EGMF position paper

Comments on the EC proposal for a Regulation on batteries and waste batteries

20 April 2021

EGMF is the European federation representing major **garden, landscaping, forestry and turf equipment manufacturers**. Through its 30 European corporate members and 7 National Associations, EGMF represents about 18 million units placed on the European market every year, accounting for around 80% of garden machinery, and EGMF members employ over 120,000 people in the EU.

The garden and outdoor power equipment industry represents a **very wide variety of equipment**. Each category of equipment covers a large range of products, in terms of size and users, who are both consumers and professional. In addition, each category of equipment is offered in different technologies, both electric and petrol powered, to offer the user the best experience according to his needs.

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**. A wide range of products are battery operated, such as hedge trimmers, leaf blowers, brush cutters, chainsaws, walk behind mowers and golf carts. Our industry has developed some equipment as battery powered only, like shrub shears and robotic mowers.

The share of battery powered equipment is rapidly growing within our industry. Today, more than one out of three handled equipment and one out of five walk-behind mowers sold on the European market is battery powered. The electrification of our sector will continue in the next years, thanks to the new battery technologies and the continuous investment of our companies in research and development. More powerful products are developed, such as ride-on mowers, that offer an equivalent performance to the petrol-powered products.

Considering the electrification trend in our industry, **the future Regulation on batteries and waste batteries is a key piece of legislation**. The future provisions will influence the future of garden machinery and outdoor power equipment sector.

First, EGMF acknowledges the **need to modernise the EU legislative framework** for batteries and waste batteries to strengthen the internal market, to make the circular economy a reality in Europe, and to reduce environmental and social impacts of batteries.

We welcome the overall approach of the European Commission proposal to **address all stages of the battery life cycle of batteries**, from the cradle to the grave, in one comprehensive legislative framework.

EGMF calls on EU decision makers to **shape a balanced legislative framework** supporting the development of more sustainable batteries in Europe and contributing to the Single Market, while **enhancing innovation** – essential elements for the EU competitiveness and sustainable growth agenda.

To this end, EGMF identified necessary improvements in the European Commission proposal to achieve a future-proof and supporting legislative framework on batteries.

1. **Provide clarifications on the scope of the Regulation to ensure a common understanding for the implementation and enforcement of the future legislation:**
    - Extend the scope of 'automotive batteries' to batteries used for starting, lighting and ignition functions in self-propelled machines, such as ride-on mowers, to ensure the same applications are subject of same requirements;
    - Introduce clear definition of concepts used to define the industrial and portable battery categories;
    - Use the term 'total energy' of battery, instead of 'capacity', to segment batteries categories, including industrial ones, in order to apply specific requirements;
    - Foresee a standard to calculate the battery rated capacity that is required to determine the performance of batteries.

2. **Set realistic and achievable collection targets for portable batteries:**
    - Revise the calculation methods for collection considering batteries available for recycling, instead of the amount of batteries placed on the market in the last three years;
    - Revise the collection targets for portable batteries in light of a revised method;
    - Better acknowledge the role of waste holders and strengthen the role of end users for the disposal of waste batteries.

3. **Differentiate requirements for industrial and electric vehicles batteries to target mass-volume products suitable for second life, and not niche-market:**
    - Apply sustainable requirements: carbon footprint, recycled content and due diligence to industrial batteries with a total energy above 20 kWh, instead of 2 kWh;
    - Require product passports and electronic exchange of information to industrial batteries with a total energy above 20 kWh, instead of 2 kWh;
    - Impose open battery management system (BMS) only to industrial batteries suitable for second life, meaning industrial batteries with a total energy above 20 kWh;
    - Exclude industrial batteries that do not have integrated management system, such as lead-acid and nickel-based batteries, from open battery management system requirements;
    - Relief smaller industrial batteries (total energy below 20 kWh) from performance and durability requirements to protect innovation.

4. **Limit the removability and replaceability requirements to battery pack to ensure safety first.**

5. **Revise information requirements and systems by providing clarity to manufacturers, avoid duplication and simplify implementation:**
    - Reduce the administrative burden by eliminating duplicated information systems and formats: labels, QR code, battery passport and database;
    - Streamline labelling requirements to focus on essential information for end-users and recyclers;
    - Remove unnecessary labelling requirements: placing on the market date, hazardous substances and critical raw materials.

