

## Electric Vehicles: Actual Battery Performance and EV Range – Emerging Legal Risks

### I) Introduction

Electric vehicles (EVs) are rapidly redefining the future of mobility and continue to gain ground as a key pillar of sustainable transport. Given that range has emerged as a key factor influencing the decision to purchase an electric vehicle (“range anxiety”), the description of electric vehicles’ range is becoming increasingly important for their successful commercialization.

A recurring issue across the market is that vehicle range and performance are typically marketed based on WLTP (Worldwide Harmonized Light Vehicles Test Procedure) laboratory results. While these figures are standardized and widely used, they do not necessarily reflect real-world driving conditions. EV performance depends heavily on factors such as weather conditions (especially extreme temperatures), driving behaviour, traffic and road conditions, as well as battery age and degradation. These variables can significantly affect both battery efficiency and overall vehicle performance. As a result, **the gap between advertised (standardized) performance and actual on-road performance has become a growing source of disputes**, raising important legal and regulatory concerns across Europe.

At the same time, consumer complaints are increasing, prompting regulators, dispute resolution bodies, and courts to examine more closely **the responsibility of manufacturers and dealers to provide clear, accurate, and transparent information**.

### II) The issue in focus: Consumer complaints and regulatory responses

#### A) Consumer complaints across Europe

It is now common practice for EV performance to be presented under ideal laboratory conditions rather than under real-world usage scenarios. However, real-life driving conditions, such as weather, driving style, road quality, and battery condition, can materially affect performance outcomes.

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Most disputes arise from the content and presentation of advertising claims, and the lack of sufficient explanation or context accompanying performance figures. For example, promotional materials may include numerical claims or visual content without adequately explaining the assumptions behind them.

The above, combined with the fact that many consumers are still relatively unfamiliar with EV technology, often leads to unrealistic expectations regarding vehicle range and battery performance, and ultimately dissatisfaction.

## B) Decisions and emerging regulatory direction

Authorities and bodies across Europe, including (a) national regulators (e.g. advertising and competition authorities), (b) independent dispute resolution bodies (such as automotive ombudsman schemes), and (c) courts (including supreme courts in certain jurisdictions), have already begun addressing these issues.

From recent decisions and opinions, several **key principles** are emerging:

- **Clear distinction between laboratory and real-world performance**

Dealers and sellers are expected to explicitly distinguish WLTP figures from real-world performance.

- **Obligation of transparency and accuracy**

Consumers must be clearly informed about potential deviations and the reasons behind them.

- **Avoidance of misleading practices**

Businesses bear a general responsibility to ensure that advertising and commercial communication do not distort consumer decision-making, even unintentionally.

In response to these challenges, several practical measures have been proposed:

- Redesign of manufacturers' and dealers' websites, to provide clearer and more user-friendly explanations of EV performance under real conditions.
- Introduction of range simulators, allowing consumers to estimate vehicle range based on weather conditions, driving habits, battery condition.

## III) The Greek legal framework: Key risks and obligations for dealers

### A) Misleading commercial practices, collective actions and regulatory impositions

Under Greek consumer protection law, a **commercial practice** is considered **misleading** and therefore **unfair** if it misleads or is likely to mislead the average consumer, even where the information provided is factually correct, or if it leads (or is likely to lead) the consumer to make a transactional decision they would not otherwise have made. Importantly, a practice may also be misleading if it involves omitting essential information that the consumer needs in order to make an informed decision.

In the context of EVs, this is particularly relevant where WLTP figures are presented without sufficient explanation, or the limitations of those figures are not clearly communicated.

Further, the Greek Advertising Code further reinforces these obligations on advertising, by providing that advertising must not exploit consumers' lack of knowledge or experience, claims must be capable of substantiation, and all material information must be provided clearly and in a timely manner.

Unfair commercial practices may give rise to **collective actions** by consumer organisations seeking the cessation or prohibition of unfair practices, compensation / financial satisfaction, repair or replacement, price reduction or refund, or termination of sales contracts.

The above consumer protection law measures increase potential financial and reputational exposure for dealers.

If a consumer protection law violation is identified (either following a consumer complaint or ex officio), the competent Greek authorities may:

- Issue compliance recommendations within a specific deadline, or
- **Impose administrative fines**, ranging from €5,000 up to €1,500,000, and up to €3,000,000 in case of repeated infringements. In cases of continued non-compliance, additional daily fines (e.g. €5,000 per day) may also be imposed.

Further, misleading/insufficient presentation of WLTP figures as per above could be also considered a false statement under the provisions governing unfair competition among businesses, in which case the offender may be ordered to cease and desist from such false statements and remedy any damage caused to a competing business.

## B) Implications on EV vehicles sales contracts

Electric vehicle sellers may also face claims under contract law if the vehicle sold is not compliant to the law and the contract. This is because a sold item conforms to the contract when it is delivered free of actual defects; specifically, in this case, when it has the agreed quality and corresponds to the sample or model that the seller presented to the buyer, and when it is capable of maintaining the required functions and performance under normal use (durability), which the buyer may reasonably expect.

Crucially, consumer expectations are shaped not only by the contract, but also by public statements, including advertising: the buyer's reasonable expectations regarding the properties of the vehicle are also determined by public statements made by the seller, their representative, or other persons, including the manufacturer, particularly in the context of advertising or labeling.

If the vehicle fails to meet these expectations, the consumer may request (in hierarchical order):

1. Repair or restoration of conformity;
2. Price reduction;
3. Withdrawal from the contract (refund against return of the vehicle);
4. Compensation for damages.

#### **IV) Conclusion: From legal risk to commercial strategy**

In summary, the way electric vehicle performance is presented under ideal driving conditions - especially where it materially departs from real-world results - is already drawing scrutiny from courts and regulatory authorities across several European jurisdictions. The direction emerging at EU level is clear: **only transparent and accurate consumer information** can effectively safeguard traders from legal disputes that may lead to administrative penalties and civil liability. To ensure that communications are genuinely transparent and not misleading, a clear distinction should be made between performance under ideal conditions and performance in everyday use. As a practical step, involved businesses (manufacturers and dealers) are encouraged to simulate range under realistic conditions and reflect this clearly in the design and content of their websites and marketing materials.

In practice, it is clearly risky for the marketing of electric vehicles to focus solely on performance under ideal conditions. It would be preferable to advertise real-world performance or, at the very least, to make it explicit where advertised performance significantly deviates from actual conditions.

This note is intended for general informational purposes only and does not constitute legal advice or establish an attorney-client relationship. It does not address any specific facts or circumstances and should not be relied upon as a substitute for legal advice.

For further information or legal guidance, please contact [Gregory Pelecanos](#) or any member of our [Consumer Rights & Product Liability](#) practice group at Ballas Pelecanos Law, which prepared this note.