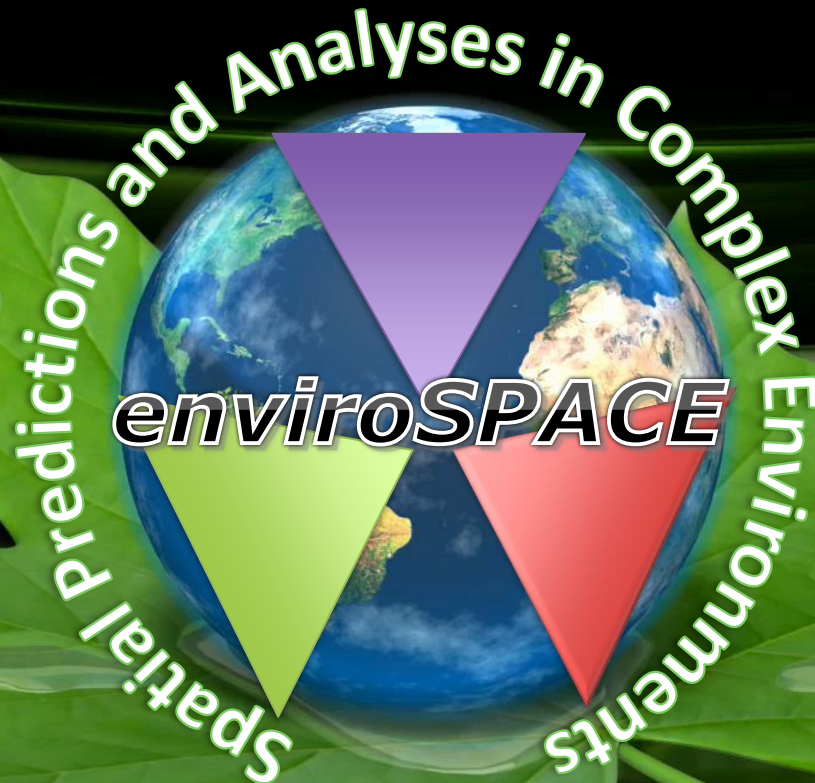


Describing the global socio-ecological system with essential variables

By Prof. Anthony Lehmann



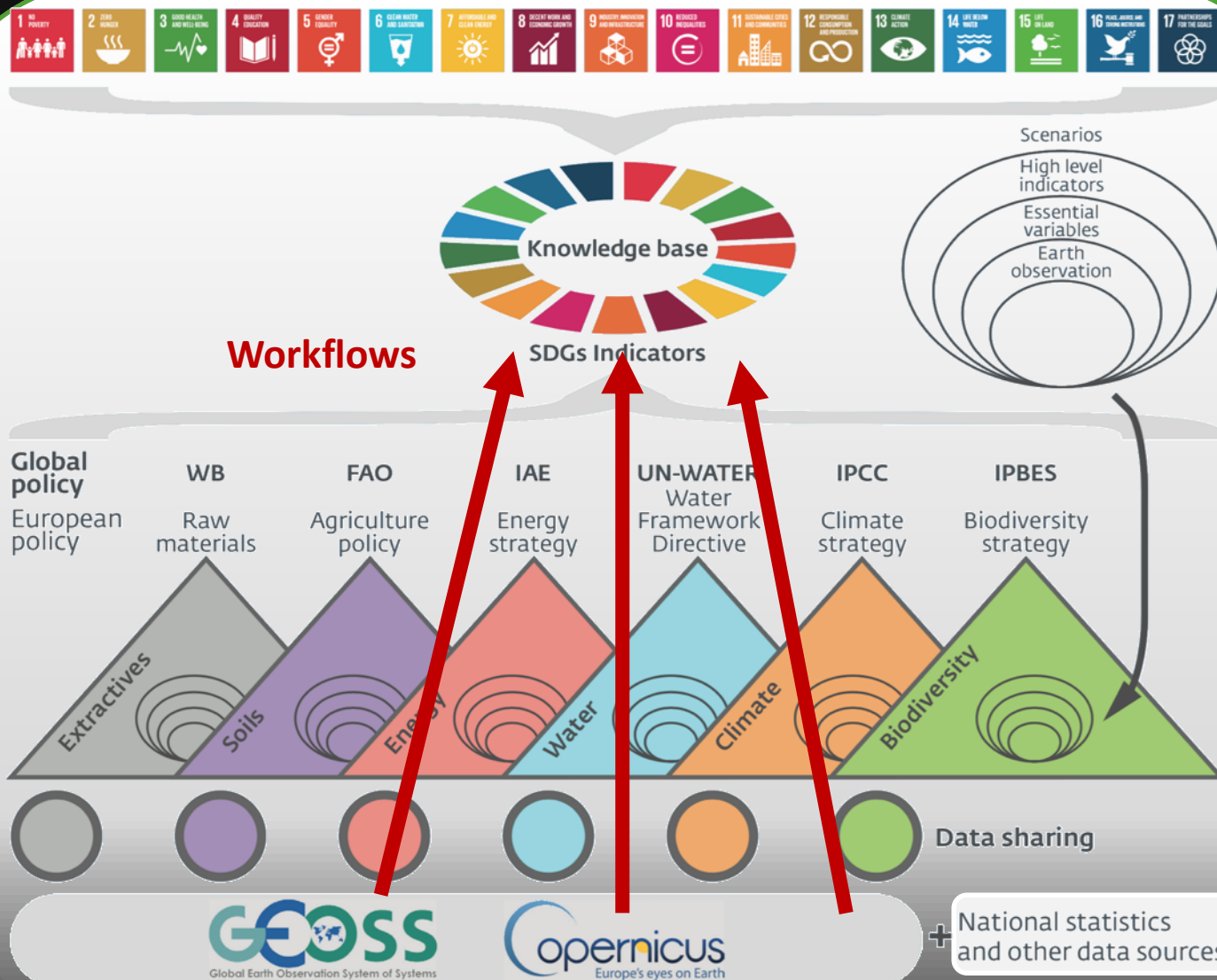
