Assessment of the waste management of portable and industrial batteries in Greece in light of the new EU battery regulation

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Introduction

Battery production and management are strategic imperatives for Europe in the context of the clean energy transition. The European Commission has recently presented a proposal for a new regulation on batteries and waste batteries (COM(2020) 798 final). The new EU Regulation will cover the entire battery life cycle, from design to end-of-life and apply to all types of batteries sold in the EU: portable batteries, SLI batteries (supplying power for starting, lighting or ignition of vehicles), light means of transport (LMT) batteries (providing power for the traction to wheeled vehicles such as electric scooters and bikes), electric vehicle (EV) batteries and industrial batteries.

The new EU regulation on batteries and waste batteries

Eunomia is following closely the legislative procedure and will provide an overview of the key measures foreseen by the regulation that have a significance for the Greek context, such as: more stringent targets for waste collection, recycling efficiency and material recovery, stronger sustainability, performance and labelling requirements, portable batteries in appliances easier to replace and consumers better informed and introduction of due diligence policy for the battery industry consistent with international standards.

Assessment of waste management of portable and industrial batteries in Greece

In this context, Eunomia has been providing technical support to the extended producer responsibility (EPR) schemes for portable batteries (AFIS SA) and vehicle & industrial batteries (Combatt SA) in Greece. The scope of these projects aimed at providing guidance for the better management of batteries through the entire battery life cycle and towards the achievement of the EU targets. With respect to the industrial and vehicle batteries management for Greece, key points of the analysis are presented below:

- **Assessment of the current situation** and identification of the actual quantities of industrial and vehicle batteries put on the market, collected and managed.
- **Identification of challenges in the traceability** of batteries (Figure 1)

Figure 1. Identification of challenges in the traceability of industrial and vehicle batteries in Greece

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- **Review of best-case practices across EU**, such as:
  - Ecopilhas & Valocar (Portugal) and WEE Ireland for industrial batteries
  - Bebat (Belgium), ASEKOL (Slovakia) for portable batteries

- **Recommendations** towards the better waste management and the achievement of EU targets for Greece with respect to the following key pillars:
  - Collection, data recording and reporting processes
  - Treatment and recycling processes and practices
  - Control and monitoring mechanisms
  - Digital platforms for the data recording (HMA, EMPIA)
  - Hazardous Waste Identification Forms (Εντύπο Αναγνώρισης Επικίνδυνων Αποβλήτων)

- **Special issues** identified with respect to portable and industrial & vehicle batteries management in Greece, indicatively:
  - Light means of transport (LMT) batteries, electric vehicle (EV) batteries, lithium-ion batteries
  - Recycled content in industrial, EV and automotive batteries
  - Performance and durability of rechargeable industrial and EV batteries
  - Portable batteries in appliances
  - Battery passport
  - Second-life of industrial batteries
  - Extended producer responsibility, minimum standards for producers responsibility organisations (PROs), etc.