will be exhibiting in Hall 8 or at the open-air ground, widening the scope of the show and reflecting the impact that the electrification has on both the bicycle business and mobility.

The Aik is Cake's first model that comes with cranks and pedals rather than footrests.



With its utilitarian design, Cake's Ösa is a versatile platform for professional use.

every single component needed to build an e-bike.

Since the Eurobike organizers have added a B2B-only option where exhibitors without any consumer business move to the second floor of Hall 9 and only show their products from Wednesday to Friday, additional space has become available in Hall 8 – and the show organizers have reached beyond the bicycle industry and the goods bicycle dealers are selling commercially to fill the available space. For example, a number of e-scooter brands will be exhibiting their products, ranging from simple offerings like the ones from **Micro Mobility [hall 8.0 / A04]** to **Tuul's [hall 8.0 / J30]** eco-friendly models and upscale models from **Streetbooster [hall 8.0 / F08]** and **Trittbrett [hall 8.0 / A44]**. Apart from some e-scooters, Chinese manufacturer **Shenzhen Tomoloo Technology [hall 8.0 / O22]** will also exhibit the F1 Electric Scooter that is pretty close to a small electric motorbike.

As in previous years, Swedish e-motorbike specialist Cake will be exhibiting at Eurobike as a guest at the booth of belt-drive specialist Gates [hall 12.1 / A25]. This does not come as a surprise since Cake founder Stefan Ytterborn has close connections to the bicycle industry and his brand is firmly at home in the e-mobility segment. With its product range, the company



The cargo trailers of E2Trail come with their own assistance drive system and a lifting mechanism.



The City Hopper fits onto bikes lanes and offers both electric pedal support and protection from the elements.

has been getting closer to bicycles step by step, starting with the full-size electric motocrosser Kalk, then scaling down to the compact and highly versatile electric utility motorbike Ösa and finally presenting the compact cargo bike Aik that features cranks and pedals and is being brought to the market mainly through rental offerings for businesses. Moving into this market from the opposite direction is folding-bike specialist **Dahon [hall 9.0 / A15]**, which launched a selection of e-motorbikes at the Shanghai Cycle Show and is bringing two models to Eurobike.

Not everybody agrees that a rain jacket or a poncho is all it takes to keep going on a bicycle despite bad weather. Catering to a new kind of bicycle user with higher demands in terms of comfort and protection from the elements, companies such as **CityQ [open air ground F11.0 / C04]** and **Hopper Mobility [open air ground F12.0 / H11]** have specialized in building hybrids of bicycles and cars. Rolling on three or four wheels and



HP Velotechnik's Scorpion is a terrain-worthy recumbent trike with electric support.

relying on parts and components from e-bikes and motorbikes, their products fill a gap between e-bikes and cars, are narrow and lightweight enough to be ridden on cycling paths legally. They even offer a trunk to transport groceries well protected from rain and keep the rider dry and snug on a comfy chair. Following this very concept, the Podbike from Norwegian brand Frikar was one of the crowd favorites and won a Eurobike award last year.

Large cargo trikes and quads for professional logistics are a market of their own, as manufacturers deal with logistics providers or local authorities directly rather than cooperating with traditional bicycle dealers as intermediaries. Still, some well-known specialists for this segment are exhibiting with the likes of **Bikelecting [hall 8.0 / B33]**, **VUF Bikes [at 4R Concept, hall 8.0 / B29]**, **Rytle [open air ground F12.0 / H09]** and **Radkutsche [open air ground F10.0 / D14]**.

Their products are worth checking out if you are interested in how last-mile deliveries will be handled in the not-too-distant future – and most of them will be available for test rides as well. **LvR**



No pedals included: Shenzhen Tomoloo's F1 is a light e-motorbike, not an e-bike.



CityQ specializes in light-weight electric pedal cars for commutes.



Logistics giant DHL has been testing the CityQ as a platform for last-mile deliveries.



Ready to take big loads: The XXL Transporter of VUF Bikes relies on Valeo's innovative mid-motor with integrated gearbox.

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PREVIEW: CIE SUSTAINABILITY SUMMIT; WOMEN IN CYCLING

CIE PUSHES FOR SUSTAINABILITY – AND MORE

As one of the bicycle industry's leading pan-European associations, Brussel-based Cycling Industries Europe (CIE) has traditionally organized panels and other events at Eurobike. This year, CIE puts the focus of its Big Sustainability Event on the sustainability of corporate operations and matters of diversity, equality and inclusion in the workplace.



Just like last year, a high-profile panel will discuss urging topics at the CIE summit.

As the umbrella organization of the European bicycle industry, **CIE (Cycling Industries Europe) [hall 8.0 / J08]** is active on many fronts. It's been lobbying the European Union to put cycling at the centre of the EU's New Green Deal

and to shape the EU Cycling Strategy. It also contributed to the decision of the European Commission to slap heavy anti-dumping tariffs on e-bikes made in China, boosting the reshoring trend within the industry. Another important

field of action is the ongoing discussion about changes in legislation that may have a drastic impact on the status of bicycles and e-bikes in traffic – and as a consequence on how future sales develop. The same goes for budget discussions in EU member states and investments in bicycle-friendly infrastructure.

Since a large part of the European and the global bicycle industry is heading for Eurobike as the world's largest bicycle trade show, CIE has been making good use of this gathering to organize panel discussions and other meetings in recent years. This year will be no different, as CIE is hosting a series of events. It all starts on Thursday with the Industry Leaders' Breakfast held at the Eurobike Hub in the Portalhaus. From 9am to 10.30am, the 10th edition of this high-profile event aiming at CEOs, presidents and directors in the bicycle sector will focus on the new EU Cycling Strategy that has the potential to double the current levels of cycling in the EU and create up to one million new jobs in

the sector. Attendees will be updated on what the announcement of this new EU cycling policy means, what has been achieved for the industry in the last year and what critical topics still remain on the policy agenda.

Apart from this high-level exchange to start the second day of the trade show, all activities of CIE take place on Friday. At CIE's Big Sustainability Event from 10am at the Future Mobility Forum, sustainability will be the central topic. The reason for this is that new EU policy developments are requiring companies to conform to new international standards on transparency and traceability, including batteries, critical raw materials, packaging, carbon tariffs, and digital services. And just conforming to these standards will not do, as compliance needs to be independently certified as well. Rather than passively waiting for the impact of these changes, many companies aspire to be at the forefront of the ongoing green transition, working hard to come up with solutions. At the Cycling Industries Sustainability

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Small steps can combine to create a big effect, with more sustainable packaging being a prime example.

Panel some of these front runners share their strategies and experiences.

The Big Sustainability Event is held in partnership with industrial federation Conebi, the Zweirad Industrie Verband (ZIV), Verbund Service Fahrrad (VSF), lobbying organization Zukunft Fahrrad and the think tank Bikebrainpool. The latter four will be launching their guidelines to the German Sustainability Code (DNK) for the bicycle industry as part of the event. These guidelines will help companies from the bicycle industry to report about their sustainability activities and to develop a sustainability strategy. Afterwards the Cycling Industry Sustainability Expert Group, jointly run by CIE and Conebi, will launch an industry-wide Climate Pledge calling on companies

to measure their carbon footprint and take individual action to lower their CO2 emissions.

The presentation of VeloLAB, an innovation platform funded by the German Ministry for Digital & Transport and the bicycle industry, is a case study showing how innovation and sustainability go hand in hand. Last but not least the high-profile Big Sustainability Panel is discussing how to tackle the new and unprecedented challenges that the bicycle industry is facing in terms of sustainability, circular economy, the transparency and traceability of global supply chains and new opportunities and business models arising from this ongoing green transition. Amongst the panelists will be experts representing



Last year, the Women in Cycling Networking Breakfast saw a sizable attendance, showing that the bicycle industry is not a man's world anymore.

global industry heavyweights such as Trek, Decathlon and Giant, but also domestic frontrunners such as Riese & Müller and French bikesharing operator Fifteen.

With the Women In Cycling Networking Breakfast organized by the Young Mobility Network and to be held at the Eurobike Hub on Friday morning from 9am to 10am (exhibitors are allowed in from 8am already), CIE is also putting its weight behind the push to move the cycling industry towards more diversity, equality and inclusion. And to get more female professionals to join the cycling industry, leading to a product portfolio that better reflects



the needs of all kind of consumers and not just those of a very enthusiast, sports-oriented and mostly male segment of the population. After all, modern investors are looking into ESG criteria, and apart from eco-friendliness and good governance, an open and friendly workspace environment for all is an important part of these criteria. **LVR**

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OVERVIEW: E-BIKE BATTERIES & COMPONENTS

BATTERY ECO-SYSTEMS AIM FOR EFFICIENCY AND SUSTAINABILITY

In the ever-evolving landscape of battery technology, the push for design and efficiency takes centre stage, together with the environmental implications driving the industry towards a more sustainable future, in line with new regulations set forth by the European Union.



Celxpert's Triton extends the battery's range and can charge your devices.



Celxpert's Triton can be paired with DKN and Cobra batteries.

its new generation 21700 batteries with capacities of 835Wh and 720Wh, offering high-capacity options for demanding applications. Demonstrating a commitment to versatility, each battery is designed to seamlessly integrate with a wide range of motor and e-drive systems, maintaining Darfon's reputation for compatibility and innovation.

Germany's **Akku Vision [hall 8.0 / G09]** is developing and manufacturing replacement batteries for the most popular drive systems under its own brand, E-Bike Vision. Distribution takes place through long-standing partners, from large online stores to all specialist dealers in Europe. The e-bike batteries, manufactured in Haibach, Germany, are constantly adapted to the latest technical requirements in order to offer customers the longest range and safest battery. Among their most popular e-bike batteries is the E-Bike Vision InFrame, compatible with the Bosch Active (Plus) and Performance (CX) drive systems. These can be charged with the original Bosch chargers. Optionally, Akku Vision offers three different chargers with charging currents of 4 A and 6 A for faster charging and a 2 A car charger. The models are equipped with the third generation of its in-house developed intelligent eBV Battery Management System (BMS), and offer the user four safety levels to control and monitor the temperature and voltage of the battery pack. The E-Bike Vision InFrame battery is offered in capacities of 17.5Ah and 630 Wh or 12.8Ah and 461Wh. Both models are available in horizontal and vertical versions.

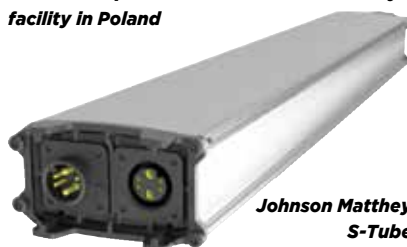
Established just over 25 years ago, the Taiwanese company **Celxpert Energy Corp. [Hall 8 / O08]** has developed a wide range of batteries for various types of products, including laptops and power tools. At this year's Eurobike, the firm is unveiling its Dual Battery solution. It is designed to offer a main battery, such as the DKN-35E-25, paired with a secondary battery, the Triton-48X-18

E-bike battery manufacturers are actively developing and introducing new products to meet the growing demand for advanced, high-performance battery solutions. **Johnson Matthey Battery Systems [Hall 9.2 / A48]**, a leading European manufacturer of advanced lithium-ion battery systems, is at the forefront of producing a diverse range of battery solutions in Poland. Their portfolio spans various applications, including power tools, light e-mobility, and notably, e-bikes and cargo e-bikes. Among their latest offerings are the S-tube and B-tube batteries, each catering to different needs. The S-tube 36 V features a lightweight and slim design, along with a convenient handle and effortless slide-in mechanism. It is available in multiple capacities ranging from 346Wh to 511Wh. For those seeking unparalleled power and endurance, the in-house designed B-tube 48V steals the spotlight, engineered to deliver exceptional performance even under heavy loads. Furthermore, an upgraded version is on the horizon, expected to provide an even higher capacity and energy level, reaching approximately 1,100Wh.

China's **Spard New Energy [Hall 8 / I15]** develops and manufactures high-quality lithium-ion battery solutions for various industries. The com-



Automated production at Johnson Matthey facility in Poland

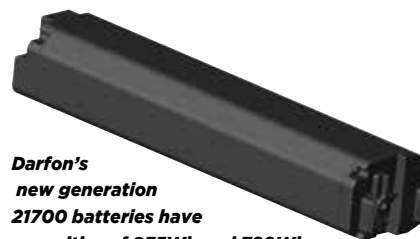


Johnson Matthey S-Tube



Johnson Matthey B-Tube

pany's factory is ISO9001 certified and equipped with advanced production lines for manufacturing high-quality cells, BMS (including ISO13849 certified hardware, UART, and CANBus BMS), battery packs, and chargers. At Eurobike, they will be showcasing a wide range of e-mobility batteries



Darfon's new generation 21700 batteries have capacities of 835Wh and 720Wh

and charging solutions including the YT30115YX. This 48V Li-ion battery uses 18650 cells and comes in three different capacities: 11.6Ah, 14Ah and 14.5Ah.

With a solid reputation for reliability and cutting-edge technology, **Darfon Energy Technology [Hall 8 / I10]** from Taiwan continues to be a trusted leader in advanced energy solutions. This year, they are making waves with three significant updates to their e-bike battery range, coinciding with the opening of their new factory in the Czech Republic. Among the highlights is the introduction of a new lightweight battery produced in Europe, weighing under 1.9 kilograms and boasting a capacity of 418Wh. Additionally, Darfon is showcasing



Akku Vision's in-frame battery is compatible with Bosch Active and Performance systems.



The YT30115YX-D is part of Spard's wide range of external batteries.



The e185 range extender from Mahle provides an additional range of up to 60km.

range extender, with Type-C power output. The primary aim is to provide not only extended riding ranges but also an enjoyable user experience. The range extender battery, adding up to 5Ah/180Wh of capacity and weighing less than 1kg, ensures exceptional portability and, with USB Type-C output, users can also enjoy a full day of uninterrupted power supply for all their external devices with 5V input voltage. Installing and fixing the Range Extender Battery is hassle-free, offering two convenient options. Moreover, the dual battery system boasts compatibility with a wide range of drive systems.

The Spanish company **Mahle SmartBike Systems [Hall 8 / H14]**

is another brand offering smart solutions to expand mobility. Highlights at the show include their new Range Extender e185, recently launched by the company and now joined by the Energy Hub charging base. Mahle's e185 Range Extender weighs in at 1.1kg and delivers 171Wh of power — increasing range by up to 60km. The compact design fits into a standard bottle cage and is compatible with any bike powered by the Mahle X20. On top of that, the new Energy Hub is a charging base for the Range Extender that allows hassle-free charging and also turns the e185 into a power bank able to charge other devices.

Amidst the ongoing quest to enhance battery capacities, reduce e-bike



The Swobbee Station lets you swap batteries in less than 30 seconds.

weight, and improve the efficiency of e-drive systems, the expansion of range takes on new dimensions. Two practical methods emerge as viable solutions: the swift battery swap at specialised swapping stations and the use of dedicated charging stations, reminiscent of their electric car counterparts. By seamlessly exchanging depleted batteries or recharging them conveniently, e-bike enthusiasts can now enjoy uninterrupted journeys, extending their commutes and pushing the boundaries of exploration.

A company that opted for the first option is the German company **Swobbee [Hall 8.0 / B19]**, a smart and sustainable solutions provider based in Berlin. Their Swobbee Station

is a smart, modular battery swapping station designed to provide convenient charging infrastructure for small electric vehicles. With the ability to support various battery types and featuring user-friendly interfaces, the stations offer a seamless battery swapping experience. Additionally, Swobbee offers a battery rental service, allowing businesses to rent batteries for applications such as e-bikes and e-scooters, promoting flexibility and sustainability in transportation.