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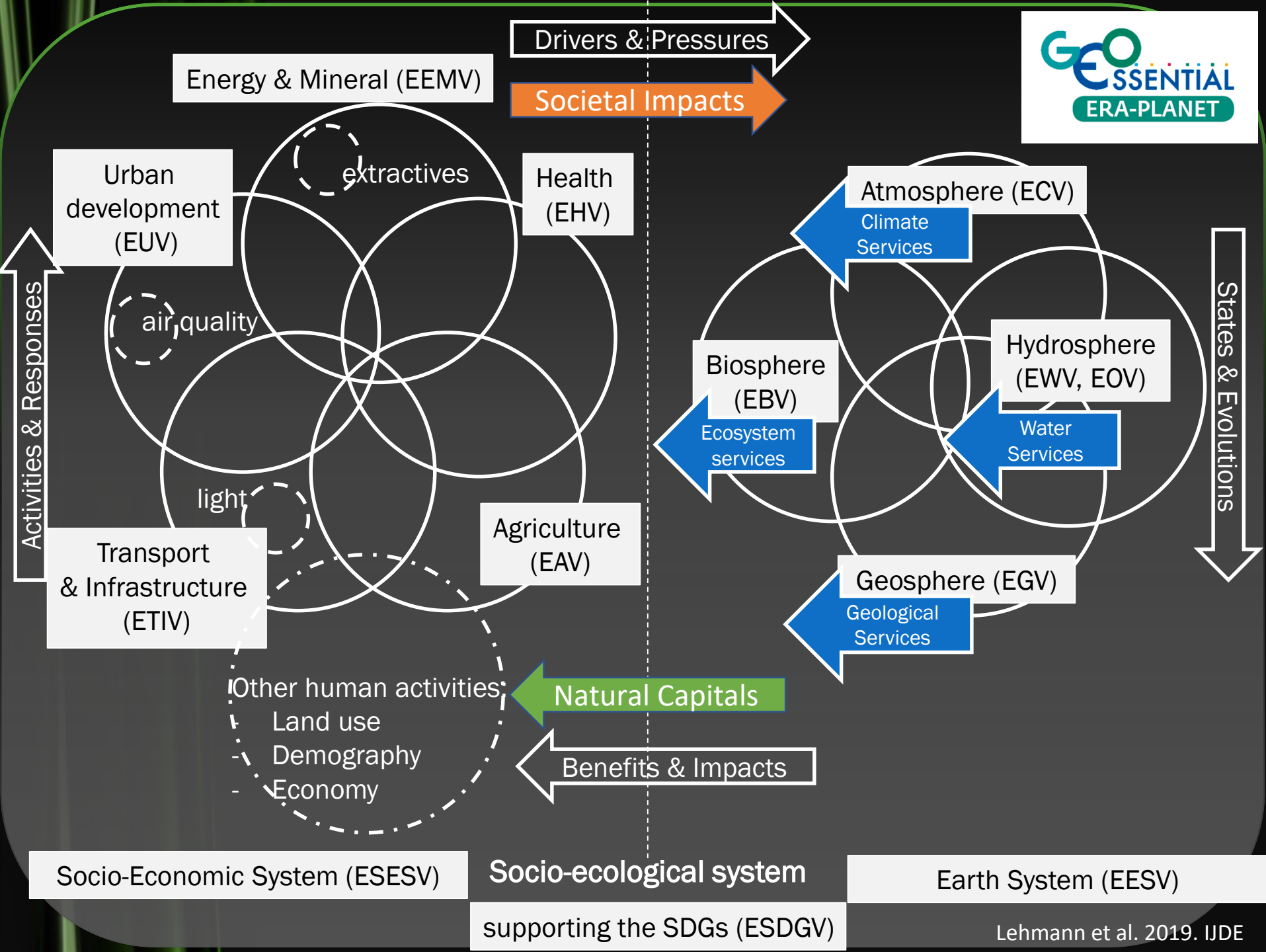
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Data Science Day, September 16. 2021

