

# EGMF position paper

## Ecodesign and Energy Labelling Working Plan 2020-2024: universal and interoperable batteries

31 May 2021

EGMF – the European Garden Machinery industry Federation, strongly supports European initiatives aiming to encourage sustainability and achieve a circular economy. As an industry close to nature, improving and promoting the sustainability of outdoor power equipment and services is a strategic priority. In the preparation of the **Ecodesign and Energy Labelling Working Plan 2020-2024**, we would like to submit comments on the **concept of universal batteries**.

EGMF members produce a very wide variety of **equipment for garden, landscaping, forestry, and turf maintenance**. Within our product portfolio, **a wide range of products are battery operated**, such as hedge trimmers, leaf blowers, brush cutters, chainsaws, shrub shears, robotic and walk behind mowers.

As **one of specificities of our industry**, many of our members already offer **interoperable battery systems** within their brand or across brands, both for consumer and professional products. There are multiple benefits for both the users and the environment, notably resource efficiency and cost savings.

**Not the legislation, but innovation, competition and safety should remain the main drivers for the electrification of our industry and the development of interoperable battery systems. Innovation is essential answer to global competition and contribute to the sustainable growth agenda. We strongly believe that interoperable batteries should remain a voluntary initiative.**

Therefore, **EGMF welcomes the absence of measure on universal batteries in the European Commission's Roadmap** for the Ecodesign and Energy Labelling working plan 2020-2024, in line with the recommendations of the preparatory study.

In the context of the preparatory study, EGMF has already provided comments that mainly question assumptions and calculation methods resulting in savings due to the mandatory implementation of the 'universal battery' concept. In addition, we would like to further bring attention on key aspects in view of any future discussions regarding universal or interoperable batteries.

### 1. Battery is the key element of a cordless outdoor power equipment

Driven by innovation, our companies have been ahead of the curve to develop high performing battery equipment, enhancing the electrification of the garden and outdoor power equipment sector. The battery is an essential part as **it influences the performance of cordless garden machinery and outdoor power equipment**, and consequently its efficiency.



The garden and outdoor power equipment industry covers a large range of products in terms of size, and consequently users: consumers and professionals. Although some batteries are designed to be used for different applications in one interoperable system, **one battery type cannot work for all applications**. As a main reason, characteristics depends on the main field of applications, such as consumer vs professional needs, outdoor vs indoor applications, energy and power density, cycle stability, and all are not compatible. In addition, **designing one universal battery** to be used in a very wide range of scenarios will result in **increasing costs for the consumers, while eroding the overall product performance**.

Today, the battery performance, including the charging and discharging aspects, has become an important quality criterion for differentiation and competition between manufacturers. Therefore, more efficient battery powered products are developed thanks to the new battery technologies and the continuous investment in research and development.

## 2. Free competition is a key driver for innovation and competitiveness

So far, the technological **development of batteries and machinery** is considerably **supported by the existing competition** between manufacturers. Developing one standard battery technology, and consequently imposing design restrictive measure, will considerably stifle innovation.

**Mandatory standardisation** would freeze the current state of art and offer competitors **little incentive to further develop new or better performing solutions**. If Europe does away with this incentive, we run the risk of losing our technological advantage. Furthermore, given the rapid growth and evolution battery technologies, implementing such a measure could **stifle European innovation** in other types of emerging technologies and battery chemistries which could be more environmentally efficient. Thus, resulting in unintended negative consequences in the push towards developing more sustainable technological solutions and hamper the decarbonisation of our green area maintenance.

There are **already existing industry initiatives** setting up cross-brand interoperable batteries, such as Cordless Alliance System (CAS), Power4All, while additional ones are under development, such as POWER X-Change. However, it is important to note that these are not systems with a "universal battery". Instead, they are platforms with a predetermined system specification by the battery manufacturer, which, in the course of its product liability obligation, prescribes profound safety requirements for the tools of the partners and verifies the implementation.

Last, a universal battery system could encourage non-genuine batteries to enter the market. In case of lower quality, this could result in added safety and security concerns for the consumer.

## 3. Safety should remain the first priority and cannot be compromised

First, **batteries are very sensitive products**: there are multiple safety risks associated with their management and use. Consequently, batteries, chargers and compatible tools are developed and assessed as a whole system.



**Safety plays a crucial role for interoperability** across applications and brands. Our industry is highly concerned that this element has been discarded in the recent preparatory study. Although we support improving energy and material efficiency, **jeopardizing safety**: the primary objective of equipment manufacturers and other pieces of EU legislation, **is an unacceptable compromise**.

A battery can impact the 'behaviour' of an equipment and, ultimately, its safety. Therefore, **all products must be tested with the intended battery to be used**. To ensure the safety of outdoor power equipment and the safety of users, experts have developed international standards, such as IEC/EN 62841. Allowing unidentified batteries from unknown third parties is currently not compatible with these assessments or certifications. Specific connectors in one brand or series of products are designed to avoid misuse and guarantee a safe operation of the battery and the equipment. Most consumers do not have the necessary knowledge to decide which type of battery fits their needs, for example the required capacity or the maximum current for their application.

In addition, the concept of universal battery raises **questions about the responsibility of manufacturers, and their liability**, in case of accident or hazard due to malfunction of the battery or the tool. Roles and responsibilities must be clarified, which would require adapting the EU regulatory framework, such as the Machinery, General Product Safety and Product Liability Directives.

Different companies have developed their own technical differentiation in security systems. By imposing a universal system, some manufacturers would lose control in their security level, which would result in **lower security for consumers**. As an example, the development of common USB chargers resulted in an increase of notifications to the EU's rapid-alert system (RAPEX).

Furthermore, the design of the battery pack and the final equipment are interlinked, especially for hand-held tools where manoeuvrability of machines is essential. **Imposing one-size-fits-all battery solution will be design restrictive**. Using less adequate or less manoeuvrable machines is likely to increase the risk of accident and injuries for users.

#### 4. Backward compatibility contributes to material and energy savings

A key benefit of interoperable systems is **the possibility to use new equipment and batteries with products already placed on the market**, so-called 'backward compatibility'. This allows consumers to replace the battery without discarding the full equipment. Garden machinery and outdoor power equipment are durable products, which are designed to be long life-time. Thanks to this principle, **our industry is already enabling energy and material savings**.

The additional potential savings in terms of energy consumption, carbon emission and cost put forward by the preparatory study raised questions, while evidences are missing.

First, imposing **universal batteries will make obsolete millions of cordless equipment and chargers** already placed on the market, in an artificial and planned manner, while those products are still functioning. This will create a huge amount of waste, while requiring significant investments in R&D to redesign battery powered equipment and production.



The preparatory study provides calculations based on an overnight replacement of products, which is an unrealistic scenario. Instead, the existing battery systems and the new universal battery system will coexist for a certain period without any benefit for the manufacturers or end-users.

Finally, the fast-technical development of the charging and discharging systems may lead to a replacement of the whole solution, i.e. equipment, battery and charger, every 6 to 8 years due to products evolution. In addition, the life time of the battery pack and tool platform is also an important parameter that need to be properly considered.

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*The European Garden Machinery Industry Federation – EGMF – has been the voice of the entire garden machinery industry in Europe since 1977. With 30 European corporate members and 7 National Associations representing manufacturers of garden, landscaping, forestry and turf maintenance equipment, we are the most powerful network in this sector in Europe.*

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