When embarking on a longer commute or journey with your e-bike, the hassle of lugging around a bulky charger often poses a challenge. However, this quandary finds its

Cont. on page 26



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The charging station from Powerbox can charge up to eight bikes at the same time.

solution in the form of charging stations. In the pursuit of advancing electric vehicle charging technology, Czech company **Powerbox [Hall 8 / D40]** has emerged as one of the prominent names in Europe for charging electric bikes outside the home, with an extensive network of nearly 500 installations. Capable of accommodating up to eight e-bike owners simultaneously, the Powerbox charging station can be powered via a conventional 230V socket or even a solar panel. Charging a battery with a capacity of 400Wh from 10% to 80% capacity will take about 2 hours with the Powerbox. ONE.

In an e-bike, beyond the batteries, lies a realm of components that significantly contribute to a pleasur-

able and seamless ride. Among these, torque sensors play a vital role in ensuring a delightful riding experience.

AUTORQ [Hall 8 / F38]

offers a wide range of bottom brackets-based sensors that fit any needs, from city bikes to mountain and cargo bikes. AUTORQ's torque sensors employ active magneto-strictive technology, utilising a non-magnetic spindle and a magnetic field

The proTORQ from
AUTORQ is best for
high-end e-bikes.



Lishui Controller offers a large range of dual motor controllers, including the LD-DU02.

that changes when torque is applied, converting the force into an electric signal that's more stable and saving up to 40% of energy. On top of their range, the proTORQ is designed with a creak-free ISIS drive and is made for premium cranksets, offering less friction, greater performance and greater durability.

Nanjing Lishui Electronics

Research Institute [Hall 8 / N10], also known as Lishui Controller, has been focusing since 1997 on the development and production of brushless motor controllers for electric bikes and electric motorcycles. Lishui controllers currently support dual-motor vehicles with a maximum power of 1000W per

motor, but they are working on developing a dual-motor system to accommodate higher-rated power motors. The integration of proactive and passive anti-slip algorithms in the controllers ensures improved anti-slip capabilities and release performance, allowing users

to seamlessly switch between four riding modes without stopping. They also offer IoT solutions that include customizable modules, application development services, cloud server leasing, and features such as remote lock switch and vehicle status monitoring.

AVS Electronics [Hall 8.0 / M22]

focuses on sport and bike related electronics including displays and remotes. Their latest AVS TT10 HMI is conveniently placed into the e-bike's top tube. With two buttons and a 1.22" display, the TT10 makes it easy to control functions and view data such as speed, assist modes, battery SoC, error messages and other information. For convenience, the TT10 can be adapted to a variety of drive systems and is compatible with common communication protocols. **MW**



The TT10 HMI from AVS Electronics is conveniently placed on the top tube.

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OVERVIEW: SUSTAINABLE APPAREL

GREEN PROGRAMS AND FEATURES SPREAD IN CYCLING APPAREL

From recycled content to second-hand options and repair workshops, sportswear makers are coming up with multi-faceted strategies to become more sustainable – and to get consumers on board with their green initiatives.



Agu uses undyed fabrics

The efforts are aligned with growing consumer demand for greener gear. But at the same time, the European Union is coming at the apparel industry from several angles to help make it more environment-friendly – with regulations or guidelines covering recycling, circular design and much more.

At **Vaude [Hall 11.1 / C14]**, next year will mark the consumer launch of Rethink, a program to stimulate apparel repair and recycling. The crux of the strategy was to create products entirely based on PET, without losing technical performance. This makes the garments easier to dismantle and to recycle.

Vaude said the Rethink products meet all the requirements from the European Union for a closed textile loop. Not that the German company needs any coaxing from European regulators: its founder, Albrecht von Dewitz, already tried to implement a recycling project about three decades ago. Way ahead of the green curve, the program was given up when it turned out that there weren't enough returned products to make the loop work.

Under the leadership of Albrecht's daughter, Antje von Dewitz, Vaude remains ahead in the adoption of greener practices across many aspects of its business, such as the complete removal of per- and polyfluoroalkyl substances from its apparel, footwear and backpacks three years ago.

Vaude explains that the Rethink program delivers on more circular ambitions. It found solutions such as mechanical stretch from PET, to avoid blending in elastic fibres. It's using zippers made from PET and recycled PET. For the backpacks in the Rethink program, the water repellent coating is from PET. Trims that aren't available in



Vaude's Rethink program in cycling apparel

this material so far, such as buckles on backpacks, are attached in such a way that they are easy to remove.

"This means that the products are circular-ready," explained Martin Reiniger, country manager for Vaude's bike business in the U.K., the Benelux countries and Scandinavia. Rethink includes cycling shirts for men and women.

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Tracking Löffler's supply chain

70% of its fabrics are made. The company says that this saves much carbon dioxide from transport, and it helps to directly try out sustainable solutions to make its products more durable and repairable. It also means that Löffler has fabrics and other components in stock for repairs at its own workshop.

Pearl Izumi [Hall 11.1 / A04] has widened its own program to inform consumers about the impact of its garments in terms of carbon emissions. Pedal to Zero tells the consumers through a label on each product how many miles they would have to ride instead of taking the car, in order to offset the carbon impact of the garment.

Pedal to Zero started off with the brand's lifestyle range, but it has been widened to cover the entire apparel offering.

Agu [Hall 11.1 / D33] has started using undyed fabrics for jerseys and bibshorts in its Six6 range. The merino wool jersey is particularly breathable in warm weather, and it isolates well when the temperature drops. The use of polyamide and elastane makes it durable and comfortable.

Agu adds that the bibshorts and the integrated seat pad are made of recycled and undyed polyester, which saved an average of 38% in resource consumption and used 10% less energy in production.

Agu has two coloured jerseys in the same range, made with Nano-Earth-dye technology. "This uses non-toxic minerals with a nanotechnology that allows the dye to penetrate the inside of the fiber to make the



PureFlowz Eco by Zimtstern

most of the pigments and reduce the wastewater that needs to be treated," the Dutch company explained. This dying process involves fewer stages than most, which reduces water and energy consumption. It creates a natural, washed-out fabric.

The Explorair Light Windbreaker jacket by **Scott Sports [Hall 12.0 / A22]** takes a sustainable approach to keep

riders warm. It's made of fully recycled polyester, and the Swiss company says it's one of its most efficient "re-source products" for multi-activities. The durable water repellency is without PFC.

Scott's lightweight windbreakers are adjustable and packable — and easy to put away with backpack stow straps. Turned out in separate versions for men and women, the jacket has zipped hand pockets and elasticated cuffs.

Many other apparel makers are integrating more sustainable fibers into their garments, such as **Zimtstern [Hall 11.1 / D11]**. It has created more environment-friendly versions of its Pure Flowz trail shirt and its Heavy Pedalz tee-shirt for the city, both using Drirelease E.C.O. This stands for a fabric with "Environmentally Correct

Origins" that combines recycled polyester fibres with organic cotton fibres.

Hans Allmendinger, managing director at Zimtstern, said that this fits with the concept of the brand's mountain biking range. "It was the natural next step for this product to make it even more eco-friendly," he said, "but the benefits apply for cycling in the city as well." ■ **BS**



Scott's Explorair light windbreaker for women

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BMD's lacing and truing machines inside the stone and brick facility.

As the bicycle industry continues its rapid evolution, smart manufacturing has emerged as a pivotal solution for manufacturers seeking heightened efficiency and output without the need for additional staff. By automating tasks, harnessing the power of data analytics, and optimising production processes, manufacturers need to produce customised products efficiently while remaining fiercely competitive in the market.

Based in the picturesque Czech Republic, Bohemia Machine Develop-

ment **BMD [Hall 9.0 - C26]** is revolutionising the manufacturing industry with their cutting-edge approach to flexibility and efficiency. BMD focuses on enhancing existing machines, ensuring backward compatibility and extending their lifespan, rather than rendering them obsolete. This forward-thinking strategy translates into optimised return on investment and significant space savings for manufacturers.

From lacing to rim taping, each BMD machine is designed

to maximise space use while delivering exceptional results. BMD's state-of-the-art machinery allows manufacturers to streamline production processes and achieve efficiency without compromising on quality.

One notable example of BMD's ingenuity lies in their use of versatile rollers. By seamlessly switching between two types of rollers, their machines cater to both alloy and carbon wheels, eliminating the need for multiple machines and saving space.

Looking to the future, BMD is embracing the power of smart data analysis software. Through "Digital Twin" technology, hypothetical scenarios and drift parameters are simulated in a virtual environment. This approach empowers manufacturers to identify potential issues before they materialise, drastically reducing costly downtime. By monitoring machine performance and analysing data, BMD also facilitates proactive maintenance, ensuring optimal operational efficiency and extending the lifespan of the machines.

The company is welcoming the founder's sons, Bob Jr and Olaf, to the team. Bob Jr will take the helm as the company's new manager, overseeing projects and spearheading strategic initiatives. Meanwhile, Olaf,



With modern technology, BMD's truing machine has a production speed of 40 to 100 wheels per hour.

a mechanical engineer, will lead the Research and Development (R&D) department. This dynamic duo promises to infuse BMD with fresh perspectives and ideas.

BMD's unwavering commitment to innovation, flexibility, and space-saving solutions has earned it a sterling reputation among manufacturers worldwide. With BMD as a trusted partner, manufacturers can unlock unprecedented efficiency, save space, and propel their operations into the future. ■ **MW**



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EXHIBITOR PORTRAIT: AKKU VISION

A SECOND LIFE FOR E-BIKES

How long is the lifecycle of an e-bike? While consumers expect it to be at least 10 years, changes in the firmware and batteries of assistance drive systems often cut it short. Akku Vision aims to keep e-bikes going.



To make sure each battery is assembled correctly, the single cells are mounted in specific frames.



Discussing the need for high-level after service, former Flyer CEO Kurt Schär once said that the purchase of an e-bike is "the start of a ten-year relationship between customer, bicycle dealer and manufacturer." Since many e-bikes are used on a daily basis to replace car journeys, the demands in terms of speed and quality of service are higher. Given the higher prices of electric assistance drive systems, consumers also expect their investment to last – for at least ten years. Which is significantly more than the legally required two-year warranty.

Due to compatibility issues between different product generations, e-bikes are often being decommissioned before reaching the desired life span of ten years. Reasons include older-generation motors that can't be repaired or batteries going dead – which can often be seen with consumers who use an e-bike intensively on a daily basis. Many lithium ion batteries found on e-bikes are designed to last for about 1000 charge cycles, which equals three to six years depending on the intensity of use – and avoiding mistakes that can shorten their life span.

Not only is this frustrating for consumers whose expectations are not met, it is also negative in terms of sustainability. All the more so, when one defective part that is not

available anymore as a spare can render an entire e-bike useless. Here's where the **Akku Vision GmbH [Hall 8.0 / G09]** comes into play: under its aftermarket brand name E-Bike Vision, this company, founded in 2011, entered the market with a battery of its own for Panasonic's 26 Volt system back in 2012. This first product demonstrated the firm's business concept: to build replacement batteries in Germany that are at least as good as the original battery and come with a full two-year warranty.

"While most manufacturers claim 500 to 1000 charge cycles as a life span for their batteries, most consumers only get about 150 charges over three years out of such a battery, according to our experience", explains Akku Vision's chairman Daniel Maiberger. "For this reason we expect a consumer to need two replacement batteries to cover a 10-year life span for their e-bike." The company builds its lithium ion batteries to work with a selection of popular electric assistance drive systems, involving some serious reverse engineering.

Akku Vision operates two separate locations in Germany where it designs and produces battery management systems. Thanks to improved battery cells – Akku Vision relies on a selection of suppliers from Asia for these – the replacement batteries

often not only feature better software that optimizes the charge cycles and overall performance of an assistance drive system but also add to the range thanks to a higher capacity. And while the recent trend towards integrated batteries has posed some extra challenges for Akku Vision's engineering department, adapting to this was worth the investment, as it's clearly the big trend in the industry.

Speaking of trends, Akku Vision has been well positioned to profit from the electrification of bicycles. "Until 2020 we saw steady growth in the demand for our e-bike batteries, but with the Covid-19 pandemic this growth accelerated drastically," says Maiberger. The annual capacity of Akku Vision's new battery assembly operation in Haibach currently stands at 270,000 units. "Since sales of e-bikes have been growing for the last ten years, there are a lot of e-bikes out there that need replacement batteries. For this reason we were able to grow faster even than the e-bike market."

The next stage of growth is likely to come from a push towards becoming an OE supplier, Maiberger says. "At the moment, 20 percent of our turnover results from the OE business, where Akku Vision supplies batteries to assistance drive system manufacturers such as Revonte and Oli eBike. We expect this share to grow



Chairman Daniel Maiberger wants to turn Akku Vision's focus on the OE business for further growth.

to 60 percent in the not-too-distant future, and this will also see our staff grow from its current size of 71 people to about 100." Due to the combination of low volumes and a highly diversified portfolio, automation is not currently a viable strategy for the company. Instead Akku Vision relies on skilled labor - not always easy to find in Germany but allowing for more flexibility. **LVR**

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Freewheel clutch



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OVERVIEW: CITY, URBAN AND CARGO TYRES RECYCLING A REALITY AS E-BIKE TYRE CHOICE EXPANDS

Tyres are notoriously difficult to recycle: the particular mix of components and the construction process mean that separating components for reuse is often impossible. But new processes are starting to open up the possibilities of a circular tyre economy.



The Maxxis Metro family covers urban ebiking from commuting to last mile deliveries

Schwalbe [12.1 / A27] is one company that has been making strides in this area: it describes its new Green Marathon model as “the first circular bicycle tyres in the world”. The Green Marathon is made from 70% recycled and renewable materials, including fair trade natural rubber, and the newly-developed rubber compound uses 100% carbon black from recycled bicycle tyres. The Green Marathon is setting a new standard for eco-friendliness, and it carries the Marathon name which has long been a byword for reliability in the urban tyre world.

The 20” wheel size has become increasingly popular on fast urban ebikes, and especially in wider profiles which offer more comfort and puncture protection. **Vee Rubber [12.1 / A01a]** has a whole range of 20x4.0 tyres designed to work

with a wide range of city ebikes and rated for use with speed pedelecs and similar fast ebikes. The tyres are all built around Vee’s Override construction, which borrows technologies from Vee’s motorcycle brother, Vee Moto Tires. The Override casing is three times stronger than Vee’s B-Proof Aramid Belt and 2 times stronger than the B-Proof+ Aramid Belt. The casing uses a lower TPI, which gives better puncture, cut, and abrasion resistance. It’s a bit heavier, but because the main target market is fast e-bikes

equipped with highspeed motors, that’s less of an issue. The treads use Vee’s Energetic Compound, and the company has adapted this already efficient rubber to be more suitable in this segment through collaboration with Vee Moto Tires. Rolling resistance



Vee's range of 20" ebike tyres includes the street-focused Chicane



The Schwalbe Green Marathon is made from 70% recycled materials



The Maxxis Metropass tyre comes in standard or heavier Pro builds

has been reduced and urban durability and puncture protection has been improved. The range includes the city-oriented Chicane (pictured), the more heavy-duty E-Huntsman, and even a studded ice tyre, the Snowball.