6. **Make a future-proof regulatory framework:**
    - Enable electronic declaration of conformity to embrace the available technologies to supply information to authorities;
    - Allow digital instructions to supply information to users to improve coherence of the future EU legislative framework.

7. **Design a fair and supportive regulation:**
    - Foresee enough time to comply with future requirements, including a minimum 2-year transition phase;
    - Ensure sufficient time is available for the industry and European Standardisation Organisations (ESO) to develop standards according to ESO procedures;
    - Include provisions on enforcement and necessary resources required at Member State level to sufficiently execute enforcement measures.

A. Setting a clear scope is essential for a proper implementation

Today, the clear majority of batteries integrated in the **garden and outdoor power equipment** fall in the **category 'portable battery'**.

The proposed revised definition of 'portable battery' (Article 2.7) significantly impacts the categorisation of batteries within our sector. In fact, the inclusion of a **weight parameter creates an arbitrary split** of the product portfolio. Some batteries currently classified as 'portable' will fall in the industrial battery category, such as back pack batteries.

Therefore, the proposed **limit of 5 kg should not be lowered at any cost**. We request decision makers to refrain further reducing this limit of 5 kg. Lowering this limit will result in additional and unnecessary confusion for equipment manufacturers, consumers, collectors and recyclers, and ultimately disturbs the smooth collection of those batteries.

Moreover, the **electrification of our sector** and the development of more powerful products, such as ride-on mowers, **will lead to an increasing integration of batteries considered as 'industrial' in garden and outdoor power equipment**. The new classification criteria will emphasize this trend.

For the sake of clarity, the future Regulation should also provide **a clear definition of concepts** used to define the categories of industrial and portable battery, notably **'industrial purposes', and 'industrial uses'** (Articles 2.7 and 2.11).

Furthermore, the **concept of 'battery capacity'** is leading to confusion and **should be clarified**. In fact, this concept of 'capacity' is used several times in the proposed Regulation with two different meanings: first to apply specific requirements to larger batteries, including industrial batteries, and, second, to require information about batteries, notably related to the performance.

When used to **segment industrial batteries (i.e. above or below 2 kWh)**, the term **'total energy' should be used instead of 'capacity'**. The proposed regulation targets the total energy of the battery, i.e. "watt-hours (=joule)", an interpretation we support. In addition, the calculation method of 'total energy' should be clarified, and standardised, to ensure a common understanding for the implementation and enforcement of the future legislation.

In parallel, the proposed Regulation mentions the **term 'capacity' to determine the performance of batteries**. For example, Article 13 on labelling requires to specify the 'rated capacity' of portable and automotive batteries. **In this context, the term 'rated capacity' means "ampere-hours"**, and not "watt-hours". This is similar to the current batteries directive, and defined by an implementing act (Article 3 of the Regulation 1103/2010/UE). To ensure a fait level playing field, **the calculation of battery rated capacity, as defined in Annex IV, should be subject of standard**.

We strongly support the proposed **approach about non-rechargeable portable batteries.** In other words, we **support not to phase out** this type of batteries immediately and re-assess non-rechargeable portable batteries of general use in the future. Primary batteries have **a vital role to play in a number of different battery applications and complement the use of rechargeable batteries**. They are necessary to maintain some functions, such as safety and monitoring, even when the machine is not being operated. In addition, such non-reusable primary batteries are designed to last the entire product lifetime.

Finally, we would need a **clarification on the scope of 'automotive batteries'** (Article 2.10), in order to know whether this definition is applicable or not to other mobile machines, such as ride-on-mowers and garden tractors for which the battery has the same function. In our view, **the definition of 'automotive batteries' should also apply to batteries used in self-propelled machines** since the application and technology are identical. Sometimes, starting, lighting and ignition (SLI) batteries used in cars and mobile machines are the very same product.

