

## Products and producer responsibility:

### Electric bicycles and batteries for electric bicycles

*Further to legislation on producer responsibility for electrical and electronic equipment DPA-System decides whether equipment or products are covered by or exempt from the rules on producer responsibility, cf. the WEEE Order. Also, if the product is covered by the rules DPA-System will assign the product to one of the categories described in the Order<sup>1</sup>. In addition, it will be assessed whether the product is used in private households or only in businesses<sup>2</sup>.*

*The following assessment has been made for the product group of electric bicycles as well as batteries and electric modules and accessories for bicycles.*

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#### Definition and assessment

Electric bicycles (also called electric bikes or E-bikes) come in several different variants. Common for them all is that they are used as a means of transport for persons, and the motive power is in whole or in part supported by an auxiliary motor and a battery.

Whether only part of the bicycle or the entire bike is subject to producer responsibility depends on the degree of integration of electrical and non-electrical parts. Generally, electric bicycles can be divided into two variants:

1. Electric bicycles where the electric motor and other electric parts (battery, switches, power meter etc.) are fixed/integrated during manufacture.
2. Electric bicycles where the electric motor and other electric parts (battery, switches, power meter etc.) are retrofitted on a traditional bicycle.

Re 1. The electric motor and the bicycle are designed, combined and placed on the market in one integrated product (compact integrated). Thereby, the entire electric bicycle is subject to producer responsibility.

Re 2. Electrical/electronic accessories - a so-called electric bicycle kit - consisting of motor, battery, battery charger, sensors, display, etc., can be bought separately and retrofitted on a traditional bicycle (modular system). Thereby, the traditional bicycle is converted into an electric bicycle. If the producer only sells finished electrical kits for the electrification of traditional bicycles, producer responsibility will in general apply only to the electrical parts - in the form of the conversion kit.

#### Categories of electric bicycles, modules for electric bicycles and electrical accessories

Electric bicycles are categorised under Category 4: Large equipment, if an outer dimension is equal to or more than 50 cm. This will apply to all compact integrated bicycles. Or Category 5. Small equipment, if it is a kit with an outer dimension at the time of sale of less than 50 cm.

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<sup>1</sup>Read more about the WEEE Categories on the DPA-System website under [WEEE categories](#).

<sup>2</sup>Read more about end-users on the DPA-System website under [Identification of the end-user](#).

A number of electrical products exist as accessories for traditional bicycles as well as for electric bicycles, such as a number of electrical ancillary equipment for the bicycle: electrical gear shift, distance recorder, cadence sensor, etc. These products are also categorised under Category 5. Small equipment.

### **Assessment of batteries for electric bicycles**

Batteries used in electric bicycles are subject to producer responsibility for batteries. There may be variations with regard to the battery location on the bicycle and to whether the battery is detachable or integrated with the bicycle.

The main rule for batteries is that they must be readily detachable or removable from electrical products, and this also applies to electric bicycles. However, regarding the duty of registration in the producer register the location of the battery is not decisive, since in any event the battery is subject to producer responsibility.

### **Battery categories for electric bicycles**

In pursuance of the provision that batteries used as the motive power in equipment in connection with the transport of persons, the battery for the motor is categorised as an industrial battery.

If there are batteries in other equipment for the bicycle, such as button cells or AA batteries for integrated cycle lamps or measurement equipment, such batteries will also be subject to producer responsibility in the category: Portable batteries.