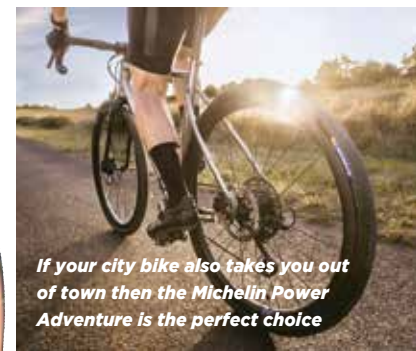
Ebikes not only travel more quickly, in the case of speed pedelecs, but are also heavier and designed to carry significant loads. **The Maxxis [12.1 / B21]** Metro family of tyres is specifically designed to cope with the rigours of urban ebike riding. The Metropass is the commuter tyre, designed for everyday cycling about the city. Metroloads is specifically designed for the rigours of cargo biking so it’s ideal as a last-mile delivery tyre. Both tyres are now available in a pro build which uses a double-layer 60TPI casing and a thicker sidewall. The Metroloads Pro has been tested under full load up to 10,000km without failing. All Metro tires are equipped with reflective strips for increased traffic safety and are ECE-R75 approved for fast e-pedelecs.

Hartex [9.2 / B14] will be presenting its Xcite tyre at Eurobike. The

Xcite is an all-purpose city tyre that’s capable enough for trekking and touring too. Available in 38mm and 45mm widths, it features a close-packed but reasonably deep tread for sure-footed riding around town, and an anti-puncture strip to keep you rolling for longer. Wire bead and folding tubeless builds of the tyre are both available

The extensive range of city tyres from **Innova [9.1 / D08]** includes the Wanderer, a 29x2.15” (55-622) urban and touring tyre built around a dependable 60TPI casing. The center tread is smooth for quiet progress around town, while the more widely spaced and textured side knobs add grip where it’s required on broken tarmac or unpaved paths. The Wanderer tyre uses a new high tech rubber compound that Innova says is designed for superior durability at high speed, combining that with low rolling resistance.

If your commuting bike also spends time taking you further afield then a tyre like the Power Adventure from **Michelin [11.0 / B14]** is perfect for mixed use. The tread pattern is designed to be fast rolling on the road but also capable when the tarmac gives out, so it’s a great urban commuting tyre but can cope with touring and even bikepacking too, where the notched side tread complements the smooth-rolling slick central band. The new and exclusive Gum-X compound optimizes grip on both dry and wet surfaces and the Power Adventure also benefits from BEAD 2 BEAD technology, an additional protective layer surrounding the entire carcass, which offers very good durability. **DA**



If your city bike also takes you out of town then the Michelin Power Adventure is the perfect choice

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OVERVIEW: COMPACT AND CAPABLE CARGO BIKES

SMALL IN SIZE, BIG IN UTILITY

As brilliant as full-size Long John cargo bikes may be, they need a lot of space to park and the handling takes some getting used to. This is where a new breed of compact cargo bikes can save the day, combining the foot print of a conventional bicycle with a lot of carrying capacity.



Vello's SUB allows for the transport of two kids and groceries.

Longtail bicycles have been around for quite a while – and have been a favourite with Californian surfers in particular as they can carry a board. But most longtail models were still pretty big, especially for crowded city centers. This was the motivation for **Tern [hall 12.0 / A04]** to design its first non-foldable model, the GSD. The idea was to create a model with the same footprint as a normal bicycle, rolling on small wheels and offering plenty of space on carriers in the rear and up front. In the meantime, Tern has added the HSD, the Quick Haul and the Short Haul models as gradually smaller and more afford-

able options.

For 2024 the HSD gets an all new frame to add stiffness. While the maximum system weight including the rider and cargo is set at 180 kg, the sturdy rear rack can carry up to 80 kg – all based on testing done by EFBE. Since the new version of Tern's HSD comes with the Smart System of Bosch eBikes Systems, you get to enjoy a lot of extra functions such as an electronic lock, an anti-theft alarm and GPS-based tracking. Naturally the wide selection of accessories that Tern has been developing, ranging from pannier bags to seat cushions for the

carrier and rain covers, fits the new generation of the HSD as well.

Finding the best mix of utility and practicality, of additional carrying capacity and proper handling was the jumping off point for **Benno Bikes [hall 12.0 / A15]**. The company's new RemiDemi XL is no exception. For an extra portion of traction and comfort, it rolls on 3.6-inch-wide, voluminous tires mounted to extra-wide 20-inch rims. For the assistance drive system, it relies on Bosch eBike System's Performance or Performance Sport mid-motors, combined with external PowerPack batteries with a capacity

of either 400 Wh or 545 Wh. For long rides, you can go for a double battery option with the RemiDemi XL as well. In short, this is one compact and fun bike to ride in urban traffic while still offering plenty of carrying capacity. If necessary two children seats fit on the rear carrier of this sturdy longtail model. As an option the RemiDemi XL can be fitted with a dual kickstand for more stability when loading the bike or securing children in their seats. Since the maximum gross load of this bike stands at 190 kg or 420 lbs, you can pack a whole lot of groceries and people on its carriers up front and in the back, and Benno Bikes offers a selection of accessories to facilitate the transport of goods and people in all weather conditions.

Up to now Austrian brand **Vello [hall 12.0 / C12]** has been known for compact and stylish folding bikes. Now the SUB is presented as the first cargo bike from the company, rolling on 20 inch wheels and featuring mounts for carriers up front and in the back. Despite its elegant looks the maximum gross load of the SUB stands at 210 kg. A double kick stand secures the bike for loading and unloading. Its unisex frame is available in either steel or titanium and features an extended rear triangle that allows for a long carrier fitting two kiddy seats. While Gates's beltdrive comes as a standard, there are options with either an Enviolo gear hub or a single speed build.

As for the assistance drive system, Vello has opted for the Performance Cargoline in the Smart System version as Bosch's top-of-the-line product. This means that the SUB offers plenty of support and a lot of connectivity-related functions, from anti-theft alert to GPS tracking and crash detection. As a standard, you get one 400 Wh PowerPack battery. But there is also an option for the larger 545 Wh battery and to go for a dual battery option. Since the racks are compatible with the MIK and the MIK-HD standards, you get to choose from a lot of accessories to facilitate the transport of goods.

Ca Go [hall 11.1 / C20] has created some waves with its premium Longjohn model already. But the Koblenz-based company also

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With its burly tires and low center of gravity, the RemiDemi XL is ready to take on heavy loads.

understood that this might be too big a bike for many customers. So it began development of a more compact model that still would not compromise on safety. The result is what Ca Go calls a City Utility Vehicle (CUV) and goes by the simple model name CS. Rolling on Schwalbe's wide, cargo-bike specific Pick Up tires mounted to 20-inch wheels, this compact beast of burden comes with the agile handling needed to thread one's way through dense urban traffic. The Smart version of Bosch's Cargoline mid-motor system makes getting ahead easy.

Since the maximum gross load is set at 180 kg, you can pack a lot of cargo onto the CS, and the bike offers three places to do so: an extended carrier in the back, the center rack with its low loading bay big enough to take standard euro boxes or beverage crates and a front rack. While the center rack can carry up to 30kg and the rear carrier up to 27 kg, the weight limit for the front rack is a bit lower at 18 kg. Thanks to the flat seat angle, it's easy to touch the ground

with one foot without having to get out of the saddle, and one frame size fits a wide range of body heights – an approach often seen with these compact cargo bikes.

With the **Moca Bike [open air ground F12 / F04]**, German distribution specialist Messingschlag is taking aim at the market for compact cargo bikes. While not a longtail, the Moca Bike can carry up to 35 kg each on the carrier in the back and up front. Since it combines a 26-inch wheel in the back with a 20-inch wheel up front, this bike has a really small footprint and agile handling. Its alloy frame has been designed to cover body heights from 1.50 m to 1.95 m with one size, so the saddle and handlebar can be adjusted over a wide range without the need of tools. To park the Moca Bike in confined spaces both the pedals and handlebar can be folded away.

Strong 4-piston disc brakes and a double kickstand are clear indicators that this bike is built to carry goods. To get you up to speed and keep



Ca Go's CS is big enough to haul cargo, yet compact and agile for urban traffic.



With the Muli Motor EU, Muli Cycles focuses on sourcing within Europe.

you going with a payload of up to 70 kg, Shimano's EP6 Cargo mid-motor delivers plenty of power throughout a large cadence bandwidth. Since the in-tube battery comes with a generous capacity of 630Wh, you do not have to charge it all that often. As a modern touch of the digital era, Moca Bike has integrated a smartphone mount and a

USB C charging port into the bike's design, and a hidden air tag holder allows for GPS tracking in case of theft.

By downsizing the classic Long John concept and putting it on a 16-inch wheel up front and a

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Despite its small footprint, the Moca Bike can carry up to 70 kg of load.

20-inch wheel in the back, **Muli Cycles [hall 8.0 / B30]** has opted for an unconventional approach. The fact that the cargo bay can be folded up to park the bike in confined spaces is another plus – and quite a unique feature. While earlier motorized versions relied on a retrofit solution of Pendix and Shimano's Steps e6100 mid-motor, Muli Cycles is putting a different emphasis now: the Muli motor EU claims to be the most eco-friendly and "made in Europe" cargo bike to date. The Cologne-based brand has already been manufacturing its steel frames in Germany for quite a while. Now it has found ways to source

practically all parts for this model in Europe, entering the Eurobike Awards with this concept. A closer look reveals a Smart System version of Bosch's mid-motor with a PowerPack battery mounted to the steering column, a voluminous nine-gear internal transmission hub from 3x3 and hydraulic disc brakes from Magura. Other parts sourced in Europe include lights from Busch & Müller, crankarms and a stem from Miranda, a suspension seat post from Airwings, a dual kick stand from Italian manufacturer Ursus and a classic leather saddle from Portuguese supplier Tabor. ■ **LvR**



Tern's next-generation HSD rolls onto the streets with a beefed-up frame and Bosch's Smart System.



With a choice of either steel or titanium as frame material, Vello's SUB stands out from the crowd.

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DIRK ZEDLER ON: BICYCLE EXPERTS

THE DARK SIDE OF THE BOOM: COURT AND INSURANCE CASES

Higher prices, more complex technology: increase in court cases and insurance cases where bikes are involved. That's why more bicycle experts are needed.



On the face of it, there can be little doubt that the cycling industry has done some stellar work over the last few years. Intricate drive systems with powerful batteries are boosting sales of higher-priced e-bikes. Lots of progress has also been made in ergonomic design, safer braking, brighter lights and the transport of children and cargo.

In a related and welcome development, a new and well-heeled type of clientele is streaming into bike shops, meaning all the pricey bicycles and e-bikes actually get ridden. On the flip side, all these factors also lead to higher caseloads for insurance companies and courts.

More expensive bicycles – increased volume of claims to settle

In Germany alone, there were around 84,000 incidents involving cyclists and cars in the year 2021, according to the Federal Statistical Office. The vast majority of these crashes had car drivers as the responsible party, which means the driver's insurance has to pay for the damage. But how exactly is the insurer supposed to settle the claim? Can the bicycle or e-bike be expected to be repaired, or should it be filed as a total loss?

While bike dealers often issue quotes for repair jobs in such cases, there are many reasons why they cannot (and should not) provide expert opinions on the questions raised. Sometimes the insurance company cannot bring itself to trust the quote provided by the bike dealer. Thus begins, more often than not, a veritable odyssey for cyclists looking to have their damage compensated.

Some insurers try to solve this by partnering with fast-turnaround appraisers, but in our experience these often quote figures that are far too low to truly compensate for the damage incurred.

If no agreement with the insurance

company is reached, going to court is the only avenue left for the claimant. Reaching a final verdict and finally settling the claim can easily take one or two years.

Accidents due to material failure? – A chicken-or-egg dilemma

While it is rare, some cases involve the cyclist are involved in serious crashes without influence from any other road user. Bike dealers and the police taking down the accident usually explain the cause as rider error, and broken handlebars are simply seen as a consequence of the crash itself.

But is this really what happened? Did the component have the strength required for its proper use? Were the components used on the bike actually compatible with each other? Were they installed correctly? Did they allow for sufficiently stable riding?

Not only do the competent parties frequently fail to examine these important questions with the required know-how, they often do not ask them in the first place.

Defects on the bike, repair bottlenecks or buyer's remorse?

Much more often than material failures leading to accidents, buyers lodge complaints about defects on their bikes. Some of the most frequent reasons for such complaints are noise coming from the bike or e-bike, inadequate battery range, disappointing torque delivered by the motor, insufficient gear shifting performance, accelerated wear, unsuitable frame sizes, and so on.

Many bike dealers are familiar with such complaints; it is all in a day's work to them. But that does not mean that the problems can always be solved finally and to the satisfaction of dealer/manufacturer and customer. A low point during my work as an expert for the courts was complaints about

noises coming from the drivetrain. An examination quickly revealed that the chain was simply not sufficiently lubricated. I came across this in not one but two separate court trials. A few drops of oil could have prevented two months-long lawsuits and costs of several thousands of euros per case.

Well-founded investigation – genuine bicycle and e-bike experts needed

Germany alone has several hundred publicly appointed and sworn-in experts for motor vehicles. Their network covers the whole country so that the courts, attorneys and insurers can fall back on enough expertise to professionally clarify any questions arising around cars in any region of the country. This is the reason why judges have been able to decide many issues, with the outcomes having virtually binding effect for the industry as a whole. This is extremely helpful for trade and industry.

But how many certified bicycle experts are there in Germany? The answer is... ten.

That number is unacceptable and fails to reflect the importance of the bicycle with regard to its technology and its significance as a mode of transport and sport device.

As a result insurers and courts are too often forced to use experts with no relevant experience, who often end up causing more damage than good. Once an unqualified or incompetent "expert" opinion is out there, removing it can be a long and arduous, sometimes even futile, quest.

Opportunities and the way forward

All this means that we as an industry should not just focus on selling great products but also make sure our after-sales service game is on point. Which includes dealing with the dark side of our success. The technical know-how required to assess damages and faults exists in many places. The task now consists in training bicycle specialists and turning them into true experts.

The prerequisite for such training is a qualification as a master bicycle mechanic, technician, or a university degree in the field, as well as several years' experience in the cycling industry.

Further education courses to become a recognised expert are offered, for instance by the Gesellschaft der Fahrrad-Sachverständigen (www.gdfs.bike).

Membership in an association such as the Bundesverband der Fahrrad-Sachverständigen e.V. in Germany (www.bdfs.de) where bicycle experts come together to exchange ideas, is also recommended.

Good bicycle experts are a cornerstone of a more professional cycling industry as a whole and help to turn the bicycle into a true and serious alternative for mobility over short and medium distances. ■ Dirk Zedler



DIRK ZEDLER

Since 1993, Dirk Zedler has been an analyst and expert witness on bicycle accidents and product failures for courts, bike and insurance companies, and private individuals. He got his start in the industry by working for a large bike shop from 1986 on, and now holds the respected advanced engineering degree known as "Diplom-Ingenieur."

Courts have recognized Zedler as an officially appointed and sworn expert on bicycles since 1994, and on electric bicycles since 2014.

The Zedler – Institute for Bicycle Technology and Safety has used this wealth of knowledge, derived from his and his teams work in thousands of court proceedings and expert's reports not only in Germany but from the US to all over Europe, to enhance research and development in the bicycle industry.

The Institute sets the standards for the bicycle industry. It develops and builds testing equipment that is used by manufacturers to improve the riding performance and safety of their bikes, and by leading European bicycle magazines to test them. The Institute's work provides a basis for European and American manufacturers to communicate with their Asian suppliers. Manufacturers can buy test equipment from the Institute or use its state-of-the-art testing labs.

