



Water footprint components required to address the water-energy-food nexus, with the recent Urban Water Atlas for Europe as an example

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The first part of this presentation analyses which water footprint (WF) components are necessary in WF accounting to provide relevant information to address the Sustainable Development Goals (SDG's) water security (SDG 6), food security (SDG 2) and energy security (SDG 7) in a nexus setting. It is strongly based on the publication Vanham (2016) <http://dx.doi.org/10.1016/j.ecoser.2015.08.003>. First, the nexus links between (1) the planetary boundary freshwater resources (green and blue water resources) and (2) food, energy and blue water security are discussed. Second, it is shown which water uses are mostly represented in WF accounting. General water management and WF studies only account for the water uses agriculture, industry and domestic water. Important water uses are however mostly not identified as separate entities or even included, i.e. green and blue water resources for aquaculture, wild foods, biofuels, hydroelectric cooling, hydropower, recreation/tourism, forestry (for energy and other biomass uses) and navigation. Third, therefore a list of essential separate components to be included within WF accounting is presented. The latter would be more coherent with the water–food–energy–ecosystem nexus. The second part of the presentation gives a brief overview of the recently published Urban Water Atlas for Europe. It shows for a selected city which WF components are represented and which not. As such, it also identifies research gaps.