

Popular science article from the Master thesis

'Be the Change – Exploring the Environmental Mitigation Potential of Lifestyles Changes in Europe Using a Multi-Regional Input-Output Model'

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Report number: LUTFD2/TFEM-- 16/5118--SE + (1-101)

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Biking to work, eating vegan food, buying organic food or renewable electricity, working from home, shopping second hand clothes, co-owning tools and machinery, living off-grid, or simply spending less money; how can I practically 'Be the Change' I want to see in the world? What are the environmental effects of largely spread "sustainable lifestyles"?

By the help of global production and consumption data, Ruben Lundström has analyzed the impact on carbon, toxicity, land, and water footprints that different lifestyle changes in the EU have. The footprint methodology gives the blame for emission caused by production activities to the final consumer; that is, you and me. Every product we buy, be it strawberries from Morocco or locally produced pig from the farmer around the corner, requires inputs that may come from all over the world. For example, by our consumption we may cause carbon emissions in Brazil in the production of soy bean-based fodder for your local farmer's pig, or a water deficiency in Morocco in production of your strawberries. Ruben investigates 50 different lifestyles changes, derived from EU citizen visions of a sustainable Europe by 2040.

12 lifestyles are found that offer significant impact reductions without the risk of trade-offs across footprints (for example decreasing carbon footprint but increasing land use). These include working part-time, purchasing local services, consuming local and organic food, decreasing use of in-house chemicals and garden fertilizers, and decreasing purchase of clothes by reuse and repair. Half of these 12 lifestyles are based on net reduction of consumption, and half involve shifting consumption patterns toward less environmentally intensive products. Compared to the total EU household footprint in 2007, the best combination of dietary lifestyles (only vegan and organic food, no food waste, and eating less) may potentially reduce our environmental footprint by 20-35%. The majority of the land and water use embedded in the products we buy, and a significant share of CO₂-emissions, is linked to our dietary choices; and this aspect is therefore important to consider to achieve a sustainable lifestyle. All low-meat diets are beneficial, but the resulting reduction of land and water use occur mostly outside the EU. The benefits of such diets may therefore not yield regional environmental benefits. The largest potential for reducing emissions of CO₂ is found by overall reduction of the use of personal transport (cars, buses, airplanes, trains, etc.), for example by biking or working for home.

Reducing working time (and thus income) by 25% offers the most obvious impact reduction. All other lifestyles based on reducing consumption of specific products risk that the saved money is re-spent into other products. This so-called *rebound effect* could undermine or even worsen the outcome of lifestyle changes in cases where monetary savings are re-spent on products that are

more emission or resource intensive. Such negative outcome is best addressed by having consumers redirecting the saved money toward services, that have the lowest impact per Euro spent.

Ruben argues that it is possible to 'Be the Change' you want to see in the world by a change of lifestyle, but we all must seriously consider what we do with the money we potentially save. We must all realize the limitations of material happiness and come to the point where we put higher focus on personal relationships and the inner journey of coming to know our purpose in life.