

2017-2018 Test details and booking form

ExtraEgergy.org

Riding tests in Tanna: (a) 18th April to 2nd May 2017 (b) 18th to 31st May 2017

MTB off-road riding tests with Marco Hösel: For offroad pedelecs: June 2017

Ergonomics tests in collaboration with the ANWB: Wassenaar, Netherlands: 7th to 8th June 2017

Publication from August 2017 to March 2018

High reach in four languages: German, English, Chinese and Norwegian.



Publication is planned via the following media:

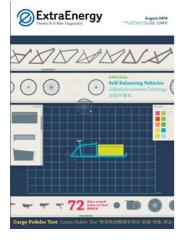






Norsk elbilforening





Print run: 200,000 copies

Frequency: Quarterly Language: German Distribution in: DE, A, CH, BE, LU

Also planned is additional re-use of the results in other media owned by the Axel Springer publishing house. Selection of products featured will be by the editorial judgement of the BIKE BILD editors.

ANWB

Since April 2017, the ANWB, the Netherlands' largest consumer organisation, is a principal partner for ExtraEnergy and the Tests. The ANWB will organise the Ergonomics Test in the Netherlands, and it will also publicise the ExtraEnergy Test report on the ANWB's websites.

Norsk elbilforening

Translation of the results into Norwegian, and publication on the website of this Norwegian electromobility association with over **50,000 members** (only applies for products which are advertised Norway in Norwegian).

Special-E

Publication of results, grouped by themes, in the Special-E Magazine, published twice a year, with a print run of 35,000 copies. Frequency: Twice a year Language: German Distribution: Exposure via electromobility dealers (car, motorbike and cycle dealers)

Self-published ExtraEnergy.org Magazine:

Print run: 10,000 paper copies plus ca. 60,000 online views / downloads Frequency: Twice a year Languages: German/Chinese/English Distribution: At trade and public exhibitions worldwide, as a download and online magazine, plus sales via Amazon. Plus the <u>ExtraEnergy.org</u> Website and the <u>ExtraEnergy.org</u> Newsletter

Additional collaborations and publication channels are under development, and announcements will be made in due course.

ExtraEnergy.org reserves the right to publicise the results in any desired language and media. This reflects the consititutional objectives of the ExtraEnergy e.V. not for profit association: "To support human-electric mobility by all appropriate means, for example through impartial testing, and publicising these tests."



Booking form: ExtraEnergy Test 2016/2017

Fax to: +49-36646-270 95 Or send a scan by email to: <u>office@ExtraEnergy.org</u> Or send by post to: ExtraEnergy Services GmbH & Co. KG, Koskauer Str 100, 07922 Tanna	
Company/invoicing details	
Company name:	
Contact person for booking and administration:	
Telephone:	
Email:	
Street and area:	
Postcode:City:	_Country:

If you are in the EU but not in Germany, then we need your European VAT ID number:_____

Number of pedelecs*:___ For delivery until the 19th April 2017: 3700 Euro. For deliveries from 20th April the price per vehicle rises by 400 Euro.

Bulk order discounts for companies sending multiple bikes to test: From 3 bikes - 20%, from 6 bikes - 25% and from 10 bikes - 30%, on the total invoice amount.

Number of pedelecs*:____ Repeat publication at 950 Euro, for booking by 20th May 2017. This option is available for pedelecs which have already been tested in a previous test, and which are still available unchanged for 2017. The measured ratings will be recalculated in relation to the latest models tested, and this can result in changes to the test results.

Wir haben Interesse an einer Publikation der Ergebnisse unserer Pedelecs* im einer Ausgabe der BIKE BILD. Die BIKE BILD entscheidet über die finale Auswahl der Räder.

Test participation with prototype pedelecs*. Number:____. For this option, the test results will only be published, in article format, on your request, but they will not be published in test report format with a comparative rating. Prices for the test sessions in April and May 2017 are the same as for production bikes. For tests at other times: by arrangement, fees will be calculated per day of testing at 2900 Euro/day. Additional work carried out will be calculated at 150 Euro/h.

* Please use this link: <u>https://tinyurl.com/ktp2doe</u> to provide all manufacturer details for each vehicle booked in for the test, and to send additional or supplementary information about the test bikes.