The Zedler Institute also prepares risk analyses, conformity papers, workshops, recall papers und user manuals for bicycles and pedelecs. These manuals, now available in more than 40 languages, help consumers use their bikes properly — and in many cases have protected manufacturers from liability.

Our experts draw on the wealth of experience gained through several thousands of expert's reports to train experts from in and outside the bike industry, such as automotive experts.

What we have learned from court cases, the proceedings of the market surveillance authorities and recalls is the content of our training courses for bicycle manufacturers. As a result, they are in a position to set up CE conformity processes internally.

For more information, visit www.zedler.de.

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If you are the type of traveler that goes far, we've also got that covered. Dual battery from Bosch is also possible to give you the performance and range you are looking for.

EG4A-B11

Material	Aluminum #6061
Mfg. Method	Tig Welding
Frame Size	51cm
HT	1-1/8"
Seat Post	ø34.9mm
Motor System	Bosch Drive Unit Cargo Line, Gen 4
Battery	Bosch Power Pack 800Wh(400Whx2)
Rear Hub	142 x 12mm E-thru System
Dropout	Post Mount
Tire	Front-20.0" x 2.15" Rear-26" x 2.35"
Weight	9.4Kg(Frame)



Meet us at booth Hall 9.0 D21



JULBO SHIFTS GEARS WITH CYCLING EYEWEAR AND HELMETS AT EUROBIKE

Firmly established in outdoor sports from skiing to mountaineering, Julbo has made large-scale investments in cycling in the last years to launch a high-end range of eyewear and helmets at Eurobike.

Julbo [Hall 11.1/ D08] is a French company well known by athletes for its sunglasses using photochromic lenses. They get darker or lighter depending on the changing light conditions, so they adapt to sudden changes of brightness on the terrain. Julbo eyewear has long been used by cyclists. But a few years ago, the firm resolved to make a strategic investment in road cycling with the development of a specific and full product range. This strategic turn became clear to consumers last year with Julbo's participation in L'Etape du Tour de France, and a partnership with the Groupama-FDJ team.

Bertrand Ragonneau-Flemming, Julbo's international sales director, said that its cycling eyewear stands out for the technical quality of its lenses and streamlined design. "We are approaching this market from the higher end," he said, "and we have the opportunity to work with a professional cycling team that is highly demanding." Julbo's three highlighted sunglasses for cycling are all lightweight and stacked with technical features, from the Density to the Edge and the Frequency. They

use vented photochromic lenses as well as oil-repellent coating to prevent marking, and anti-fog coating on the inner surface.

The Edge is intended for serious performance, with a super-slim frame, a highly vented structure, a wide lens surface and thin wraparound temples. It's built for quick and easy lens changes, with the company's Magnefix technology on the bridge. "The frames and lenses are all perfectly adapted to the reality of riding," said Ragonneau-Flemming. A fourth type of cycling eyewear is slated for launch next January.

Julbo's helmets come in two versions for road cycling, two for mountain biking and one for commuting. The eyewear and helmets have complementary designs, including a dual eyewear storage system on the helmets.

Julbo's brand name comes from Jules Baud, who began creating his own eyewear in 1888. It's established in the Jura region, in eastern France, which has a long tradition of quality eyewear production. Baud started by making protective eyewear for crystal hunters in Chamonix, and then

Julbo's iconic round glasses with side protection for mountaineering. Over the last two decades, the company has diversified into eyeglasses for other outdoor sports, such as trail running and mountain biking. In 2004, it started making goggles and helmets for winter sports.

Julbo will lean on its existing European subsidiaries and staff to sell the bike products. "Bicycle retailers have become a strategic development focus for us," said Ragonneau-Flemming, to complement the opticians and sports retailers targeted by its existing range. In countries where it works with distributors, Julbo wants to intensify these relationships to help them cover the road cycling market as well.

Ragonneau-Flemming estimates that technical cycling products could make about 20% of Julbo's turnover in five years. "We have shown a real willingness to invest in this community with a technical range that will only grow in the years ahead," he said. "We have laid the foundations to really talk at a professional level."

Julbo was taken over last year by



Julbo targets riders with high-end range of sunglasses and helmets.

Peugeot Frères Industrie, an entity that diversifies the Peugeot family's investments beyond the car business. It was previously owned by Matthieu and Christophe Beaud, Julbo's chief executive. Peugeot Frères bought 80% of Julbo, while Christophe Beaud remained on board with a minority stake and the company's leadership. The chief executive indicated that the brothers resolved to sell because none of their children had interest in taking over.

Julbo's sales have risen sharply in the last years, due to an upswing in participation in outdoor and mountain sports, as well as cycling. ■ **BS**

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OVERVIEW: MID-DRIVE MOTORS

MORE POWER IN A SMALLER PACKAGE

As the market leaders in mid-motors work to refine their offerings, new suppliers are entering this dynamic market. Apart from optimizing the ratio of support to weight, the main focus is on refining the sensors, software and connectivity – to the smartphone of consumers or to the servers of manufacturers.



E-Mountainbike racing is evolving quickly, and Bosch launched a mid-motor optimized for this application late in 2022.



Bosch eBike Systems is further expanding the selection of displays and controllers.

While hub motors dominate the entry-level price points and various special segments such as oversized cargo bikes and trikes for professional logistics or e-roadbikes, mid-motors are the most common solution in the upper price levels that are typically covered by independent bicycle dealers. The main advantages of mid-motors are that they improve the handling by keeping the centre of gravity low and central and that they cope well with stop-and-go traffic and steep climbs as they tend to react more sensitively to pedal input. Another reason is that mid-motors can be nicely integrated into the frame design, but this integration comes at some tooling costs as frames need to be built around the motor.

While the upper levels of the mid-motor market are dominated by

Bosch eBike Systems and Shimano respectively, Bafang has become a strong player in the value-oriented market. The ongoing dynamic growth of the e-bike market is still attracting new players as



As the third generation of Brose's mid-motors, the Drive 3 Peak runs on 48 V.

smooth yet powerful and immediate support. Since this additional torque tends to drain the batteries, they are getting more capacity as well – and almost all suppliers offer in-tube batteries for clean integration. Another big topic is connectivity, whether as consumer apps or as an IoT solution where every e-bike is constantly sending data to the manufacturer's servers when in use.

As the undisputed market leader in assistance drive systems for bicycles, **Bosch eBike Systems [hall 12.0 / A17]** is focusing on the rollout of its all new, light-weight Performance Line SX platform. But that is not all that is new for 2023. Having launched its next-generation Smart System in 2021 and expanded this ecosystem last year by adding second generation ABS technology amongst other features, the news at this year's Eurobike is more subtle for the powerful mid-motors. The Active Line and Active Line Plus platforms get the Smart System upgrade for the model year 2024 as well.

In line with this extension of Bosch's smart offerings are two novelties that are aiming to make operating the Smart System more intuitive. The Kiox 500 is a larger version of the Kiox 300 unit. As its 2.8-inch display is 40 percent larger, reading the relevant data is getting easier even under tricky conditions. The display settings of both Kiox displays can be customized using the eBike Flow app. If you rather fancy a compact controller unit, the Purion 200 might be the right choice. While this unit features a small color display of its own, it can be combined with other displays of Bosch eBike Systems as well.

Since the Smart System has been introduced with extended connectivity functions in mind, Bosch has been working intensively on this aspect. A first result of this is the premium Flow+ subscription app. For € 5 per month or € 40 per year, subscribers get a set of additional functions, starting with the premium eBike Alarm service. To activate this service, the eBike Lock feature needs to be activated and the e-bike needs to have the Connect Module installed. More premium services are to follow step by step as part of the Flow+ subscription app. Another push sees the number of fitness-oriented functions grow with the regular eBike Flow app.

Do not expect any new motors from **Shimano [hall 11.0 / A16]** at this year's Eurobike, as the Japanese component giant has introduced the next-generation EP8 and EP6 mid-motors recently. The main focus will be on the combination of these units with the electronic XT Di2 and Cues Di2 drivetrains, respectively. This combination opens up the Free Shift and Auto Shift functions for which Shimano has just won a Eurobike



While Hyena's UniDrive 60 may not be the most powerful mid-motor, it weighs less than most.

well as the demand is higher than the production capacity of established suppliers. Examples for this are Oli eBike Systems from Italy or Okawa from China – or Hyena Tek. This Taiwan-based supplier so far has been focusing on hub-based assistance drive systems but is launching its first mid-motor at this year's Eurobike show. Another new player working on mid-motors is Porsche: the famous sportscar specialist has acquired light mid-motor supplier Fazua and is currently developing a mid-motor.

Across the many suppliers, there are some clear trends with mid-motors. One goal is to reduce the weight of the drive unit, with 3 kg as a benchmark that suppliers are aiming at. Since the power output is limited by law, suppliers focus on increasing the maximum torque. A lot of R&D efforts go into advanced sensors and improved software to deliver



With the Edge series, Oli eBike offers an alternative to the sought-after products of Bosch and Shimano.



Shimano syncs the electronic shifting of its XT Di2 and Cues Di2 drivetrains with its mid-motors



Thanks to their position in the bottom bracket, mid-motors have little impact on a bike's handling.

Award. This means you can now change gears without pedaling in the Free Shift mode or be sure to always have the right gear for the situation at hand thanks to Auto Shift, so you can fully focus on the trail ahead, picking the right lines and operating the brakes. Expect more suppliers to come up with similar solutions in the future, connecting both assistance drive system and drivetrain.

Brose Antriebstechnik [hall 8.0 / I08] premieres the Drive3 Peak as its third generation mid-motor at this year's Eurobike. With a weight of 2.9 kg this motor is on par with the top offerings of both Bosch and Shimano. To facilitate a clean integration of the unit Brose has managed to reduce its size as well. Yet it does not skimp in terms of support, as it cranks out 95 Nm of torque and can amplify the riders input by up to 410 percent. Apart from the modernized looks, the biggest change is that the voltage the Drive3 Peak system is running with has been upped from 36 V to 48 V. According to Brose, the main reason for this change was to push for a smooth integration of motor, display and batteries.

In line with Brose's push for more

sustainability, the Berlin-based company is going to offer its second generation Drive mid-motors as refurbished units as well. In what is a pioneering step towards a circular economy, Brose has developed an industrial recycling process where new motors are being built from parts taken from returned units. Of course, those parts are tested meticulously before they are being combined with new parts to build a Remanufactured Drive mid-motor. According to Brose this approach saves considerable resources



Okawa's A70 mid-motor is one powerful unit that can be configured to meet various legislations.

and reduces the CO2 emission of a 2nd generation Drive unit by at least 21 kg. The Remanufactured Drive units come with a full 2-year warranty and get you proven technology for less money.

Ambitious Chinese newcomer **Okawa [hall 8.0 / H20]** has just opened its European headquarters and service center in the Netherlands. The company's current flagship product is the A70 mid-motor. With a magnesium housing and internal gears all made of steel, this unit hits the scales at 2.7 kg. While the 250 W version can be configured to run with either 36 V or 48 V, the 500 W version is 48 V only. In terms of support, the A70 packs quite a punch: with the 250 W version the maximum torque stands at 90 Nm, and with the 500 W you even get 120 Nm. Okawa also looks to set itself apart in terms of after sales service, offering a full 4 years of warranty from the start of use, an extended lifetime warranty upon subscription and leasing options for its motors.

So far, **Hyena Tek [hall 8.0 / K16]** has been known for hub-based assistance drive systems. But that is about to change as this Taiwan-based supplier rolls out its first mid-motor with the UniDrive 60. As the name suggests this compact unit is not aiming for maximum power as it only dishes out up to 60 Nm of torque and a rated power of 200 W. But at a weight of 2.4 kg, it saves half a kilogram compared to established offerings. Thus the UniDrive 60 is an interesting option for segments such as city bikes, trekking bikes, e-gravelbikes and even e-roadbikes. All the more so as the battery can also be downsized due to the slightly reduced support.

Positioning itself as an alternative to the offerings of Bosch eBike Systems and Shimano, Italian supplier **Oli eBike Systems [hall 8.0 / G28]** has built its flagship Edge mid-motor to either fit the mounting interface of Bosch or Shimano.

A clever move as this eliminates the need to redesign a frame to switch to the Oli motors. The compact Edge motor hits the scales at 3.2 kg and can be customized to specific needs or used with standard settings and

support modes. Speaking of support, the Edge is able to amplify a rider's input by 400 percent, maxing out at 90 Nm of torque and delivering up to 600 W in peaks.

Special attention has gone into torque sensors and the software to calculate the support needed – and into making the Edge run as smoothly and quietly as possible. As for the batteries, Oli eBike cooperates with German supplier Akku Vision. A novelty worth mentioning is the new Ring Vision controller: this minimalist, ring-shaped unit with integrated LED strip, light sensor and control buttons fits neatly next to the grips on the handlebar, allowing you to change the support modes or switch on the headlight without taking a hand off the grips. For those who want more data while riding, Oli eBike has optional High Vision and Side Vision displays with Gorilla glass as well.

As a well connected company with a diversified portfolio, **Neco Technology Industry [hall 8.0 / J01]** is looking to increase its e-bike-related business. At this year's Eurobike, two mid-motors are put in the spotlight: the MM18 unit is available in silver or black and with either 250 W, 350 W or 500 W power output, depending on needs and legislation at hand. While it may not be the most lightweight mid-motor out there at 3.6 kg, the claimed maximum torque is pretty impressive at 100 Nm. If you think you need even more support, the MM20 Max may be the right choice, as this mid-motor is available with either 1000 W or 1500 W power output, cranking out up to 175 Nm of torque. According to Neco, the MM20 Max hits the scales at 5.1 kg. ■ **LvR**



The MM18 mid-motor of Neco has a claimed maximum torque of 100 Nm.

OVERVIEW: GREEN PRODUCTS & SUSTAINABILITY

BIKE FIRMS RIDE THE GREEN WAVE WITH ECO-CONSCIOUS SOLUTIONS

In the quest for a greener future, the bicycle industry has emerged as a shining example of sustainable practices and eco-friendly initiatives. With an ever-increasing emphasis on reducing carbon footprints, the industry has turned its attention towards the development of green products and the adoption of eco-conscious manufacturing processes.



The Ossby GEO folding bike is made from vegetable resins and recycled fibers.

manufacturer Kenstone, shared her motivation for venturing into bioplastics and the challenges involved. She stressed the importance of degradable bioplastics, as conventional plastics made from fossil fuels pose a significant threat to ecosystems and humans health. Grønblå focuses on creating a wide range of eco-friendly alternatives for the bike industry, including water bottles, protectors, packaging films and bags that are 100% compostable. But its vision goes beyond simply introducing bioplastics; the company strives to establish a circular economy. By using certified bioplastics for packaging and accessories, implementing effective collection and separation mechanisms, and investing in specialized industrial composting facilities, Grønblå aims to close the loop and minimize waste.

Among the latest companies to explore innovative materials as alternatives to conventional non-eco-friendly options is the Norwegian company **reTyre [Hall 9.0 - F20]**. The company is tackling the issue of tire waste - 1.8 billion rubber tires are discarded annually - and reducing reliance on rubber, a critical raw material often associated with deforestation and environmental challenges. The firm's pneumatic tires are made entirely from bio-based thermoplastics elastomers, enabling them to be fully reusable in a closed-looped circular economy, as the whole tire, including the casing and beads, can be fully repurposed into new tires - a first for the tire industry. In addition, reTyre's advanced production technology allows for local manufacturing, significantly reducing CO2 emissions by lowering shipping distances and using clean energy.

