

EDITORIAL

The article series 'Arab and German perspectives on controversially perceived technologies and subjects' aims at compiling a catalogue of Arab and German perceptions towards different topics such as Bioenergy, Climate Engineering, Genetically Modified Organisms, Fracking, Nature Conservation, Nuclear Energy, Solar Energy, Wastewater Treatment, etc.

Our motivation for this series is to shed light on different approaches towards applications of controversially perceived technologies in Germany and in the Arab world. A mutual understanding of the commonalities and differences in the perception of these technologies and subjects is a precondition for the success of Arab-German joint developments. It is also an initial step to increase awareness towards a sustainable application of the discussed technologies.

The considerations on the different technologies are organized as 'perspective papers'. Article structures include an unbiased overview of technological developments of the respective topic aimed at defining and delineating the subject. Besides a short and comprehensive introduction to the topic, different or even controversial opinions that reflect the assets and drawbacks of the technology will be juxtaposed. Country perspectives will be collected using an iterative 2-step survey (modified Delphi method [1]). Participants will be selected amongst scientific experts, policy makers/ government agencies, industries, and non-governmental organizations. The survey focuses on consensus and disputed opinions related to the specific topics.

In this miniseries Friesen focuses on wastewater treatment and reuse [2]. In water scarce countries water reuse is becoming increasingly important, however, the actual use (industry, recharge,

agriculture) is highly debated. In another background article, Elleuche and Baqi highlight recent developments in biomass conversion to produce bioenergy and bio-based materials [3]. The limitation of fossil fuels necessitates a shift towards alternative energy resources, yet, opens the road to the food vs. fuel debate. Sawall discusses nature conservation [4]. Continuous destruction of nature and its abundant resources might result in negative feedback loops for human and natural ecosystems. Drissi and Djefal outline recent developments regarding solar energy [5]. Opinions and country debates of all introduced topics will be presented in the forthcoming perspective sections.

We very much encourage further contributions on additional technologies and subjects that are controversially perceived in Germany and the Arab world. The tools and methods are prepared in a generic way and are available online at AGYA (<http://agya.info/working-groups/energy-water-and-environment/>).

- [1] Lux (2016) Collection and interpretation of country perspectives on disputed technologies and subjects: Methods and methodologies. AGYA (available online)
- [2] Friesen (2016) Wastewater treatment and reuse. AGYA (available online)
- [3] Elleuche, Baqi (2016) Biomass to fuel the world – a curse or a blessing? AGYA (available online)
- [4] Sawall (2016) Nature conservation. AGYA (in preparation)
- [5] Drissi, Djefal (2016) Solar: A promising energy source for the future. AGYA (in preparation)

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