

# EcoG launches its Charging Reliability Index (EcoG CRI), ranking the performance of different EV manufacturers

Interruptions to charging sessions were a key factor for low-performing models; the index highlights significant potential for improvement in EV reliability

**MUNICH, GERMANY, August 2023:** EcoG (<u>www.ecog.io</u>), developers of interoperable charge controllers and software for electric vehicle (EV) charging stations, today launches its first-ever Charging Reliability Index (EcoG CRI): an index by which the charging reliability of EVs can be measured and compared.

The test suite of the Charging Reliability Index consists of 3 categories:

- 1. Reliability of Charging Start
- 2. Reliability of Charging Process

### 3. User Communication and Prevention of Errors

The first edition of the Index has come back with the following results, the key learnings from which can be summarized as follows:

- On average, the tested vehicles only score 68% within the EcoG Charging Reliability Index
- This mirrors the relatively low charging reliability of e.g. <u>~80% in North America</u> that is substantially below the 99.99% operational reliability rate that is common in other industries
- E.g.: Test on plug locking: 50% of EVs do not inform users about avoidable plug locking errors in the charging preparation phase
- E.g.: Test on Control Signal Quality: Two out of ten cars show high damping of the control signals resulting in an unreliable charging process with random interruptions

EcoG is calling for all OEMs to participate in the Charging Reliability Index, and will test the reliability of any EV that is put forward for the assessment.

Follow <u>this link</u> to read the full report, test methodology and rankings for electric vehicles tested on the Index.



## Methodology

To make the reliability of the EV charging process measurable, the EcoG test team developed the Charging Reliability Index based on their field experiences of technical failures during charging sessions. The index consists of a range of tests that have been implemented to accurately evaluate the charging interface of EVs, measuring how reliably they can initiate a charging session and sustain charging for the required time. The tests also include an analysis of how well charging interfaces communicate errors to the user in an attempt to circumvent charging failures.

### Combatting issues with reliability and building trust

For years, "range anxiety" - the concern drivers have around the maximum range of their EVs - presented one of the biggest obstacles to mass EV adoption across the world. The industry has worked relentlessly to alleviate this, offering more range through increased battery capacities and advancements in charging power.

However, in recent years, range anxiety has been <u>replaced by charging anxiety</u>. 6% of charging attempts, or 2,000 charging sessions in Germany alone, run into technical failures. According to a <u>study</u> by J.D. Power, at least one in five electric charging attempts fail.

<u>Joerg Heuer</u>, EcoG CEO and Co-Founder, and former Professor at the University of Passau, comments: "Questions remain about charging reliability. Will I be able to charge my car when the battery is low? How often will my car fail to charge? These questions have not been addressed by standard charging test procedures, which is why we've produced this Index to test the reliability of today's range of available EVs.

Failed sessions occurring even at low rates seriously impact the way EVs are perceived by consumers. Considering the <u>millions of sessions</u> that take place every day across public and private charging stations, the need to track reliability and drive improvements is clear."

## About EcoG

EcoG is a global IP and tech company working on the rapid expansion of sustainable charging infrastructure for electric vehicles. With its charge controllers, reference designs and software, it enables companies to get products & services to market quickly and scale profitably.

EcoG is already the market leader in Europe with more than 15% market share and a strong footprint in the Indian and North American markets. Overall, EcoG grew four times faster than the market last year. Industrial giants such as Siemens or one of the world's largest service station equipment suppliers are among its customers. The company continues to grow in 2024 and as a next step invests 14,4M\$ in its North American HQ in the USA.



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