Headquartered in Taichung, Taiwan, **GW Manufacturing [Hall 9.1 - B16]** has garnered extensive expertise in designing and manufacturing top-quality products, including hubs, thru axles, headset, and chain guides. Committed to advancing sustainability, they have embarked on integrating the principle of "reduce, reuse, and recycle" into their R&D and production processes. A significant milestone in their sustainability journey is the imminent

reTyre tackles the issue of tire waste with non-rubber tires.



manufacturer Kenstone, shared her motivation for venturing into bioplastics and the challenges involved. She stressed the importance of degradable bioplastics, as conventional plastics made from fossil fuels pose a significant threat to ecosystems and humans health. Grønblå focuses on creating a wide range of eco-friendly alternatives for the bike industry, including water bottles, protectors, packaging films and bags that are 100% compostable. But its vision goes beyond simply introducing bioplastics; the company strives to establish a circular economy. By using certified bioplastics for packaging and accessories, implementing effective collection and separation mechanisms, and investing in specialized industrial composting facilities, Grønblå aims to close the loop and minimize waste.

Grønblå produces bike protectors and more in 100% degradable bioplastics.



Ortleb offers over 18,000 repairs annually, reducing premature disposal.

production launch of a headset spacer entirely crafted from recycled alloy, achieving a 70% reduction in the carbon footprint compared to its counterpart made from raw alloy. Notably, GW Manufacturing currently sources all recycled materials from their own production lines, showcasing their success not only producing from recycled materials but also in efficiently recycling their own waste. The firm's next goal is to manufacture parts with structural requirements utilizing recycled alloy.

Another Taiwanese company that is transforming its manufacturing processes with a more sustainable approach, is high-end titanium frame manufacturer **ORA [Hall 9.2 - F32]**. With a strong commitment to the environment, they prioritize sustainable practices including an advanced water treatment system that effectively converts waste water into usable water. In line with its low-waste approach, 95% of raw material is fully used, with the remaining 5% appropriately recycled.

Recognizing the importance of Environmental, Social, and Governance (ESG) factors, Stella Yu, the founder of **Velo [Hall 12.1 - A10]**, emphasizes that Velo upholds the strictest standards in quality control and ESG practices. Through innovative recycling techniques, Velo minimizes waste and produces top-tier sustainable products. For example, in their facilities, the company meets ISO 14067 and ISO 14064-1 standards, using smart meters to monitor electric consumption and carbon emissions. The solar panels on the roof reduce

GW Manufacturing's new headset spacer is made from recycled alloy sourced from their own production lines



ORA production facility has advanced water treatment and optimal cooling.

carbon emissions by 216,798Kg CO2/KWh annually. Besides, all products comply with REACH and ROSE certifications. Recycling and reusing materials are top priorities for Velo. Materials are sourced with PCR or GRS certifications to reduce the use of petrochemical raw materials, effectively minimizing pollution and carbon emissions. Impressively, over half of the waste generated in Velo's production lines undergoes recycling, ultimately transforming into functional saddles and grips.

Ortleb [Hall 11.1 - C12] is also fully aware that there is a substantial journey ahead in the quest to diminish

Over 50% of Velo's grips and bar tapes are sourced from recycled materials.





V-Grips V-769 water bottle is part of the DoEgo green series, made 100% out of recycled materials.

ish its environmental footprint. A key focus for Ortlieb lies in waste reduction, achieved through meticulous design optimization and streamlined production processes. The aim is to minimize offcuts, ensuring that every material used serves its purpose efficiently. Furthermore, the firm prioritizes the use of environmentally friendly materials, with a remarkable 70% sourced locally in Germany, reducing transportation distances and also enhancing the traceability of their supply chain. Ortlieb has also implemented a state-of-the-art photovoltaic energy plant, satisfying two-thirds of their electricity demand. Importantly,

Sunny Wheels latest large bicycle box is made from 85% RPP.



durability stands as a pivotal pillar in Ortlieb's ethos. By offering over 18,000 repairs annually and making spare parts available for at least a decade after a product has been phased out, the company ensures that premature disposal is minimized.

With a strong focus on innovation and quality, **Sunny Wheel [Hall 9.1 - E36]** has established itself as a trusted provider of bicycles components and accessories, using resin, metal and composites materials. Pioneering sustainable practices for over a decade, the firm made waves in 2011 with the introduction of the first bamboo fenders. Continuing their sustainability journey, in 2020, the company unveiled the industry's first fender crafted entirely from RPP (Recycled Polypropylene) materials. At Eurobike, Sunny Wheel is showcasing the largest bicycle box available on the market. Boasting an impressive 15-liter capacity and completely waterproof, this box is composed of 85% RPP from recycled bottles. Sunny Wheel has recently integrated the SBTi (Science Based Targets initiative) into its operational processes. This globally recognized framework promotes the adoption of best practices in emissions reductions

and facilitates the establishment of net-zero targets in line with climate science. To reinforce its commitment, Sunny Wheel has transitioned to green energy sources since May 2023, with the goal of achieving 450 kW per year.

As a prominent OEM manufacturer from Taiwan, specializing in accessories such as grips, bottles and others, **V-Grip [Hall 9.1 - E08]** has

recently undertaken a noteworthy shift in its production processes to prioritize environmental sustainability. As part of the transformative effort, it's launched the "DoEgo" green brand, dedicated to products crafted using recycled biomass materials. Notably, V-Grip has introduced a range of eco-conscious offerings under this brand. Among them, the new V-614 bottle cage along with the V-768 and V-769 water bottles stand out as responsible options as they are made from 100% recycled materials.

Another supplier of quality bicycle parts and consumer goods, Co-Union [Hall 9.1 - B38] also values innovation and is introducing a water bottle that aligns with the growing demand for sustainability. The bottle is made from bio-based materials, effectively eliminating any reliance on conventional plastics. As a result, the Co-Union bottle is not only entirely plastic-free but also has the remarkable qualities of being 100% biodegradable and compostable, in various environments, including oil, water and home compost. Furthermore, the bottle exhibits exceptional heat resistance, making it a reliable choice even in hot weather conditions, ensuring that the bottle maintains its structural integrity and functionality.

Green products are not all about plastics and how to replace it. The family-run company **Roeckl [Hall 12.1 - B28]** specializes in



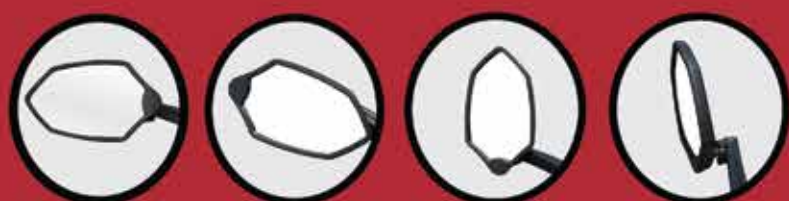
Co-Union's new water bottle is 100% biodegradable and compostable

high-quality hand gloves for over 180 years, designed for outdoor activities, including cycling and skiing among others. Their recent additions to the cycling range, the Delani and the Imatra are both summer cycling gloves and part of their Eco Series, designed to be as resource-friendly as possible.

The Delani's synthetic suede is made from 92% polyester with 60% recycled materials while the high-performance BIOcore padding contains a 45% share of plant-based materials. On the other hand, The Imatra's soft and grippy palm is made out of 60% recycled content while the Eco AiryFlex consist of 22% recycled elastane on the back of the hand ensures optimum ventilation and lightness. ■ MW



The synthetic suede of the Roeckl's Delani hand gloves is made from 60% recycled materials.



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HALL 12, BOOTH B08

OVERVIEW: BIKES: FOLDING AND UTILITY

PEDAL-POWERED BIKES FOR DAILY TRAVEL AND HIGH-VOLUME TRANSPORTATION

Few styles of bicycle remain unaffected by the advent of electrical assistance. However, electrification isn't without its drawbacks. As a result, solely pedal-powered utility and folding bikes still have lots to recommend them. First, they offer lower entry costs. Then there's their reduced weight, a particular boon on folding bikes, where portability and ease of carrying remain key. Ongoing maintenance costs are also lower. Plus, there's the added practicality that comes with not having to worry about when you can next recharge. These facets mean there's still plenty of innovation to be found among entirely pedal-powered folding and utility bikes. Below you'll find some of the most intriguing at this year's show.



The BYB 10 is made to slot easily into your lifestyle

French bikemaker **Jean Fourche [9.0 / B11]** is a company that wants to make bicycles for everyday use. More than that, it intends to re-localise production to its base in France while still providing keen value for money. It now produces electric and conventionally powered machines based on a unique frame that prioritises ease of use and versatility. Its bikes are designed, painted and assembled locally in Bordeaux on its own premises. The frames are made in Portugal, while most components are manufactured in France and Europe. Created from aluminium, each features an integrated rear rack and front cargo shelf. The bike itself also has a considerable carry limit of 170kg. Unsurprisingly, its build list majors on functional components, including Shimano Nexus hub gearing and v-brakes. Mudguards, lighting, and a chainguard also come as standard. Upright and comfort-

able, a single-size bike is designed to suit riders from 150 to 190cm.

Utility specialists **Tern [12.0 / A04]** has launched its smallest folding bike yet in the form of the BYB P10.

This conventionally propelled machine is designed for urban riders who want a compact and portable bike that can



The BYB is the smallest bike Tern has ever created and rolls on 20-inch wheels



Jean Fourche's mission extends beyond bikes and aims to revitalise European manufacturing



The Coh&Co Anna cargo bike has room for all your pals, plus groceries

be easily stored in the boot of a car or taken with you on public transport. Its TriFold frame collapses down to a tiny size of just 33x30x50cm, making it one of the most compact folding bikes on the market. It's also lightweight, at just 11.8 kg. Despite its small size, the BYB P10 aims to be a capable and comfortable bike to ride. It features a 20-inch wheelset, a Shimano 1x10 drivetrain, and Schwalbe Kojak tyres. It's also backed by a full range of accessories. These include the Pack Rack, a frame-mounted rack that carries up to 15kg and doubles as a handle for trolleying the bike. Alternatively, the Metro Transit Rack holds up to 20kg and can carry two full-size panniers.

As with the rest of the firm's range, a single size is designed

to accommodate many riders via a handlebar stem that can be adjusted to fit users of varying dimensions.

Copenhagen's **Coh&Co [8.0 / G07]** is a Danish bicycle company that makes a range of utility bikes. These include the slimline Erik, a full-size hybrid with folding components and an adjustable cockpit designed to take up a minimum of space once



Coh&Co Sigg is heading from Kickstarter to the streets

slotted into your hallway. Then there's the front-loading Anna cargo bike, which comes in electric and conventionally powered models. This can be adapted for businesses or families. Finally, there's the compact and full-foldable Sigg. Currently seeking funding on Kickstarter, this extremely light 20-inch wheel bike employs a single-sided fork plus front and rear suspension. It also uses the firm's StoneWeave construction, a proprietary frame material technology based on carbon toughened with basalt fibre. This promises to absorb shocks from the road and is recyclable at the end of its lifecycle. It also allows the firm to offer an option whereby it will buy back and recycle or recondition any of its bikes after ten years of use.

Sweden's **Ginkgo [8.0 / C09]** produces one of the lightest full-size cargo bikes available. Its minimal mass makes it comparatively easy to pilot. This is one reason the firm's conventionally powered models remain popular even when electrical assistance models are offered as an alternative. The core of the bike is an aluminium frame with control taken care of by a steering linkage that runs from the handlebar to the front fork. Its cargo bay is enclosed within the front of the frame. This can accommodate various fittings, including twin child seats. The bike can be built in multiple formats, including versions with 27.5-inch wheels and fat tyres or slimmer treads running on 700c hoops.

Guangzong-based **Wanyi Bicycle [9.2 / F13]** creates a wide range of models, from

China's Wanyi Bicycle is ready to work with brands to create competitively-priced folding bikes



kid's balance bikes to adult mountain bikes. You can also find several folding bikes with different wheel sizes among its products. The most diminutive in the range is this 14-inch wheel model. Its frame is made from aluminium, and the entire bike weighs just 10kg. The handlebars and body are easy to fold and collapse into a tiny package for

Wanyi Bicycle's range also includes this utility model with a belt drive and hub gear



transport. It's available with a single-speed or six-speed Shimano derailleur. Also in the firm's range is a neat Japanese-style utility bike with internal three-speed gearing. Other features include an aluminium frame, a low-maintenance belt drive, plus front and rear luggage carriers. Dynamo lighting, a rear-wheel stand, and an immobiliser lock round off the package. Both bikes can be customised and are offered as OEM products to brands.

London-based **Brompton [12.0 / C48]** is famous for its instantly recognisable folding bikes. These are based on one basic design in various configurations, including conventionally and electrically powered versions. More recently, the firm has simplified its range. Its A-line is now the most affordable way to get aboard one of the brand's bikes. This utilitarian version comes in a single white colour and employs a three-speed hub. However, in the interest of cost restraint, it does without mudguards or folding pedals while also making do with a slightly more basic saddle and brake levers. The C-line take the same frame and functions while peppering the bike with a few uprated components. C-line riders also get the option to custom-build their bikes, with a range of handlebar types, gearing options, and colourways to choose from. The lightweight P-line sits one level up and mixes titanium elements into the frame. Finally, sitting atop the non-electric range is the T-line which was introduced last year. This ultralight bike is the first Brompton to use an



Brompton A Line represents the cheapest way to own one of the firm's famous folders



The titanium framed T line is the pinnacle of Brompton's non-electric line-up

entirely titanium frame, which results in weights from 7.45kg. Combined with the familiar Brompton fold and ride, they're easier on your arm when carrying and even more fun to ride once applied to the tarmac. **JD**

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OVERVIEW: BAGS & PANNIERS FOR URBAN COMMUTING

VERSATILE BIKE BAGS SUPPORT URBAN MOBILITY

As urban bikes proliferate, so carrying options are becoming more diverse, from practical shopping baskets to handlebar bags and even briefcases with bicycle attachments.



Deuter [Hall 11.1/B15] has set out to solve the cycling shopper's dilemma. Should you opt for a bike bag that makes the ride breezier, but that may be bulky and uncomfortable to carry around? Or take a backpack, which may not have the same capacity and may be heavy on the shoulders?

Deuter's answer is the Xberg. It works with a clever mechanism that enables the rider to easily fold the back panel up or down. The first setting uncovers the bag-fix bracket to attach the bag to the luggage rack. The second reveals the ergonomic and well-ventilated shoulder straps.

The Xberg uses a rolltop closure,

so the volume of the 25-liter bag is adjusted to the contents. If you're heading back with bulky purchases, you can easily add five liters of capacity.

This closure makes the contents of the Xberg's main compartment easily accessible, and the backpack has plenty more clever space to park your stuff. There's a removable compartment for tablets and laptops, as well as folders and notebooks. The front pocket is where you'll easily stash and retrieve your keys, cards and portable knick-knacks. Even a helmet could fit in there. The hybrid bag is equipped with a detachable rain cover.

With its recycled materials and

sustainable components, the Xberg complies with Bluesign and Grüner Knopf requirements. Deuter adds that it's climate-neutral and free of PFAS.

Urban Rider's [Hall 9.2/F14]

answer to the same dilemma is the Cargo. It's a single bike bag that easily transforms into a backpack, with a capacity of 20 litres. The brand has a resolutely urban style, and it prioritises the use of durable and recycled materials. The Cargo commuter bag is made with recycled PET, at 100% for the main fabric and 75% in all.