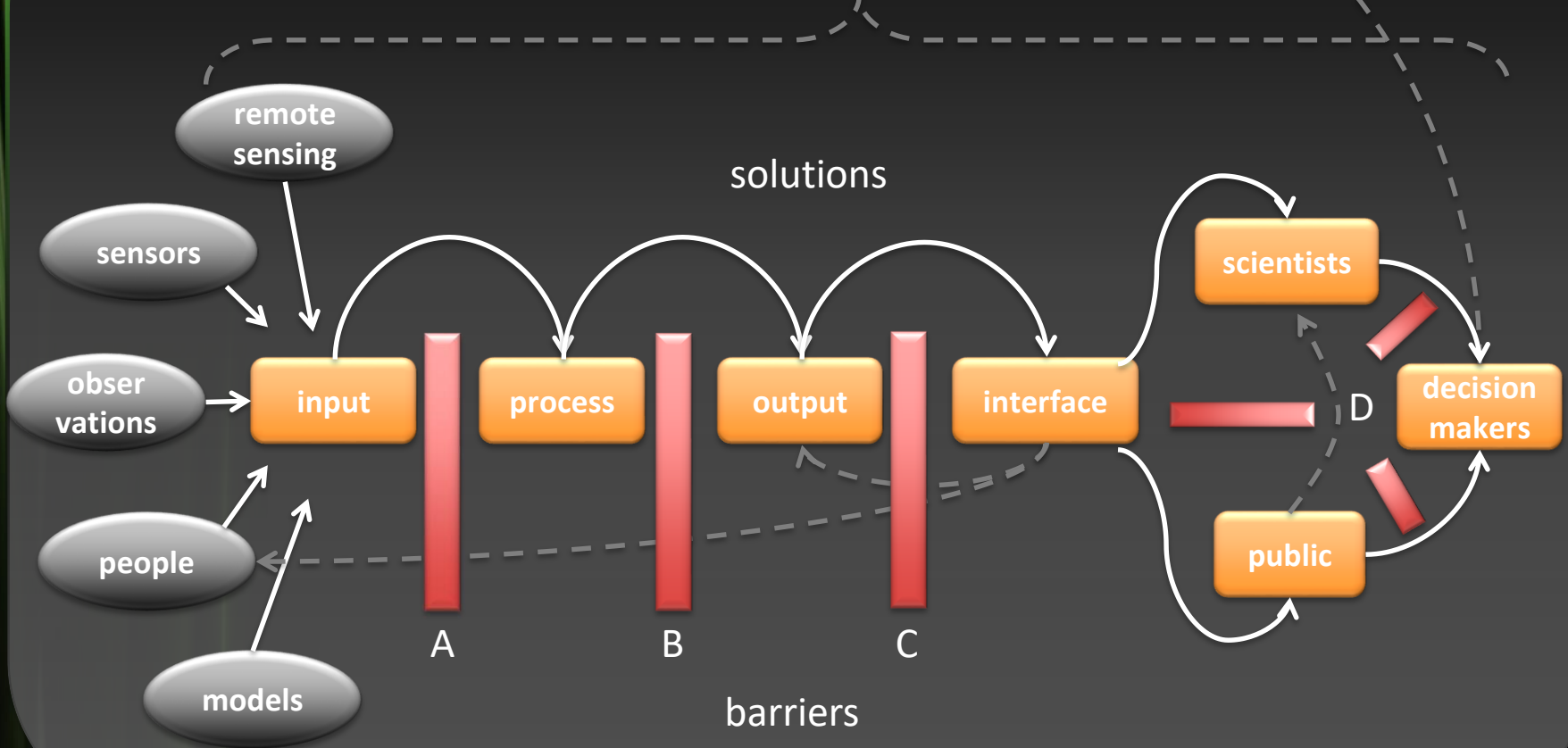
GEOEssential project

GEOEssential general framework linking data sources to policy indicators through Essential Variables





Barriers and solutions in the flow of data to sustainability decision-making.



Lehmann et al. 2017. Sustainability

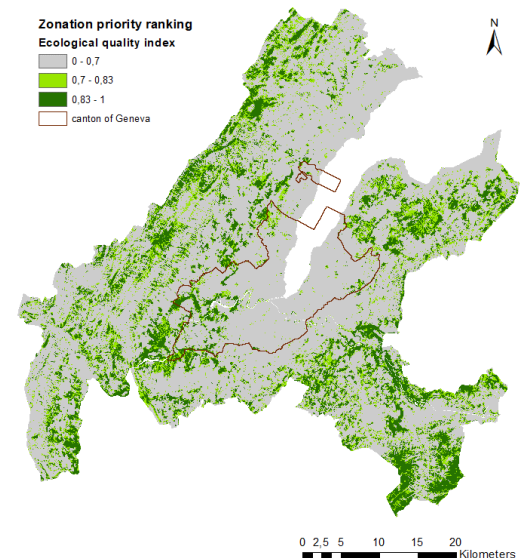
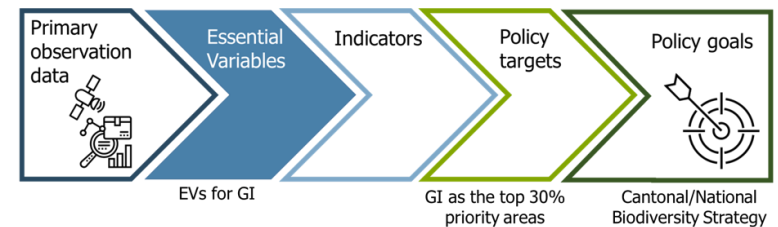
