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# Schott Climate Neutral 2030 – a way to decarbonization in the glass industry

Dr Wolfgang Schmidbauer\*<sup>1</sup>

<sup>1</sup>SCHOTT AG – Germany

## Abstract

The transformation from a fossil energy-based glass production to the use of Zero Carbon (ZC) energy within glass production and, furthermore, the subsequent technological roll-out into production is one of the most challenging tasks of today's R&D. SCHOTT, as a global specialty glass manufacturer and leading company for ZC transformation, is pushing the usage of green electricity in glass melting to its limits, for example, within the funded flagship projects PROSPECT F&E and PROSPECT Pilot. These projects will reduce CO<sub>2</sub> emissions of a melting tank up to 80% by the use of electric melting. Other alternative ZC energy sources like Biofuel or Hydrogen may be introduced later for a complete carbon-neutral production. Besides that, further innovative ZC technologies like plasma flame or microwave heating show the potential to enlarge the portfolio for technological transformation even further. This talk will deal with some technical insights of existing and potential technological solutions to overcome hurdles in the transformation path of SCHOTT's glass production towards climate neutrality.

**Keywords:** transformation, zero carbon, glass production, electrical boosting, biofuel, hydrogen, plasma, technological roadmap, special glass

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\*Speaker