Compatible with e-bikes, the Cargo comes with Vario Fix bike hooks. It has a padded laptop compartment and a large front pocket with easy access. There's a hidden pocket at the back with a zipper. Another version of this backpack is the self-explanatory Rolltop.

Urban Rider was launched by René van Leeuwen, a former buyer at Hema, together with a partner, with the aim of making more sustainable products. It's encapsulated in the company's slogan: Sustainability in Motion.

U+ Creative Concepts is the company behind the design of Urban Rider products, while Dutch Perfect takes care of the sales. Operating from a container office in Haarlem, U+ Creative Concepts is a certified B Corporation. It donates 5% of the profits from its Urban Proof Recycled range to Love not Waste, a beach clean-up group in the Netherlands.

"At our core, we're all about making sustainable products available to everyone," said Van Leeuwen. "Not only do we reduce our own impact on the environment, but we also empower our customers and consumers to do the same. That is why we have brands to inspire others, but also provide private label to make sustainability for everyone. Not as a choice but as a standard."

For any stuff that needs to be quickly accessible on an urban ride, there's the Tuptube Bag by **Ortlieb [Hall 11.1/C12]**. It's easy to open the bag and access the contents with one hand while riding. The lid will shut again under its own weight, with two magnets to close it securely.

The bag, with a capacity of 1.5 liters, can be attached with perforated rubberized straps. Any holes drilled in the top tube can also be used to fasten the bag. With the Tube-Lock adapter system, it takes just seconds to detach the bag, when you have reached your destination or just want to pop into a store.

The Tuptube Bag has a silicone holder on the lid, which makes



Ortlieb's Tuptube bag

it easier for riders to use their smart phone for navigation. Combined with the bag's sturdy nylon fabric, the stiffened material inside ensures that it retains its shape at all times.

With its Urban Collection, **Weathergoods [Hall 11.1/D10]** targets riders who are after a smart yet functional bicycle bag for office commuting. It comes in two versions, a backpack and a briefcase, which are both made with recycled polyurethane and recycled ripstop lining. The two products have padded laptop sleeves.

Due to the discreet incorporation of the hooks into the design, the Weathergoods bag could easily work for a business meeting. "The fabrics have been chosen for their durable and sustainable properties and give the collection a more refined look making it suitable for a more formal office environment," the Swedish company says.

Clarijs Covers [Hall 8.0/B18]

a Dutch specialist in bike bags and covers for cargo bikes, has come up with a bag for longtail bikes, launching at Eurobike. Frank Koppenol, the owner at Clarijs Covers,

explains that the Longtail Universal was built purposely to be functional for this type of bicycles, as well as durable and stylish.

The bag comes with an adjustable attachment system, intended to fit with any longtail bike. The inner bag provides plenty of space for any stuff that could come handy, from shopping to a computer. The features include a Fidlock closure system, making it easy to open and close the bag, even on the go. At the same time, it's safely and



Hybrid bag by Deuter

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DUFFLE RC WITH CARGO STRAPS

A versatile travel and sports bag with roll closure. The Duffle RC comes in 49 and 89-litre versions, both of which work with the firm's Cargo Strap systems. These allow the bag to be carried by its owner

or lashed to the bike. These ensure the load is held securely, even over bumpy terrain. Each bag is sustainably produced in Germany and 100% waterproof.

11.1 / C12





The Cargo backpack from Urban Riders



An urban cycling briefcase from Weathergoods

firmly attached to the bike, in such a way that the contents won't spill out.

"Another smart feature is the foldable bottom, which makes it easy to fold the bag when you're not using it," adds Koppenol. That's most useful for riders who use their longtail bike for

multiple purposes, and don't always need a bag.

The bicycle basket from **New Looxs [Hall 9.0/D08]** is an efficient and more durable alternative to the plastic shopping bag. It's made from recycled plastic and produced in the Netherlands.

Among the most practical aspects of the basket is the patented handle with one-handed operation, meaning you always have a hand free to hold your bike. New Looxs adds that the handle does not rattle while cycling.

The basket fits almost all carriers, and it can be fixed in two ways, lengthwise and widthwise. "Fix it with a click, take it from the carrier with one touch," as New Looxs puts it. The brand's shopping package comes with a bottom plate and waterproof cover.

The City Shopper from **Basil [Hall 12.1/B09]** wouldn't be out of place for a walk around town or lunch at the café. With a capacity of 14 litres, it's large



Infinity Top Bag from SKS

enough for groceries but small enough to be carried around with a detachable shoulder strap when it's less full.

This vegan lightweight bag has folding closure with a magnet. The City Shopper is easy to attach to luggage carriers with the Hook-On system. The neatly hidden hooks are another feature that makes this bag elegant for a city stroll. Moss green has been added to the colour options.

A more functional option is the top bag from **SKS [Hall 12.1/A26]**, which uses a robust tarpaulin fabric with taped seams. It has a capacity of about seven liters, and several features to organize the contents, such as a large internal pouch with roll-top closure, several padded compartments and a net at the top.

Suitable for shopping, commuting or

Clarijs longtail bag

other outings, the Infinity Top Bag is built to be attached to the Infinity Universal luggage carrier, and to all luggage carriers with MIK adapter plates. With a removable shoulder strap, it can be easily carried around.

The Cargo Hold 28 pannier has been created for popular **Tern [Hall 12.0/A04]** e-bikes such as the NBD and HSD. It can be used to carry anything from groceries to a work bag. The pannier has a waterproof liner and weather-resistant outer material, which reliably shield the contents from rain. The rolltop construction makes it easy to switch from bucket to pannier mode, or to just flatten the bag when it's empty.

■ BS

Tern pannier



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Technical perfection and refined design combined to achieve unique performance levels, which will raise your pulse and your desire to ride. Fulcrum's wheels are born out of the synergy between form and function, a perfect balance that guarantees unique performance levels and a superior ride feel. We want to show you why.

Form. Function. Fulcrum

FULCRUM

OVERVIEW : FRAME MAKERS

KEEPING ART & SCIENCE IN THE FRAME

Bicycle frame making is an artful process that lies at the very heart of the cycling industry and demands an exquisite fusion of engineering prowess and craftsmanship. Frame makers are the architects behind the structural soul of a bicycle as they possess a deep understanding of materials and manufacturing techniques. Their expertise allows them to forge frames that strike the perfect balance between strength, weight, rigidity and ride quality. With an eye on market demands, they continuously push the limits of innovation, propelling the industry forward.



Astro is using heated and pressed thermoplastic composites sheets to form frames.

Taiwan is the home of some of the world's leading frame makers. Focusing on the niche of high-quality titanium for over two decades, **ORA [Hall 9.2 / F32]** has established itself as one of the best titanium bicycle frame manufacturers and has also successfully elevated the quality benchmarks for their steel and alloy products. This year, they're introducing a new frame with shape elements originating from carbon fiber frames. The infusion of these new shapes into the top tubes and down tubes is achieved through the innovative process of oil forming, giving the bike a more modern and fashionable style. Additionally, the company has designed a completely new titanium stem, entirely CNC-machined with full internal cable routing.

Another Taiwanese company that's always looking to innovate is **Astro [Hall 9.1 / C26]**. Astro has been designing and manufacturing frames since 1991 and was one of the pioneers in the production of e-MTB frames. Always on the lookout for innovation, they're once again revolutionizing the process of frame fabrication with a new process that uses sheets of reinforced thermoplastic composites. While not a groundbreaking concept in the aviation industry, the application of heat and pressure to shape composite sheets is now finding its way to the bicycle industry, bringing forth promising advancements in automation and sustainability.

Backed by its experience in bicycle frame making and recognizing the shifting landscape of urban commuting towards cargo



The shapes of ORA's new 24CX301 brings a modern look to classic Ti frames'



A-Pro Tech's latest cargo line offers abundant customization possibilities.

transport, **A-Pro Tech [Hall 9.0 / D21]** has embraced this trend with its latest model, the E-Cargo EG4A-B11. The versatility of this bike shines through its multiple customization options, making it equally suitable for transporting packages or embarking on family rides. Travelers are not left behind either, as A-Pro offers a dual battery option from Bosch, providing additional performance and extended range.

Also with a firm conviction that cargo bikes hold the potential to alleviate city traffic issues and serve as an alternative for delivery needs, **Limotec [Hall 8 / E32]** emphasizes the importance of collaboration between the bike industry and the cities to shape the future of transportation. In line with this vision,

Limotec is unveiling a 3-wheeler cargo bike designed as an open platform to both business and individuals. This versatile cargo bike offers a customizable platform, capable of accommodating various e-systems and even boasting all-wheel drive capabilities for

Businesses will benefit from the versatility of the new 3-wheeler cargo bike from Limotec.



enhanced performance. Safety has been prioritized with the integration of the patented Chassis Control System (CCS) to enhance driving stability. Additionally, Limotec's T&T patented wave frame structure delivers impressive stiffness for low-step systems.

Combining the expertise of a multi-generation, family-owned Taiwanese manufacturer with the practical

knowledge and passion of retired professional cyclist, Steve Fenton, **Pro-Lite [Hall 9.1 / C06]**

has manufacturing capabilities across all frame types. In recent

years, Pro-Lite's frame factory has undergone a transformative journey as they expanded their portfolio to include cargo bike chassis and a



Pro-Lite is fully equipped to produce frames of all types.

variety of e-bike frames. Their commitment to efficiency is evident through strategic investments in materials, aimed at reducing lead times.

Ballistic [Hall 9.1 / E19] is another Taiwanese frame manufacturer with extensive experience in producing e-bikes since 2006, when the market had yet to witness the advent of mid-motor technology. With unwavering dedication to innovation, the firm has engineered a frame capable of accommodating an impressive 1Kw battery. The frame can be produced in both mid-motor and rear

motor configuration and the battery can be installed in a separate dock and used for other power applications.

Established in 2001, **Cycle Chris/Joyland Technology [Hall 9.2 / D18]** is a Taiwan and China-based team specializing in OEM/ODM services. With expertise in diverse manufacturing processes such as injection molding, CNC, and die casting, they have developed a wide range of bicycle parts, from plastic, carbon and a range of alloys. At

this year's show, they are unveiling their new gravel alloy frame, the RF226-UMET with an emphasis on a fun yet comfortable ride. The bike offers a 74 degrees seat tube angle that's well suited for various riding scenarios. Furthermore, the frame features multiple fixations points for water bottle or travel bags and features a tire clearance of up to 65mm.

With a steadfast commitment to quality and innovation, the renowned manufacturer of lightweight aluminum

Ballistic's new frame can accommodate a 1Kw battery.



frames **Kinesis [Hall 9.1 / C08]** employs advanced materials, specialized fixtures and state-of-the-art heat treatment ovens to ensure minimal deformation during the water quenching process for 6061 aluminum. Moreover, their rigorous adherence to stringent quality control standards includes subjecting every product leaving their factory to EN testing. Not stopping at just one breakthrough, Kinesis is presenting two frame sets. The first, the IQ8000, is a suspension city-trekking



Joyland's new gravel frame is designed for fun and comfort.

Kinesis' patented technology seamlessly incorporates the downtube and motor bracket in a single hydroformed piece.



LightCarbon's new gravel frame in T700 carbon.



The new Rey-Drive concept from Reynolds is targeted at custom frame builders.

bike frame with a shock mechanism cleverly concealed within the seat tube, resulting in a visually clean and seamless appearance. The second frameset, designed specifically for gravel biking enthusiasts, incorporates a technological advancement call HDM (Hydroformed Downtube Motor). Through this technique, both the down tube and the motor mount are hydroformed from a single piece of aluminum, providing a combination of lightweight construction and uncluttered aesthetic.

Driven by an experienced R&D department, **LightCarbon [Hall 9.1 / G39]** develops carbon frames and rims using high modulus carbon fiber, specifically Today T700, T800 and T1000. The company guarantees the utmost quality, with all their precuts surpassing the new ISO4210 standard by an additional 20%. Furthermore, the adoption of 3D latex mandrel technology enables LightCarbon to produce carbon frames with flawless inner walls, uniform thickness and exceptional stability. To prove it, two new frames are being launched at Eurobike: the LCE930 eMTB frame, compatible with the latest Bafang M820 motor and that can potentially weigh under 19kg fully assembled, and the LCG071-D gravel bike frame using T700 carbon.

At its 4,000 sqm plant in Xiamen, China, **Pro-Mance [Hall 9.2 / A03]** produces a wide variety of carbon bike parts, from frames to accessories, covering all cycling categories. For 2023, the firm is presenting three new bike frames: the PRO-M075 is a 29er Trail/XC MTB frame with split pivot system and full internal cable routing, the PRO-EB019 eMTB frame, available in 2 wheel sizes (27.5+ or 29 inch) and two Shimano drives options, as well as the PRO-R8038, a road frame with internal cable routing that weighs in at 835g in size M.

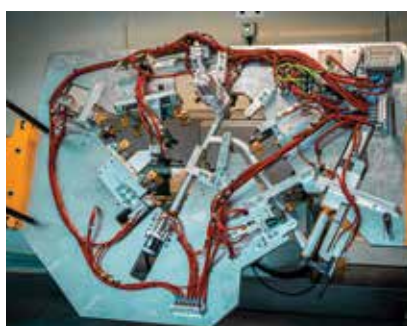
Celebrating their 125th anniversary this year, **Reynolds Technology Ltd [Hall 11.1 / C15a]**, based in Birmingham, UK, continues a long

tradition innovation by launching the Rey-Drive concept at this year's show. This is targeted at frame-builders who want to offer their own unique design and ride quality to riders, but with the option of a removable light e-drive system for steel or titanium custom built frames. The Rey-Drive series of components and parts offer builders the ability to use the 12*142 mm industry standard axle, interchangeable with the award winning Mahle X20 hub. The flexible design offers both internal and external battery options, cable routing and bespoke X20 frame tubing components. The system suits commuter, gravel, road or hard tail mountain bike designs and is fully compatible with the 853/725/631 steel, 931 stainless steel and 3-2.5 titanium tubing. At Eurobike, Reynolds is showcasing three distinctive bike frames that showcase these parts.

Another European company, from Poland, **Romet [Hall 9.0 / E07]** is equipped with a top-notch robotized frame production facility. As one of the largest manufacturers of aluminum bike frames and composite components in Europe, the development of the company in recent years has helped significantly shorten production time. Current annual production stands at around 400,000 bikes, representing one-third of the total bicycle production in Poland. ■ **MW**



The PRO-EB019 from Pro-Mance comes in 27.5+ and 29 inch



Romet's production facility is equipped with advanced robotics

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OVERVIEW: ROAD & E-ROAD BIKES

FRAME & MOTOR INNOVATIONS BRING NEW VERSATILITY

What is a road bike these days? With many manufacturers using the same platform for road and gravel, and most bikes comfortable with uses well beyond their primary purpose, there's bound to be one out there that suits your particular mix of riding. One thing's for sure though: disc brakes are what everyone wants.



The new Specialized Allez is the first disc-only iteration of the bike

The new Allez frame is constructed from double butted E5 alloy tubing, and weighs in at 1,375g. It's mated with a full carbon fork to keep weight down. The new Allez borrows from the Roubaix in terms of its geometry, so it's designed to be a more comfortable position for more riders. That comfort is aided by the fact that the Allez can take up to a 35mm tyre for riding on a wider range of surfaces. Up to 32mm tyres will fit under mudguards, and the bike comes specced with 30mm tyres as standard.

