3m1: My fossil-free wardrobe

April 11th 13.45

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Our society today relies on large amounts of fossil feedstock, for energy as well as for materials. The use of fossil feedstock is one of the main contributors to the climate change we are presently facing. To stay below the 1,5 °C temperature rise compared to pre-industrial time, as is laid down in the Paris Agreement, the use of fossil feedstock needs to be phased out as quickly as possible. Fossil oil is the main feedstock for our energy supply, transportation fuels and chemicals and materials produced by the (petro)chemical industry. The current textile industry is one of the markets that uses large amounts of fossil oil and applies hazardous substances and polluting processes. The textile industry has been growing steadily due to the growing world population and the increase in living standard. On top of this, the ever-spreading trend of fast fashion has led to fast fashion retailers selling clothing that is expected to be disposed of after being worn only a few times. Hence, new solutions to reduce the resource use (both nonrenewable as well as renewable) of the textile industry need to be developed and implemented. This masterclass will highligh circularity strategies to reduce the consumption of natural resources and explore option for replacing non-renewable feedstock by using more biomass feedstock and recycled content.