B. End-of-life management: collection targets for portable batteries should be realistic and achievable

In general, EGMF **supports the main principles of the 'Extended Producer Responsibility'** (Article 47), imposing battery producers to finance and organise a smooth, effective and efficient collection of waste batteries. The future **harmonisation of the registration format** at the EU level is a **very positive development** (Article 46). This will help strengthening the internal market and ensure fair level playing field in all EU Member States.

For the sake of clarity, the future Regulation should indicate whether the new categorisation will apply or not for the collection and recycling of **batteries placed on the market before the new rules apply**.

As regards the **collection of portable batteries** (Article 55), we support the regular increase of collection targets, step by step, to achieve higher collection and recycling of waste batteries.

The collection targets must be achievable. To this end, **the increase in collection targets must be synchronised with a realistic calculation method** (Article 55 and Annex XI). In our view, the collection

targets **should be based on the amount of batteries available for recycling** instead of the amount of batteries placed on the market in the last three years.

On basis of the current methodology, manufacturers of garden and outdoor power equipment cannot reach the proposed targets, not even theoretically. According the proposed Regulation, the collection target is based on the volume of batteries placed on the market within the last three years. This is not meaningful for a sector like garden and outdoor power equipment, which is experiencing a fast electrification combined with long-lasting products. The market grows every year by about 20%, while batteries being discarded come from equipment placed on the market 3 to 10 years ago.

Besides the availability of waste batteries, other aspects should also be taken into consideration to achieve higher collection, namely losses due to export to non-EU countries, collection infrastructures and waste holders' behaviour.

To solve this issue, **EGMF proposes a three-step approach**:

1. **Develop a harmonised standard** to estimate portable batteries that are available for collection;
2. **Apply the collection targets at national level**, instead of manufacturers or schemes, as long as the standard has not been agreed;
3. **Revise the collection targets** for portable batteries once the methodology is updated.

In addition, the future regulation should acknowledge **the role of waste holders** in the transition to a circular economy (Article 48). Ultimately, end users make the decision to discard equipment and batteries at their end of life, and then carry those waste to a collection point. Better education on how end-user decisions contribute to the EU's sustainability agenda is necessary to enhance higher collection and recycling.

Concretely, **Article 48 must strengthen the role that end users have in disposing of waste batteries**. In addition to the industry, member states should also foster education and awareness by sponsoring and organising targeted information campaigns for end-consumers.

C. Sustainability requirements must be proportionate and cost-effective compared to the objectives

EGMF supports the European Union's ambition to make the circular economy a reality and achieve the zero-pollution objective. We believe that this future regulation will help establishing sustainable battery value chain in Europe and contribute to the twofold objectives, by reducing the environmental and social impacts throughout all stages of the battery life cycle.

However, the **Chapter II on sustainability and safety requirements** includes, in our view, **major shortcomings**. The Regulation as proposed by the European Commission will lead to heavy requirements for our industry, while environmental and social benefits will be very limited.

✓ **Carbon footprint, recycled content and due diligence requirements should not be applied to niche sector.**

These sustainability requirements (Articles 7, 8 and 39) should be primarily applied to batteries for on-road electric vehicles and energy storage systems, which were the initial target. Applying the same requirements to all industrial batteries with a total energy above 2 kWh will result in unjustified burden on our industry. Therefore, **requirements for industrial batteries and electric vehicles should be differentiated**. **Regarding industrial batteries, proposed sustainable requirements should apply to batteries with a total energy above 20 kWh.**

Batteries integrated in the garden and outdoor power equipment represent very small volumes compared to batteries for electric vehicles. **Despite an increasing electrification trend in our industry, this will remain a niche market in the future**.

According to the European Commission's impact assessment, the quantity of electric vehicles batteries placed on the EU market is expected to increase fifteen times by 2035, while other industrial batteries will slightly increase. Today, the share of electric vehicle batteries represents about one third of the total industrial batteries (including electric vehicles and e-bikes). **By 2035, the share of electric vehicle batteries is estimated about 87% of the total industrial batteries** placed on the market.[1]

The proposed requirements on carbon footprint, recycled content and due diligence introduce heavy administrative process. They notably require mandatory third-party verifications, supply chain control and the setup of new internal management systems, which are highly costly and time consuming. Consequently, these **sustainability requirements are not proportionate to potential benefits** due to the small number of batteries in our sector.

