

Is There a Place for Filtration in Our World in 2050?

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Our world is changing faster than ever. How does this change affect filtration and is there a room for filtration in our world in 2050? The provocative title of the Keynote Speech already suggests that we can expect massive impacts from various megatrends such as new mobility, renewable energy, increasing health awareness and digitalization. The electrification of the powertrain in vehicles will lead to a massive reduction in filtration needs. Several filter categories such as oil or fuel filters will disappear. The rise of renewable energies and the elimination of fuel/carbon/gas based energy generation will massively reduce the demands for conventional air intake and air pollution control filters. Emission free and carbon neutral economies combined with ever-stricter environmental legislation will drastically improve the air and water quality and therewith reduce the needs for filtration in a sizable magnitude. On the other hand we see a continuously increasing health awareness in the western world as well as in the fast growing middle class of emerging countries leading to an increase in filtration demand for better health protection which may open new opportunities for improved filtration in clean air and water and healthy food. Last but not least in 2050 digitalization will finally have penetrated all areas of filtration. All relevant contamination & performance data will be available any time and feed smart filtration systems. A sizable amount of sales in filtration will be generated with sensors, digital equipment and data.

What are the conclusions? Whether all of the above-sketched megatrends will come true by 2050 is an unknown to everybody. However, without doubt, the world will move in this direction and with this move also the world of filtration will change. At the same time there are also opportunities arising from the future trends and the growing global population. Successful filtration companies in the future need to gain new competences in digitalization, upgrade their knowhow in biological and chemical skills and embrace new business models.