Date and location:

Company stamp and legally binding signature:

Please print the signature name clearly, if it differs from the name given as contact for

booking and administration:

Terms and Conditions: Please note all of the details given in this form, the terms and conditions of participation and the contract terms and conditions (pages 5 to 10). These are hereby brought to your attention and are hereby legally binding. Any entity making a booking trading under another name commits themselves as fully and directly liable for liabilities to ExtraEnergy Services GmbH & Co. KG with regard to the relevant Tests. The official and legally authoritative version of this document is the original German text, which is available on request. Should there be any discrepancies between the German and English versions, the German version is definitive.



ExtraEnergy Test 2017/2018 Contract Terms and Conditions:

Definition: ExtraEnergy Services GmbH & Co. KG, based at 07922 Tanna, Koskauer Str. 100, Germany, is henceforth referred to as the ORGANIZER. ExtraEnergy Services GmbH & Co. KG conducts the Test on behalf of the consumer protection non-profit association ExtraEnergy e.V., Koskauer Str 100, 07922 Tanna, Germany. This activity is conducted in accordance with the fulfilment of the constitutional objectives of ExtraEnergy e.V., which are available to view in their latest updated form on the www.ExtraEnergy.org website.

All manufacturers, manufacturers' representatives, importers and dealers of pedelecs, e-bikes, e-scooters, self-balancing vehicles and other light electric vehicles who are participating in the test will henceforth be referred to as MANUFACTURERs.

§1 Booking and participation

The MANUFACTURER makes a binding declaration of their participation by returning the booking form, filled out and signed with a legally valid signature. The test and exhibition contract becomes effective for the ORGANIZER as soon as payment as specified in Section 3 below is received, and if the ORGANIZER has not declined the MANUFACTURER's participation within one week.

§ 2 Contract terms

The ExtraEnergy Test 2017/2018 Services details (pages 5, 6 and 7) and the ExtraEnergy Test Information 2017/2018 (pages 7, 8, 9, 10 and supplementary document in English), which are contained within the booking information for the ExtraEnergy Test, are an intrinsic part of the test and exhibition contract. The ORGANIZER is responsible for the conception, organisation and documentation of the test, and of the exhibitions and Test IT Shows.

A test vehicle is to be made available to the ORGANIZER by the MANUFACTURER free of charge. Transport costs are to be borne by the MANUFACTURER. Any replacement parts which may be needed for repairs will be made available to the ORGANIZER free of charge by the MANUFACTURER, or if the vehicle cannot be repaired, an identical replacement.

The test vehicle will remain at ExtraEnergy Services GmbH & Co. KG for at least 12 months after the first publication of the test results, and if publication is to be repeated this time period re-starts with the republication date. If the vehicle is rated as one of the three best vehicles in a product group, or is of particular historic significance (for example in its technology or design) the vehicle will go on permanent loan in the care of the ExtraEnergy Association. ExtraEnergy e.V. is authorized to use the vehicle for test rides, testing, and exhibitions in compliance with the constitution of the Association.

The ORGANIZER will send the test results, which inform the test verdicts, to the MANUFACTURER to view before publication, in the form of a preview.

Should defects which might represent a significant danger to of personal injury or death to future customers become apparent during the testing, the MANUFACTURER will be urgently informed (for example brake failure, or parts which lock up in use such as pedals, steering, wheels...).

The MANUFACTURER has the opportunity to investigate the cause of this potential danger on location in Tanna, or at the laboratory of our partner velotech.de and, at their own cost, to have the tests that led to the discovery of the safety-relevant defect repeated until the cause is determined, and ideally a technical change has been identified which removes the danger and convincingly prevents it.

Such improvements, if they are completed before the 15th June 2017, will not be referred to as current defects in ExtraEnergy's own publications, so long as the product was not yet on sale at that date, and the MANUFACTURER assures the ORGANIZER in writing that no vehicles with the detected safety risk will go on sale. The ORGANIZER reserves the right to verify this at a later date by making spot checks on the open market. If the MANUFACTURER puts products on sale with the identified safety-relevant defects, despite making a written assurance to the ORGANIZER that they would not do so, the ORGANIZER is authorised to communicate this via all appropriate media, to warn consumers of the potential danger to life and limb. Another appropriate method here may be to inform the statutory authorities.

If the MANUFACTURER has selected the extra BIKE BILD option during the booking process, than in addition to these ExtraEnergy contract terms and conditions, the Compliance Regulations of this publisher also apply. These differ in particular in how safety-relevant defects discovered during the test are handled. In this case, as occurred already in the August 2016 edition of BIKE BILD, in their publication the results of the initial test are published. If these were negative, then these negative results will also be taken into account for the published result. If the MANUFACTURER has managed to demonstrate an appropriate solution to the problem in follow-up testing by the deadline of the 15th June 2017, and provided written assurance that this will be implemented in series production, then mention will be made of this solution. For vehicles which are already on sale, and the ORGANIZER has detected a safety-relevant defect, the MANUFACTURER must assure the ORGANIZER in writing that they will urgently implement corrective measures or a recall. Should the ORGANIZER reserves the right to urgently make the safety-relevant problems public.