✓ **The performance and durability requirements should not be extended beyond portable batteries of general use, while they are threatening innovation in the area of industrial batteries.**

First, one specificity of our industry needs to be taken into consideration: the interoperability of portable batteries. Our companies offer interoperable solutions, both for consumers and professionals. This means that same battery can be used with different equipment, such as a lawnmower, chain-saw, hedge trimmer and brush-cutter. However, the minimum average duration depends in which application the battery is used.

In addition, **imposing performance and durability requirements** (Articles 9 and 10) **will hamper innovation and reduce the flexibility to meet user's needs**. Imposing design criteria would clearly contradict OEMs' design requirements. Driven by market forces, better performing battery technologies are already under development. Applying such requirements on industrial batteries with a total energy below 20 kWh will slow down the electrification of the garden and outdoor power equipment sector and consequently negatively affecting the competitiveness of our industry.

[1] European Commission, *Commission Staff Working Document: Impact assessment Report*, December 2020 (Part 3, pages 146-147)

✓ **Safety should not be compromised**

We support the proposed requirement to **ensure portable batteries can be readily removed** by the end-user or by independent operators (Article 11). Today, manufacturers of garden and outdoor power equipment are already designing durable and repairable products with easily interchangeable parts, including batteries. This aims to extend the life time of battery powered equipment.

However, the **removability and replaceability requirements (Article 11) should be limited to battery pack**. We call on European decision makers to refrain going further and encouraging unqualified persons to alter a battery. This would contradict with existing safety standards, while any unprofessional manipulation of battery cells is likely to lead to dangerous accidents which may seriously harm the equipment's user.

✓ **Full coherence is necessary for the restriction of substances**

We support a full alignment with the REACH Regulation (Article 6), the cornerstone of the chemical legislation, and the proper consideration of alternatives for any restriction of further substances in batteries.

D. Information requirements and systems must be simplified

In general, EGMF welcomes the regulators intention to **encourage more sustainable consumption patterns**. The proposed regulation aims to provide better information to consumers and end-users to incentive a market shift towards more environmentally sound batteries. We also support the digitisation, notably the **need to embrace new technologies to supply information** to authorities and consumers.

However, we have general **concerns on the extensive requirement and duplication of information systems in the proposed Battery Regulation**. Information, labelling, declaration and auditing provisions are spread in Articles 13, 18, 60, 61, 64, 65 as well as article 7, 8 and 39.

In line with the better regulation principles, **EGMF shares the following recommendations**:

✓ **Objectives should be clearly defined for each specific information requirement and system**

While we support the general objective to provide better information to consumers and end-users, a specific objective should be defined for each information requirement. What is the purpose of gathering such an information? Replying to this question is essential to set meaningful and proportionate requirements.

Imposing product passport (Article 65) and an electronic exchange of information (Article 64) to all industrial batteries with a total energy above 2 kWh is not proportionate to the intended objective. This will result in unjustified burden on our industry and very limited benefits due to the small number of batteries in our sector.

These requirements aim to enable tracking and tracing individual batteries, notably for their repair, reuse, repurposing and treatment at the end of life. Such requirements have been based on mass-volume products, such as batteries for on-road electric vehicles, which were the initial target for a such a regulation.

To solve this issue, EGMF suggests **imposing a product passport (Article 65) and an electronic exchange of information (Article 64) to industrial batteries with a total energy above 20 kWh, instead of 2kWh**. This will help **targeting batteries that are suitable for second life** and offer real environmental benefits.

✓ **Provisions on information requirements and system should be simplified to provide necessary clarity to manufacturers.**

As a main result of the duplication of systems, **manufacturers will have to provide the same information under different formats, including labels, QR code, battery passport and database** (Article 13, 14, 64 and 65). Such a duplication requires unnecessary administrative burden to maintain and operate several information systems in parallel, especially when the battery manufacturers will not be controlling all of these systems.

