

Abstract submission to the workshop “The Wealth of Nations in a Globalizing World” .  
in Groningen, The Netherlands, on July 18-19, 2013

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**Subject/Title:**

“The availability of scarce metal resources: estimating global societal stocks and flows using EEIO.”

**Abstract:**

Assessment of critical materials noticeably shows that precious specialty metals with small mass flows could potentially have a limited future supply. Such metals are becoming increasingly indispensable in new technologies, but the flows of these low-volume and high-value metals are usually not well described in Environmentally Extended Input-Output (EE IO) databases. The DESIRE FP7 project aims to use detailed descriptions of metal content of intermediate goods and consumer products to come up with an initial estimate of global societal stocks and flows. We will particularly focus on the application of critical metals in renewable energy technologies, because these are expected to radically influence future demand of these metals. Future demand is inherently uncertain, as endorsed by the plethora of renewable energy scenarios generated over the last few years. However, we feel that integrated assessment of climate and dematerialization policies may guide sensible policy choices. We propose to combine insights from stocks and flows assessment with dynamic demand modeling to identify possible gaps in required production, waste treatment and recycling capacity and develop indicators that cover a range of policy concerns.