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Environmental sustainability is the new paradigm in production and entails the efficient use of resources and energy. To achieve such efficiency, a multitude of technological and process-related approaches are currently being developed. The aim of this paper is to utilize technology foresight to identify the technologies and processes, which might be relevant for sustainable production in the German automotive industry in the future. Therefore, we conducted a Delphi survey with practitioners and practice-oriented researchers concerning future technologies and their postulated effect on sustainability goals in the automotive industry. The assessments were grouped into five categories: short-term developments, uncertain short-term to mid-term developments, (certain) short-term to mid-term developments, mid-term developments, and long-term developments. These categories provide insight regarding potential drivers (cost reduction, customer demands, and legal requirements) and hindrances (costs associated with large investments) for the implementation of various technologies. Major automotive suppliers are expected to adopt new sustainable technologies faster than small and medium-sized enterprises (SMEs) since they have the financial means to make investments and sufficient production volumes for automation, and modify production arrangements more often.

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