Simplifying and streamlining these provisions is of utmost importance as the future batteries Regulation will be used a model for further regulatory initiatives. Consistency between different pieces of EU legislation is necessary to avoid overlaps and duplication, or even contradictory requirements.

✓ **New labelling requirements should be streamlined and focus on essential information for end-users and recyclers**

We firmly believe that **end-users have a key role of play in the transition to a circular economy**. They can make purchase choice, while also decide when and where to discard waste equipment including batteries.

Therefore, manufacturers need to provide consumers with environmental information that is understandable and straightforward. In this context, **we support applying the 'separate collection' label and the relevant chemical symbols on the batteries** (Articles 13.3, 13.4 and Annex VI Part B).

However, we **question the relevance and added-value of additional labelling requirements** for the end-users and recyclers (Articles 13.1, 13.2, and Annex VI Part A), notably the identification of the manufacturer, battery type, manufacturing and placing on the market date, and characteristics. Any **new information requirement** should take into **consideration the intended audience and be adapted to consumer needs**; not all information is appropriate or useful to consumers.

In addition, it should be noted that garden and outdoor power equipment are used outdoor, often in harsh environment. Consequently, labels may be hard to identify at the end of life. Therefore, **symbols and information should be kept to the bare minimum**.

- **Date of placing on the market cannot be indicated on the battery, its packaging or accompanying documents**

  From a logistic point of view, it is not possible to indicate the 'date of placing on the market' (Annex VI Part A.5) as this information is unknown when the battery is produced and labelled. Such a requirement will be highly burdensome for the distribution chain as batteries are not always placed on the EU market by the manufacturer. In addition, in our sector, batteries are often imported into the EU while integrated in a machinery. Therefore, we suggest **removing the requirement 'date of placing on the market'** and keep the 'date of manufacturing' only.

- **No added value and unnecessary duplication of requirements to print hazardous substances contained in the battery**

  This requirement **should be deleted** as there is no added-value for the end-user to see a list of 'hazardous' substances printed on the battery (Annex VI Part A.7). In addition, **this provision partially duplicates existing legal requirements and goes beyond**. The REACH Regulation already sets communication requirements on the use of chemicals, notably for substances of very high concerns, in the supply chain, and to end-users upon request. Furthermore, manufacturers and importers should also notify the presence of substances of very high concerns in the recently established SCIP database. The proposed regulation goes far beyond the existing chemicals legislation by requesting a declaration of all hazardous substances.

- **Critical raw materials contained in the battery**

  Requirement to indicate critical raw materials (Annex VI Part A.8) **should be deleted**. The requirement in Annex VI does not refer to a specific list of critical raw materials, while the EU list is updated on regular basis. Although we see a need to raise public awareness on scarcity of certain materials, we question the influence of such a printed list on the purchasing decision. It is likely to lead to **high administrative burden** to find available information in the supply chain, **while resulting in little environment benefits**.

E. Battery Management System is a critical technology

The proposed regulation requires most industrial batteries (i.e. ones with a total energy above 2 kWh) to include a battery management system (BMS) to share information on the state of health and expected lifetime of the given battery (Article14). This requirement is raising strong concerns as the **battery management system (BMS) is a key part of a battery powered garden and outdoor power equipment**.

To solve identified problems, EGMF suggest **applying the battery management system (BMS) requirement to industrial batteries with a total energy above 20 kWh**. This will help targeting batteries that are suitable for second life and offer actual environmental benefits. In addition, we also

suggest **excluding industrial batteries that do not have a battery management system**, such as lead-acid and nickel-based batteries.

First, such a requirement will require redesigning the equipment and/or the management system. In fact, in some cases, the battery management system (BMS) is not included the battery itself; it is integrated in the equipment. From a manufacturing view point, it is not feasible to comply to such a requirement by July 2023.

Modifying battery management system – to partially open it – **would require redesigning not only the battery, but also the tools and charger**. In fact, the "backwards compatibility" of batteries, tools and chargers would be affected. In most of cases, it will not be possible to use a re-designed battery including an open management system with pre-existing equipment and chargers, which were not been designed for that type of battery management system.

