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The Substitution of Hazardous Chemicals in the International Context - Opportunity for Promoting Sustainable Chemistry

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While a wide range of sustainable/green chemicals for various applications is available, often only certain types of hazardous or unsustainably produced chemicals are continued to be used out of different reasons ("lock-in problem")^{1,2}. One challenge is that policy makers and industries in particular in developing and transition countries do not know about more sustainable and green alternatives for a chemical in a particular application. Methodologies and tools are, hence, needed for the communication and dissemination of information on more sustainable alternatives.

The substitution and phase-out of hazardous chemicals, such as persistent organic pollutants (POPs), on international level like under the Stockholm Convention, might provide one promising mechanism to mainstream more sustainable and greener chemicals and other alternative solutions aiming at eliminating or at least significantly reducing hazardous chemicals in products and other uses.

Within the Stockholm Convention - ratified by 179 countries - the POPs Reviewing Committee is evaluating alternatives to POPs and has developed guidance on alternatives assessment³. Within the Stockholm Convention activities on POPs-Phase-Out a publication has been developed compiling information on POPs-phase out and alternatives⁴. In the conclusions and recommendation of this document "Sustainable and Green Chemistry" is highlighted as a guiding principle for alternatives assessment³. This could be an entry point of Sustainable Chemistry in the alternatives assessment process on international level. The POPs phase out document links also to the web-platform SUBSPORT (www.subsport.eu) which has been developed in the frame of an EU project for safer alternatives to toxic chemicals.

In this presentation the Stockholm Convention alternatives assessment activities and also the SUBSPORT platform are shortly introduced as tools which can be utilized for promoting the use of more sustainable/green chemicals at international level including developing countries.

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