The MANUFACTURER may make changes to their contact details and prices until the editorial deadline on the 15th July 2017, and these will be implemented by the ORGANIZER. Change requests, relating to the initial information supplied by the manufacturer by the 1st of June 2017, are to be sent in writing by email to office@extraenergy.org or by fax to ++49 36646 27095 until midnight (in Germany) on the 15th July 2017.

ExtraEnergy.org

ExtraEnergy Test booking form April 2017 to Spring 2018 After the test results have been sent in the form of a manufacturer preview, the MANUFACTURER will have for two weeks the option to decide against publication of the test results. If a decision is made by the MANUFACTURER against publication the ORGANIZER will comply with this decision, if in the case of a pre-production version the product will not be put into production in the tested version, or if in the case of a product already available on sale, the MANUFACTURER assures the ORGANIZER that this project will no longer (or not at all, for the publication period) be offered in this form (this does not apply for the BIKE BILD option, and for these the ORGANIZER reserves the right to publish the results in any case). If doubts arise about the test results which are credible to the ORGANIZER, the test or parts of it will be repeated to clarify any such doubts. Otherwise, there is the option of repeating the test with the MANUFACTURER, or their nominated representative, present; in this case the MANUFACTURER will bear the cost of the repeat test. If failures occur on the test vehicle, the MANUFACTURER is obliged to repair these if present at the Test, or to send replacement parts as a matter of urgency, and to cover any repair costs which may be incurred.

§ 3 Prices

All prices for the services of ExtraEnergy Services GmbH & Co. KG are net prices (excluding VAT) and are given in Euro (EUR). When booked in for testing, the vehicle(s) of the MANUFACTURER will undertake all tests, presupposing timely delivery of the vehicle/vehicles. Should the MANUFACTURER request additional specific ride testing, for example riding in a particular mode, or with an additional battery variant, this should be notified by the MANUFACTURER with an additional written note accompanying the booking. The ORGANIZER will provide the MANUFACTURER with an individual quotation for this, if the measurements involved extra work.

§ 4 Invoice and payment terms

Following receipt of the booking the MANUFACTURER will receive an invoice for the total cost by return. This invoice is also confirmation that the booking has been received. The invoice will be sent as a PDF to the email address given on the booking form. Should an invoice by fax or post be required, please note this as an additional written note accompanying the booking. This invoice is due for immediate payment, and at the latest within the payment period specified. The payment terms specified on the form apply. Otherwise, the ORGANIZER reserves the right to reassign the relevant test space.

§ 5 Contract withdrawal, claims for damages

The ORGANIZER may withdraw from the Test or component exhibitions in the following circumstances:

a) If there are not enough MANUFACTURERS taking part in the test, or the exhibition.

b) If event venues withdraw their existing agreements for the various special exhibitions.c) If media partners withdraw their publication agreements, or make editorial changes which lead to a

delay in publication, or to cancellation of publication.

In these cases any payments made by the MANUFACTURER for non-fulfilled services will be refunded, or, if partially fulfilled, refunded in proportion. Further consequential claims are excluded. If the MANUFACTURER does not complete the payment due as agreed in the contract, the ORGANIZER is entitled to withdraw from the contract immediately without further notice. In this case the MANUFACTURER has no claim for the refund of any previously made payment which may have occurred. Please note all of the details given in the ExtraEnergy Test 2017/2018 description of services. Because the ORGANIZER carries out the test and the special exhibition exclusively for ideological reasons, all claims for damages by the MANUFACTURER against the ORGANIZER for any procedural deficiencies during the test, or the exhibition, or for damages to exhibited articles, are excluded. Not excluded are claims of damages for intentional or grossly negligent actions.

The MANUFACTURER may withdraw from the contract with the agreement of the ORGANIZER. The ORGANIZER will issue this agreement if they can find an appropriate replacement participant.

§6 Miscellaneous

All alterations or additions to this contract must be in written form to have legal effect. German law applies, and the German court of law where the ORGANIZER has his registered address has jurisdiction. The place of performance for all actions to do with the test is the place where the test was conducted. For all other actions the place of performance is the registered address of the ORGANIZER. For all legal proceedings, the original contract in German (available on request) shall be the definitive version.