The bike will be available in two builds. The Shimano 105 build pictured gets Shimano's hydraulic disc



The Gain M20i features a 350Wh battery capable of 4,000m of ascent

brakes, and it's set up for climbing with a 50/34 chainring and 11-32T cassette. The new Allez is priced above the outgoing model, meaning that it's maybe not so much of an entry level choice, but it's certainly interesting to see a brand as big as Specialized have a performance road range that's fully moved over to disc brakes.

If the Allez is one of the longest serving bike names in road cycling, then in the e-road sphere the same can be said for the **Orbea [11.0 / C12] Gain**. Okay, it's not been about as long, but Orbea's hub-bomb e-road platform was launched in 2017, and in 2021 the bike was fully redesigned with internal cabling. The latest incarnations of the bike feature a tuned version of Mahle's ebikemotion X20 motor, and weight savings around the platform have allowed Orbea to spec a bigger 350Wh battery, again hidden in the down tube. Bike manufacturers have been moving of late to speaking about ebike range not in terms of distance travelled but climbing capacity. Orbea says that the new Gain has enough battery for over 4,000m of climbing: that's twice up the Passo dello Stelvio on one charge.

Orbea is keen to major on the Gain behaving like a normal road bike. "The



Titici's ALFA frame has Dual Air Channel technology for better aerodynamics

natural assistance blends invisibly into the background, leaving you feeling like you are fitter than ever", the company says. "This isn't about riding faster, it isn't even about riding further, this is just about having more fun each and every time you ride."

The Gain platform is designed for both road and gravel, and the OMR carbon frame and fork both have capacity for a 35mm tyre. The M20i build pictured is a road-oriented spec, with a double-chainring Shimano Ultegra Di2 groupset, but you can spec the bike with Pirelli Cinturato gravel

The death knell for the rim brake? The **Specialized [open air ground F12 / H01] Allez** has been a bellwether for industry trends in road cycling for four decades, and the latest model is the first to do away with rim brakes entirely. "The new Allez is the best yet. Lightest in its class," says Specialized, "it delivers more confidence, versatility, and performance than ever before – to more riders than ever before."

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HALL 11.1 / D08
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Mavic's X-Tend motor weighs just 1.2kg



The Fybra features a true monocoque frame bristling with interesting tech

tyres out of the box if you prefer. Other components, such as the saddle, bars and seatpost, are also customisable.

Many road frames are described as 'monocoque', but in reality few of them are actually manufactured as a single piece. But that's what **Titici [11.0 / D11]** is doing with the new ALFA, a bike that it says represents "the beginning of a new era of hypersonic design and disruptive innovation of current aerodynamic standards."

There's quite a lot going on with the ALFA, but let's look at the frame construction first. During construction the carbon sheets are layered around a core of sintered expanded polystyrene (EPS) with a perfectly smooth surface. Titici says that the EPS system avoids the emergence of air bubbles, an issue with the inflatable bladders normally used, which cause imperfections and structural weaknesses.

Every single tube section is designed using NACA aerodynamic profiles, and the new UCI frame tube thickness standard which allows for deeper sections. The top tube flattens out to a thickness of just 10mm, which Titici says is the thinnest in the world, and allows the ALFA frame to absorb up to 18% of vibrations more than a standard frame without compromising torsional rigidity. The frame also features a Double Air Channel design: the seatstay bridge is moved forward from the seatpost junction, and a flat bridge attaches the stays and separates them from the frame, allowing air to pass through more easily for improved aerodynamics. The flat bridge section also helps to damp vibration from the rear wheel.

On the gravel side of things another bike to check out is the Portlandia GX from Taiwanese manufacturer **Ballistic [9.1 / E19]**. The Portlandia is a bike that Ballistic says will have you "riding with style, not sweat", and the assistance you'll get comes from a mid motor from DP motors, who have been making ebike motors in Taichung since 2018. Power is rated at 250W and 60Nm, and the motor is mated with a SRAM Apex 1x11 drivetrain with a wide range of ratios for all terrains. The battery is a 378Wh unit that top-loads into the alloy frame and is removable for charging indoors, or for a top-up in the cafe. The bike



The BH Core brings aero styling to the e-road market

comes specced with all-condition gravel tyres, and stopping is taken care of by Promax DSK-718 mechanical disc brakes. The colour coding of the saddle and the bar tape with the tan wall tyres is a nice touch.

The Portlandia is also available in a road build, called the Portlandia R1. That bike is quite different, in that it uses not a mid motor but a rear hub motor, from FSA. You get wide road tyres and a 1x11 transmission.

The Fybra from **MCipollini [11.0 / C03]**, the bicycle brand that benefits from the experience and image of the cycling champion Mario Cipollini, is also available in GX and R builds for gravel and road, respectively. But that's really where the similarities end. Like the Titici ALFA above, the Fybra is a true carbon monocoque, manufactured using MCipollini's TCM Technology which allows the company to treat the whole frame as if it were a single tube.

The GX build of the Fybra (pictured) is the first electric gravel bike in the MCipollini collection and boasts a number of

interesting technical features. At the front the frame is paired with a HiRide AR 1.5 suspension fork, offering 18mm of front-end travel. The suspension unit is hidden within the head tube, allowing for clean lines. Also very clean in terms of its integration is the dropper seatpost, which is controlled wirelessly from the handlebars.

Both the GX and R builds of the bike use Polini's EP3+ EVO motor, which is among the most powerful 250W mid motors out there. MCipollini also uses Polini's 500Wh internal battery



The Portlandia GX features a mid motor from DP motors and SRAM transmission

and colour display. **Mavic [F12.0 / F11]** isn't exactly making an e-road bike, but it has offered us a glimpse of what the future of e-road bike motors might be with its new X-Tend motor system. The Mavic-designed-and-built motor uses a concentric design and a cycloidal reduction gear to achieve a 45:1 reduction in one step from the motor to the pedals. That translates into a very compact and lightweight motor: the motor is just 87mm in diameter and weighs only 1.2kg, meaning that sub-10kg bikes are easily achievable. Mavic has been working with Swiss manufacturer BMC for the prototype bikes.

One of the unique features of the Mavic X-Tend motor is that it works with any Shimano Hollowtech II chainset, driving the chainset directly using an arm that extends from the motor and contacts the rear of the chainset. That means that it can be adapted for use with road, gravel, mountain bike and urban groupsets, widening the motor's appeal. Mavic is currently looking for partners to bring the motor into production.

It's more unusual to see e-road

bikes that are built around a conspicuously aero-optimised frame, but that's what you get with the **BH Bikes [12.1 / A24]** Core. The high-modulus carbon frame is constructed using Kamm tail profiles and features fully internal cable routing. An aero seatpost and dropped seatstays complete the look.

There are an increasing number of well-regarded OEM motor systems for manufacturers to choose from when spec'ing an e-road bike, but BH has taken a different path with its Core model, choosing instead to develop its own system. The BH2EXMAG motor is now on its second generation and BH says that mechanical and electronic improvements, plus the addition of a new Bluetooth system, have much improved the motor. It's capable of 65Nm of torque and weighs 2.1kg, meaning that with the bike's generous 540Wh battery builds start from about 12.5kg. That big (for an e-road bike) battery means that the bike has an excellent range. BH says the standard bike is good for 165km, and adding the optional 180Wh range extender battery will increase that to 220km.

The Core's on-board display is fully integrated into the stem, and the bike can also communicate with smartphones via a dedicated app, and with Garmin head units. The Core 1.6 bike pictured is built with a Shimano Ultegra Di2 drivetrain and FSA Trimax 35TR wheels.

Rondo [11.1 / B30] is a company that made a big impact in the gravel and all-road scene with its Twintip adjustable geometry fork. It's taken that tech into the aero road sphere with the HVRT, which it describes as "the world's first variable geometry, road-plus ready road bike". The first and only?

The Twintip fork allows the rider to adjust the geometry at the front end by flipping an insert which the through axle sits in. The lower setting steepens the bike's angles and lowers the front end for a more aggressive position, and the upper setting, with slight slacker settings, is better for longer endurance rides.

Although Rondo describes the HVRT as an "all-out race bike", in reality it's more versatile than that, capable of handling bigger volume 700c tyres and even road plus tires on 650b wheels. So it's capable of everything from the club paceline ride to traffic-free gravel riding and pretty much everything in between. Indeed, it could be the ultimate "N+1" killer.

DA



Adjustable geometry and big clearance give the HVRT huge versatility

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NEW PRODUCTS



ABUS 6950M AM GRANIT XPLUS LOCK

Thanks to its innovative, flexible fastening system, the new 6950M AM Granit XPlus frame lock fits all common frame shapes and tyre widths. Made to make life easy for retailers, its All Mounting System uses a flexible, movable screw mount ranging from 68.5 to 107mm thread distance on the frame. Its XPlus cylinder allows you to synchronise the keys with other Abus products.

Hall 12.1 / A29



BY.SCHULZ DG-BO SEATPOST TOOL

This tool serves two crucial workshop functions. Foremost, it's a high-quality diameter gauge made of anodised aluminium. With 13 steps, it's designed to determine the inner tube diameter of any frame and is laser engraved with an easy-to-read scale. Secondly, the tool functions as a bottle opener for when work is over. Includes a mounting hole for easy storage. Hall 12.1 / B34

MESSINGSCHLAGER MOTUL REFILL SYSTEM

A refillable workshop solution for multifunctional or cleaning sprays. The Motul Refill System features an adjustable and stable metal lance that allows precise spraying and even distribution. It's almost unlimitedly refillable and comes with a refill container available for brake cleaner, surface cleaner, degreaser, or multifunctional lubricant. The system offers a range of cost-effective and environmentally friendly benefits. Not only is it beneficial for the environment, but it also promotes good health by being free from silicone, Teflon or acids. Additionally, Motul products have reduced levels of highly volatile components, ensuring they're safe to use and handle. The system reduces disposal and overall costs, making it an ideal choice for businesses looking to save space and lower expenses while reducing their environmental impact. Hall 12.1 / A19



LITEMOVE AEW-230

Building on the success of its optical MTi Technology, Litemove launches new AEW-230 dual options (high and low beam) headlight with 230 lux/ 950 lumens output. With a 10m wide beam and up to 300m distance visibility, AEW-230 is designed for e-MTB riders. The AEW-230 received the "German Design Award 2023" and the World of MTB "BEST of 2022". Contact info@lite-move.com

Hall 12.1 / C18



SCHWALBE GREEN MARATHON TYRE

Schwalbe claims the Green Marathon is the world's first circular-economy bicycle tyre. Its rubber compound uses 100% carbon black from recycled bicycle tyres and sets a new standard for eco-friendliness. The remainder is made from 70% recycled and renewable materials, including fair trade natural rubber. Despite this recent change in formula, its makers say durability, safety and puncture protection remain undiminished.

Hall 12.1 / A27



MAGURA CBS

Magura is using Eurobike to launch its Combined Braking System for cargo bikes. The system aims to boost safety and efficiency when stopping. Informed by the realisation that many riders avoid the front brake, the system balances braking power between the front and back of the bike. The system works without a power supply and complements Magura's existing MT C disc brakes. Hall 12.0 / B08

CROPS V150 BELL COMBO

A battery-powered light and bell specifically designed for entry-level users. Despite its compact size, it operates on two AA batteries and provides a brightness of approximately 150 lumens. Its body is constructed with polycarbonate for durability. The unit uses Crops' UltiFix universal bracket, allowing for easy attachment and seamless integration of both elements.

Hall 9.1 / D33



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M.1 M-LINE PEDAL

With the M-Line pedal series, by,schulz adds another high-quality, durable product to its pedal range. This lightweight pedal is designed for trekking bikes, e-bikes and cargo bikes. The high-strength aluminum body is significantly thinner than usual, with a height of only 19mm overall. Despite the novel narrow reflectors and the form-fitting design, the pedal is StVZO compliant. The large tread surface

is provided with non-slip 3M Grip Tape, ensuring a secure platform while riding. The high-quality axle and bearing units from the MTB range offer high reliability and a pleasant riding experience. With an MSRP of €89.95, the pedal has been tested according to Din EN 4210 with increased test load and approved for riders up to 150 kg.

Hall 12.1 Booth B34



V-GRIP WAVE SPORT BOTTLE

Stay hydrated or stay cool. The V-Grip Wave bottle allows you to do both with twin modes offering a high-flow stream for drinking or a cooling shower spray for your head and body. Switching between the two modes via a simple pull that can be achieved using your mouth, one hand can always remain on the bar for safety. The cap also disassembles for easy cleaning. Dishwasher safe and recyclable.

Hall 9.1 / E08



3X3 E-SHIFT

The innovative 3X3 NINE gear hub with electric shifting combines the advantages of a high-quality gear hub with the power of an electric motor. With nine internal gears, it offers a total ratio spanning 554% and enables precise shifting at the touch of a button. The electric gear shifter provides a smooth riding experience, while the gear hub offers high reliability and is intuitive to use. Hall 8.0 / J20

New Ratchet System Hub

Proven durability, Low MOQ

- Fatigue test 190Nm impact 200,000 cycles, 100rpm
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**Signal speed
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36T



54T



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KT Taiwan has independently perfected the technology to come up with our own MIT ratchet system hub. The process is highly technical and extremely difficult to get right. We have done it and are now looking to ramp up production in the face of strong demand. Get in touch with us now for a discussion on how we can help you. **Hall 9.2 A07**

NEW PRODUCTS

FUMPA GAUGE

Fumpa Pumps has recently introduced the Fumpa Gauge to complement its range of bicycle pumps. This USB Type C rechargeable electric pressure gauge is great for checking your tyre pressures, weighs just 30 grams, and is small enough to fit on your keyring. Works with both Presta and Schrader valves.

Hall 9.2 / G49



MOUSTACHE BIKES

J Not Just a bike, but a new day. 'J' is the product of a two-fold intention: to produce with a short supply chain and to create an e-bike incredibly simple to use. Keeping it simple is complicated! Moustache has created a unique two-part aluminium frame with no welding, integrating motor, battery, suspension and produced in France! Aimed at bike lovers as well as complete beginners, 'J' is reinventing the e-bike experience with its simplicity and represents a new day for Moustache and the industry. Hall 12.0 / A08

KIND SHOCK GTC GRAVEL SUSPENSION FORK

Kind Shock enters the gravel suspension market. Its new fork has been purpose-built for the demands of gravel and e-gravel riding. It combines a forged aluminium crown with high-modulus carbon fibre and aluminium composite lower legs. It's compatible with up to 50mm wide tyres and uses a flat-mount style brake fixing. Inside, it employs an oil-damping system with adjustable rebound and lockout.

Hall 9.1 / B15



JEAN FOURCHE UTILITY BIKES

Jean Fourche is based in Bordeaux, where it designs and assembles its bicycles. Its product is a compact range of personalised bikes for individuals, businesses and communities. With a focus on sustainability, each is based on a single frame and is available in mechanical and electric versions. With most components sourced from within the EU, the brand aims to minimise shipping while revitalising European manufacturing. Hall 9.0 / B11



YFLAB BIKEFLARE VISIO

BikeFlare VISIO is an anti-theft tracker hidden within the handlebars. Two modules with a total weight of 80g can be easily installed by the user or bike dealer. The primary BikeFlare-Alarm sends a high-priority alert notification to the user's phone as well as an optional siren on the bike itself. If the user forgets to activate the primary alarm, the system will send a Bike-Has-Moved notification when activity is detected after five minutes of not moving. Based in Slovenia, YFLab specializes in safety and security GPS tracking solutions. For more information, visit www.getflare.eu.