In addition, the battery management system contains essential information that are critical for the equipment manufacturers. **How to protect equipment manufacturers' know-how**?

Furthermore, such a requirement poses **safety concerns**. The main purpose of a battery management system is to ensure that all components operate safely within their specified ranges of parameters including voltage, temperature and current. The proposed regulation **does not clarify the respective responsibility between equipment manufacturers and any actors accessing batteries** parameters in view of repurposing or remanufacturing.

Finally, accessing to the battery management systems and retrieving data stored will require a standardised connection or standardised protocols. This takes time to develop.

F. Allowing electronic declaration of conformity and digital instructions to be future-proof

To achieve a modern and future-proof regulatory framework, it is of utmost importance to pursue efforts towards a paperless European industry. The EU need to **embrace the available technologies to supply information to authorities**, such as Declaration of Conformity (DoC), **and product users**, like instructions.

First, the future Regulation should explicitly allow the electronic availability of the Declaration of Conformity as a voluntary alternative to mandatory printed requirements. In addition, it should also allow to provide digital instructions by default, in line with the future Machinery Regulation. **Concretely, we suggest amending Article 18 to enable both an electronic declaration of conformity and digital instructions**.

This will improve consistency with provisions in other pieces of legislation applicable to our equipment, such as the Radio Equipment Directive. At the same time, providing the alternative of an electronic Declaration of Conformity would also facilitate the investigations of market surveillance authorities. They could access the electronic Declaration of Conformity remotely, for instance via the manufacturer's website, without having to visit the manufacturer or purchase the machinery.

G. The European industry needs a fair and supportive regulation

We support turning the existing Directive 2006/66/EC into **a European-wide regulation**. Besides a uniform implementation throughout EU Member States, such a change will provide better predictability and clarity for economic operators.

The **very ambitious timeline** for the development of methodologies, definition of specific requirements through many delegated acts, and implementation of the new requirements is raising strong concerns. This poses a **real challenge to compliance**.

First, the industry and European Standardisation Organisations (ESO) **need sufficient time to develop standards** according to ESO procedures. Although the European Commission has already addressed draft standardisation mandates, these requests may have to be adapted according to final Batteries Regulation.

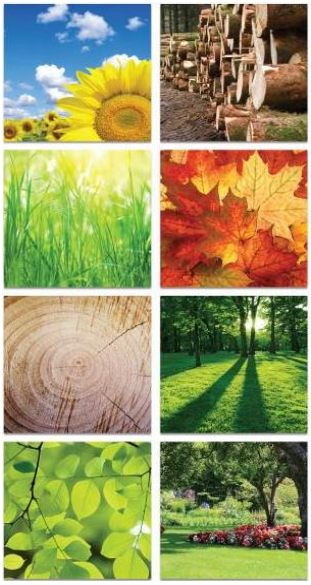
In addition, the industry needs **enough time to comply with future requirements**. The application date of the future regulation and its different provisions should be revised in the light of realistic timescales. After the development of necessary methodologies, all provisions directly or indirectly impacting the production process shall include a **minimum 2-year transition phase** for proper implementation at manufacturing line level. Indeed, implementing new technical requirements will imply redesign, prototype development and testing, tooling, procurement, pre-production testing, specification changes, component lead times and shipping from manufacturing locations, possible outside the EU.

Furthermore, the proposed regulation foresees the preparation of a **high number of delegated and implementing acts** about carbon footprint, recycled content, performance and durability. Participating in the preparatory process in a comprehensive and meaningful manner will be very demanding in terms of expertise. Nevertheless, the proper **contribution of all stakeholders, including the industry, is essential** to shape a balanced regulatory framework.

Finally, an **effective and efficient market surveillance** is essential to protect the EU industry from unfair competition, protect EU citizens from non-compliant products and secure the credibility of the EU regulatory framework.

We are wondering what is foreseen to test, verify and enforce the requirements included in the Regulation for batteries, both imported and produced into the EU. In our view, the future regulation should **include provisions on enforcement and set the necessary resources required at Member State level** to sufficiently execute enforcement measures for EU and imported products alike.

For further information, please contact: EGMF Secretariat, secretariat@egmf.org



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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