ExtraEnergy Test 2017/2018: description of services:

The test process in detail:

- Riding tests:
- The test will normally be carried out in maximum assistance mode and with a single battery configuration/battery technology.
- The riding takes place on the test circuit which we have specially designed and selected. To test the vehicles under varied, everyday conditions, the test circuit is divided into several sections (Tour, Hills, City) which place differing demands on vehicle and rider. During the instrumented test rides, which are carried out with at least six test riders, all relevant data for the evaluation of the drive system is logged using specially developed measurement technology.
- Ride test sections:
- Tour: moderate climbs and varying surfaces: rural roads, gravel tracks, forest tracks
- Flat: for determining starting and ride performance of test bikes on the flat
- Hills: ca.1 km long with a moderate gradient averaging 5% (3% to 9%).
- **City:** stop and go riding with stopping points.
- Hill start: starting off on a hill with an average gradient of 12% (8-15%).
- Motor off: to determine the ride quality of the test bike without motor assistance.
- Offroad Test (only carried out for Sport Offroad pedelecs:
- This additional test will be ridden on a separate test circuit by experienced mountain bikers. Test rides will take place on a cross-country circuit with seveal different sections:
- Sections:
- Cross-country section with various ups and downs, totalling 7 km
- The route has a variety of surfaces including gravel, woods and forest tracks
- Multiple aspects will be evaluated including for example handling, usability, gear-shifting, suspension.
- The test results will influence the rankings in the Sport Offroad product group.
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- Ergonomics test:

- For the ergonomics test, interested volunteers will test the bike at various stations for different everyday usage situations, without access to the user manual to assist them:
- Ergonomics Test test stations:
- - Test station 1: Battery and charger securing and charging
- - Test station 2: Car carrier rack travel
- - Test station 3: Steps home and storage
- - Test station 4: Loading bay obstacles and transporting
- - Test station 5: Adjustment before riding
- - Test station 6: Test ride

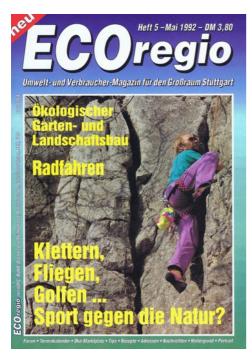


Publication of the results

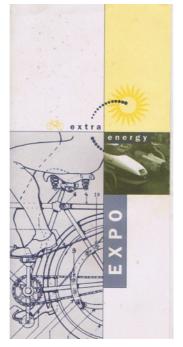
The test results for all of the vehicles under test will be published across various media. We will compile the results for each vehicle for you in the form of a 'product report'. Publication of the test results and corresponding press work are included in the Test.

The ExtraEnergy service includes:

- Compilation and publication of your product reports in German, English and Chinese via ExtraEnergy.org, and additionally communication of the test data to the editorial teams of other publications.
- The product report includes product and close-up photos, a detailed text product description, all measurement results (numerical and graphical) and your manufacturer details on model variants, prices and contact information.
- Publication of the test results in the ExtraEnergy Magazine and in additional media, online and in print, plus special editions for trade shows.
- Publication of the product report on www.extraenergy.org as a free download version.
- Free of change entries in the ExtraEnergy online dealer directory for your dealers.
- Reportage about and evaluation of the Test at www.ExtraEnergy.org and in the ExtraEnergy newsletter.
- Long term exhibition of your products (if they are among the best three bikes in a product category) at the LEV Education Centre in Tanna, with the possibility for groups of visitors to test ride them on open days by prior arrangement.



In 1992 Hannes Neupert produced the first German-language market overview for electric bikes. It was published in May 1992 in ECOregio magazine



The first large print run of ExtraEnergy's own test report publications was published in 1995 for the Intercycle event in Cologne.



ExtraEnergy test results have been publicised since 1997 in aktiv Radfahren magazine, and on the initiative of Hannes Neupert, in 1999 the first Elektrorad special issue was produced, and in 2008 a second. These were co-productions by Hannes Neupert and Daniel Fikuart. From these origins, today Elektrorad magazine is produced regularly by the Bielefelder Verlagsanstalt.



ExtraEnergy Test Information 2017 - 2018

ExtraEnergy has been testing pedelecs and e-bikes as an independent organisation since 1992, a unique track record in the pedelec and e-bike industry. The prestigious ExtraEnergy Test award logos are recognised certificates of test performance, marking out excellent products and providing recommendations for end users.