Hall 8.0 B49



SEATYLOCK FOLDYLOCK FOREVER

The Foldylock Forever is a folding lock with a gold Sold Secure rating, offering serious security, comfort, and design. It represents the end of a decade-long design process to create convenient and reliable protection. The lock's robust 6.5mm hardened metal links are key to its strength. Its makers now also offer co-branding solutions based on its design. Hall 9.1 / A18



HAFNY WIND RESISTANT BIKE MIRROR

The mirror arm of the fibre-reinforced HF-M6002LS-FR053 has a hollow design to decrease weight and improve wind resistance. The arm is the lightest and longest of the model range. The mirror arm insert base comes with a spacer that allows the user to lock the mirror in position or stay rotatable.

Hall 9.1 E40

GIYO GM-25D PUMP

The GM-25D is an adaptable pump equipped with Giyo's new CNC screw-in twin-valve pump head. This pivoting design has been created to help solve the traditional screw-in valve issue, whereby unscrewing the pump head can accidentally remove the valve stem, causing air to leak from the tyre. Works with both Presta and Schrader valves. Hall 9.1 / B29



TERN BICYCLES BYB P10

The new P10 is the lighter, sportier version of the ultra-compact, slim-folding BYB. Built on the foundation of a stiff and responsive ride quintessential of the BYB, and outfitted with a Shimano 1x10 drivetrain and fast-rolling Schwalbe Kojak Performance tires, the P10 is ideal for urban dwellers who want maximum riding fun with minimum logistics hassle in their precious off-time. Hall 12.0 / A04



DP MOTOR M065MD MID-DRIVE MOTOR

The M065MD is a road-focused mid-drive unit from DP. It aims to maintain the characteristic silent and smooth riding the brand is known for while providing up to 60Nm of torque. It's been designed to neatly integrate into the bike and offers a weight below 2.8kg. It's EN15194 and ISO13849 certified.

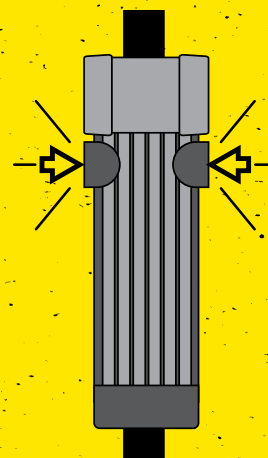
Hall 11.1 / C05



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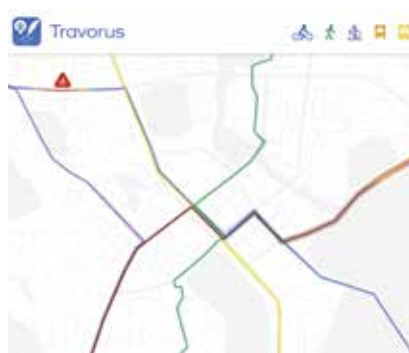
Schlage Lock Company LLC, 11819 North Pennsylvania Street, Carmel, IN 46032



THUN REV II

REV II (short for REVOLUTION 2) is Thun's new product line featuring 100 % CNC-machined (in Germany) crank arms for upscale e-bikes with central motors. REV II crank arms feature the iconic window that already made Thun's infamous REVOLUTION crankset a showstopper in the 1990's and are available with different surface options such as Polished (as illustrated in the picture), Black and Bicolor Chrome Black. **Hall 12.1 / C29**

NEW PRODUCTS



FAST2WORK TRAVORUS - FOR SAFER SCHOOL COMMUTES

Fast2work aims to make school commutes safer with its newly developed Travorus app. Specifically designed for municipalities, it provides valuable data on traffic flows, modes of transportation, and potential hazards. Respecting data privacy regulations and easy to use, Travorus allows students to record their commute by bike, e-scooter, bus, tram, car, or on foot without the need for registration or login. **Hall 8.0 / M03**



PROMOVEC DYNAMIC CARGO

Promovec offers a wide range of OEM cargo bike solutions and lets you put your own touch and brand name on the bike. Our Dynamic Cargo with a strong center motor and battery has many great features: hydraulic brakes, a seamless gear shift, and battery integrated with USB charger. Safety features include integrated wheels, ISO-Fix, and compact cabin design. **Hall 8 H22**

SKS INFINITY UNIVERSAL LUGGAGE RACK

This German-made aluminium luggage rack system can be quickly mounted and individually adapted to almost any geometry. Its rapid clamping system also ensures easy mounting to the seat stays. The MIK adapter plate with click-to-fit capability then makes it easy to attach bike bags using the popular adapter system. **Hall 12.1 / A26**



NECO MM18 MOTOR

The torque sensor and high-density chip integrated circuit on Neco's new MM18 motor promises precise output control for responsive performance and energy efficiency. The gear reduction mechanism is also simplified by reduced two-point positioning. This should result in smooth operation, with ample torque and low noise. Its mid-mounted hanger can also be rotated and welded with a high degree of flexibility. **Hall 8 / J01**



MESSINGSCHLAGER BUILD YOUR OWN E-BIKE CONCEPT

Messingschlagler can help you create your own branded e-bike within 12 months. As Europe's largest bicycle parts importer, its development and procurement expertise means it can configure e-bikes from different concept platforms or work alongside customers on their own ideas. All the necessary components, including shifting to suspension, can then be purchased directly from Messingschlagler. Its latest 170mm full-suspension e-mountain bike with a Brose GEN 2 drive and 705Wh battery is a great example of what you could achieve. Known as the MUC.C.al SUV, it offers a carbon fibre construction and benefits from a luggage rack and mudguards developed especially to match the bike. **Hall 12.1 / A19**



KT RATCHET SYSTEM HUB

The rings of KT Taiwan's ratchet system precisely engage for instant acceleration and are extremely durable. Cyclists can choose the basic 36t ratchet or the advanced 54t. Compatible with all types of derailleurs. For detailed specifications and further information on the complete range for Road and MTB visit us in Hall 9.2. **Hall 9.2 A07**



ASTRO EG4A-B11 ELECTRIC CARGO BIKE

Astro's latest cargo bike offers customisable storage and transportation options, so it's ready to transfer between work and leisure. It provides a significant range between charges thanks to a dual battery from Bosch. A large and grippy rear wheel is married to a more diminutive front hoop that imparts strength and manoeuvrability where it's needed, while suspension on the fork and seatpost keep things comfortable. **Hall 9.1 / C26**



SQLAB INFINERGY ERGOWAVE SADDLE

SQLab 611 Infinergy Ergowave carbon saddle is created in Germany and features Swiss-made carbon rails. Up top, the saddle's BASF Infinergy material is very robust and lifts rough terrain comfort to a new level thanks to its fast rebound characteristics. SQLab's active saddle technology allows the saddle to follow the rider's pedalling motion while increasing comfort and mobilising their intervertebral discs. **Hall 11.1 / B24**



MIRANDA SUSTAINABLE CRANKS

Miranda's bicycle cranks are produced in Portugal, using 100% green electricity and recycled aluminum. Emphasizing sustainability, Miranda cranks incorporate the latest technologies such as generative design for significant weight reduction without compromising robustness. The 2023 lineup also includes lightweight options specifically designed for Fazua. Each crank's manufacture results in a minimal CO2 footprint of just 1.6g, underscoring Miranda's commitment to sustainable production. **Hall 9.2 / C22**



WORLD-LEADING INNOVATION

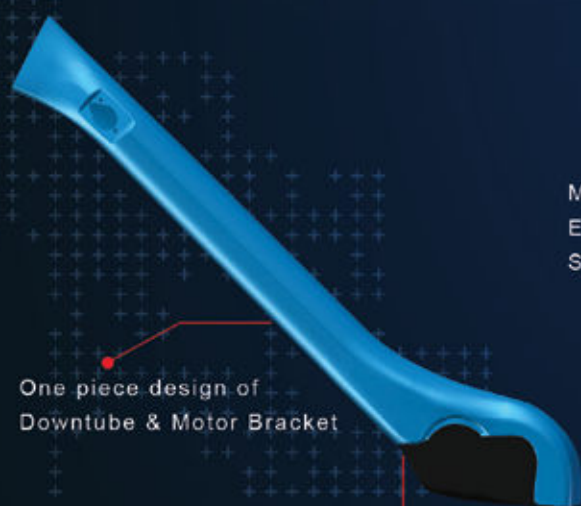
EUROBIKE come see us at
Hall 9.1 / F62

As E-BIKES get more sophisticated, So do hydroformed parts from A-FORGE www.aforge.com.tw

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Downtube & Motor Bracket

Mono DT with
Excellent Stiffness For
Step Through Bike



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Battery Length

PATENT
Seat tube

China Patent

ZL 2018 2 0212382.8 (Started since 2018.10.09)

Taiwan Patent

I676575 (Started since 2019.11.11)

European Patent

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NEW PRODUCTS



BAFANG H700 REAR DRIVE SYSTEM

With a weight of 3.2kg and 40Nm of torque, the H700 drive is built to create clean-looking bikes that provide their riders with a relaxed and flexible travel experience. The H700 is equipped with a slim and easy-to-integrate battery and control module, while the drive features the firm's automatic dual-speed system.

Hall 8.0 / J18



FPD NW-315 PEDALS

These simple and lightweight pedals from Taiwanese makers FPD feature a modern low-profile hybrid design. Their built-in reflectors are integrated into the body to help them avoid damage. Created from robust plastic, they spin on a high-strength axle system and are at home on many different styles of bike.

Hall 9.1 / D33

GRØNBLÅ COMPOSTABLE WATER BOTTLE

This plastic-free, plant-based, bio-compostable water bottle is made from renewable resources and can be completely degraded by microorganisms to return to nature as organic carbon. The material can be employed exactly like conventional plastic, meaning its use could easily be extended to other product categories. Its maker is a start-up focused on creating sustainable strategies to reduce waste within the bicycle industry.

Hall 8.0 / C15



DOLLY BIKES CARGO BIKE

The Dolly Cargo bike offers low weight, trendy looks, and solid Dutch quality. It comes as standard with a robust 80Nm motor and 600Wh battery, plus a lightweight double-walled plastic box available in 11 colours. The bike's drive system offers five levels of support, while a NuVinci Enviolo Cargo N380 gear hub provides stepless shifting.

Hall 8.0 / E22

KRYPTONITE COMBO U-LOCK

A lock for those that worry about losing their keys: instead, the Combo U-lock employs durable, easy-to-use dials to lock and unlock. It utilises a chunky 12.7mm shackle with a protective vinyl coating to keep your frame safe. With a double deadbolt mechanism, Kryptonite claims this is the strongest combination U-Lock on the market.

Hall 12.1 / A17



GAIUS RAPIDE LITE CARGO BIKE

Gaius's Rapide Lite Cargo Bike is ideally suited for pedestrian zones and bike lanes. This urban last-mile delivery vehicle features modular cargo storage and a powerful drivetrain. Its long travel suspension system aims to ride smoothly over any terrain or obstacle. Similarly, its ATV-size braking system and heavy-duty chassis construction ensures safety and durability even with heavy loads.

Hall 9.1 / A17



NOVATEC G24 WHEELSET

An ideal choice for road and gravel riders seeking versatility and performance. Thanks to their hookless carbon fibre rims, these wheels offer exceptional strength and reliability across diverse terrains. With a 28mm rim profile, the G24 accommodates tyre widths ranging from 25-50mm, allowing you to conquer any challenging route by simply swapping out your tyres.

Hall 9.2 / A37

RIESE & MÜLLER HOMAGE4

The Homage4 e-bike offers a unique design with a step-through frame. Its striking lines extend from the rear rack to the down tube, which houses a fully integrated Bosch battery. Riese & Müller



Control Technology offers front and rear suspension to ensure maximum riding comfort and safety. For those who want to go further or higher, a 1,250Wh DualBattery option delivers an extended range of up to 150km.

Hall 12.0 / A13



HYENA E-BIKE SYSTEMS E-ROAD AIR DRIVE SYSTEM

Hyena's lightest drive system yet. The E-Road AIR weighs just 3.2kg. It can provide 30Nm torque to the rear hub axle and has a 250Wh battery that can be boosted with an additional 180Wh range extender. It has a frame-embedded LED display and a two-button remote control, allowing riders to switch the assist level without removing their hands from the handlebar.

Hall 8.0 / K16

OKAWA A70 MOTOR

A robust motor that's suitable for both commercial and consumer use. The A70 has a 250 or 500W nominal power rating and a built-in strain gauge torque sensor. It can produce 90 or 120Nm of torque and features an automotive standard design base. Despite its powerful performance, the unit weighs just 2.7kg, thanks to its magnesium housing. A generous four-year warranty applies from the first use date, while lifetime warranties are available through the firm's subscription service.

Hall 8.0 / H20



A-FORGE ONE PIECE DOWNTUBE & MOTOR BRACKET

A-Forge is exhibiting its latest products and technology at Eurobike. The company has obtained patents in Taiwan and China for the manufacturing method of its one-piece hydroformed downtube with motor bracket. The new one-piece downtube & motor bracket fits PT400 battery and the new BOSCH SX motor. A-Forge invites OEM / ODM partners to collaborate using the new patented manufacturing method.

Hall 9.1 / F62



NEW PRODUCTS



SAMOX EMS06 DIRECT- MOUNT CHAINRING

Samox specialises in cranks, chainrings, and bottom brackets. The firm's new direct-mount steel chainring is conceived for sporty use. Its unique curve design is intended to be both lightweight and robust and is compatible with all popular drive systems, including Bosch, Shimano, and Yamaha. Available to fit 47,50, and 53mm chain lines. **Hall 12.0 / B07**



XPEDO FELIX PEDAL

This new wide platform pedal pairs the lightweight features of a nylon composite construction with ten removable metal pins. Each turns on a chromoly spindle with fully serviceable bushing and sealed bearings. Their body measures 109mm wide and is 16mm thick, allowing for plenty of ground clearance, while the 10mm height G-Pins offer superior grip in any condition. Weight is just 340g per pair. **Hall 12.1 / A10**

TAYA DHT TECHNOLOGY

TAYA's Diamond Hard Technology (DHT) enhances surface hardness to 1,500-2,000 HV, extending the chain's average lifespan to 8,000km. The secret lies in the baked-in DHT coating, which penetrates the chain up to 0.050mm, surpassing the shallow reach of conventional treatments that only go up to 0.015mm. **Hall 9.1 / B40**



TSG PREVENTION HELMET

A customisable multi-purpose open-face enduro helmet. Key to its unique design is its tool-free removable low-profile ear panels that deliver on-trail customisable protection. The helmet also features robust in-mould construction, with impact-absorbent dual-density EPS and refined EPS edges. It's also equipped with a unique zonal venting and airflow system for all-day rideability. **Hall 11.1 / C10**

VELO VL-3628 SADDLE

A versatile saddle to suit e-bike riders. The VL-3628 features a 160mm width for a better seated position and a tail-up design to support the rider when going uphill. Its built-in carry handle helps riders manoeuvre heavy e-bikes while the saddle has passed a 150kg loading fatigue test to ensure a safer riding experience. Finished with comfortable Airform foam and Velo's Atmos shaping technology for a sleek finish and 100% waterproofing. **Hall 12.1 / A10**



ORTLIEB DUFFLE RC WITH CARGO STRAPS

A versatile travel and sports bag with roll closure. The Duffle RC comes in 49 and 89-litre versions, both of which work with the firm's Cargo Strap systems. These allow the bag to be carried by its owner or lashed to the bike. These ensure the load is held securely, even over bumpy terrain. Each bag is sustainably produced in Germany and 100% waterproof. **Hall 11.1 / C12**



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