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### Concepts and Tools in Large Area Coating for Architectural Glass and Photovoltaics



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1=Photovoltaics 2=Architectural Glass

#### Abstract

The key resource of industrial and sustainable development in the 21st century is energy. Two business fields in large area coating have a major impact to reduce energy consumption and carbon footprint: architectural glass and photovoltaics.

Buildings consume around 40 % of the total energy demand in industrial societies. Heating and cooling account for the biggest part of it and are effectively optimized by the use of LowE coatings. Solar radiation to the earth is sufficient to feed easily a large manifold of the global demand of energy. Harvesting this free-of-charge energy has just started.

Both applications must meet technical and economical requirements. Both applications require industrial mass production on large scale substrates to be competitive with less sustainable solutions. High deposition rates in combination with best optical uniformity and ultimate technical performance is the challenge for the coating equipment.

We will show which concepts, tools and results are available to meet the demand of industrial large area coating for sustainable technologies.