The ExtraEnergy Test takes place twice a year in April and October.

Riding test - Ergonomics test - Offroad Test

The ExtraEnergy Test previously consisted of two rigorous test phases, each carried out under real world conditions. In the offroad test, sport offroad pedelecs will be tested by experienced mountain bikers on a set single-track circuit.

Riding tests in Tanna are conducted using unique, specially developed measurement equipment. Values for range, power assist levels, drive efficiency, average speed and many other parameters are determined. Then as many testers of both genders as possible test the everyday practicality and intuitive usability in the Ergonomics Test. The customer wish fulfilment factor is determined using the "Quality Function Deployment" methodology.

The results:

The test results are published via a variety of media. ExtraEnergy.org publishes the results in Chinese, English and German languages on their website and in the ExtraEnergy Magazine.

Test results / Test award logos / Test track

MANUFACTURERS participating in the test will receive the results in written form. If your vehicle has achieved a "Very Good" or "Test Winner" rating we will offer you the opportunity to present these vehicles at the Test IT Show. The Test IT Show travels around events and trade shows in Germany and Europe, and provides end users with the opportunity to test-ride your pedelecs and e-bikes. Test award logos "Good", "Very Good" and "Test Winner" are awarded in each product group. Test winner are also celebrated in public with a trophy at the awards ceremony.

Vehicles:

MANUFACTURERS who wish to participate in the test must deliver their vehicles (in a medium frame size) by **the 18th May 2017 to the ExtraEnergy test centre in Tanna**: **Test vehicle delivery address**:

ExtraEnergy Services GmbH & Co. KG Testzentrum, Attn. Uwe Keilhauer Koskauer Str 100 07922 Tanna GERMANY

Test vehicle supply details:

Test vehicles should be supplied to ExtraEnergy Test GmbH (Koskauer Str. 100, 07922 Tanna) in the same condition as they would be delivered to dealers or end users. If your product comes in different models, such as frame versions, frame sizes or specifications, as in for example 'Sport' and 'City' versions, you are warmly invited to submit these. Variations of one and the same product are counted for these purposes as one product.

For pedelecs which require registration, pedelecs must be supplied with a valid insurance ID numberplate.

Exclusion criteria

Because the Test can only be conducted in a narrow time frame, so that the whole field of bikes is tested under the same conditions, as ExtraEnergy Services GmbH & Co. KG we have defined clear criteria according to which the test may be ended prematurely. The following conditions will lead to premature termination and hence exclusion of the vehicle from the test:

Late delivery of the test bike, in this case after the 8th May 2017

Failure of the bike during test riding, if the failure cannot be remedied within 24 hours by the MANUFACTURER or their service staff.

Any failure which causes the loss of more than two days of testing.

Insufficient battery capacity. Each vehicle must be able to complete the test circuit (ca. 15 km) at least once at full power assist setting. Should the vehicle be designed with swappable batteries, enough extra batteries must be supplied so that they can be carried by the test riders.

Any attempt at fraud will lead to immediate expulsion. ExtraEnergy Services GmbH & Co. KG reserves the right to publish this as the reason for the withdrawal.

If fewer than five test riders are able to complete the testing with the bike (because e.g. the frame is much too large, or too small, etc.)

If the MANUFACTURER has not filled out the online questionnaire about the test vehicle via the link provided by the 8th May 2017.

If for a pedelec 45, no valid insurance ID numberplate is provided with the vehicle.

ExtraEnergy.org

After the test:

In case test results are questioned by the manufacturer or another actor in the market, test vehicles must remain at ExtraEnergy Test GmbH for 12 months after first publication of the test results. Only in this way can any test be repeated, if necessary with legal oversight, with the original test bike, to clarify any doubts or ambiguity.

CONTACT

Should you have any questions about the test, please do not hesitate to contact:

Test Director: Hannes Neupert

Tel.: +49 173 35 88 221 or +49 36646 32980 hannes.neupert@extraenergy.org

Test Technical Director: Uwe Keilhauer

Tel.: +49 171 5651 937 or +49 36646 32980 uwe.keilhauer@extraenergy.org

ExtraEnergy Test 2017/2018: Information

Supplementary to, and part of the information about the ExtraEnergy Test 2017/2018 is the document which you can download here: https://tinyurl.com/kolldzq. Document file size is 65 MB. A version with reduced image quality for quicker download is available here: https://tinyurl.com/k4fqtxh (6.9 MB).

