



Gigafactories, Giga-Challenges

STRATEGY PAPER

Gigafactories, Giga-Challenges

26/11/2024 What it takes to master the large-scale industrialization of battery cells

The gigafactory concept emerged in the mid-2010s in response to the increasing demand for sustainable energy solutions, electric vehicles, and energy products. Companies operating gigafactories aim to significantly reduce battery production costs through economies of scale, innovation, and vertical integration. In today's rapidly expanding battery market, ambitious newcomers are ramping up production capacities to compete with established industry leaders.

This strategy paper identifies eight key challenges that newcomers face in scaling up giga-scale battery cell production capacities. Furthermore, it outlines five critical improvement levers that established players should prioritize to maintain a competitive edge. Additionally, the paper presents a holistic approach to mastering advanced gigafactory manufacturing.

Read the strategy paper in full length: [Gigafactories, Giga-Challenges](#)

**MEDIA
ENQUIRIES**



Jan Boris Wintzenburg

Director Communications and Marketing
Porsche Consulting GmbH

+49 (0) 152 3911 8663

jan_boris.wintzenburg@porsche-consulting.com

Link Collection

Link to this article

<https://newsroom.porsche.com/en/2024/company/porsche-consulting-gigafactories-giga-challenges-2025-37968.html>

Media Package

<https://pmdb.porsche.de/newsroomzips/c345807b-98ee-424c-b799-7643cd1c0b25.zip>

External Links

<https://www.porsche-consulting.com/de/home/>