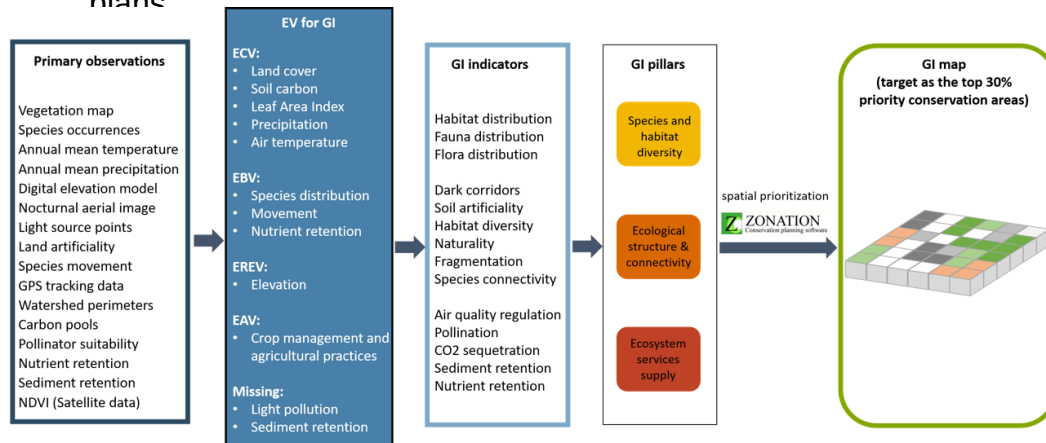
(A) access to data; (B) data size; (C) the ability to develop and iterate existing software; and (D) knowledge transmission. Simple arrows are solutions for removing obstacles, and dotted arrows represent an active feedback in the workflow.

EVs for Green Infrastructure

Essential Variables for Green Infrastructure mapping across scales and borders

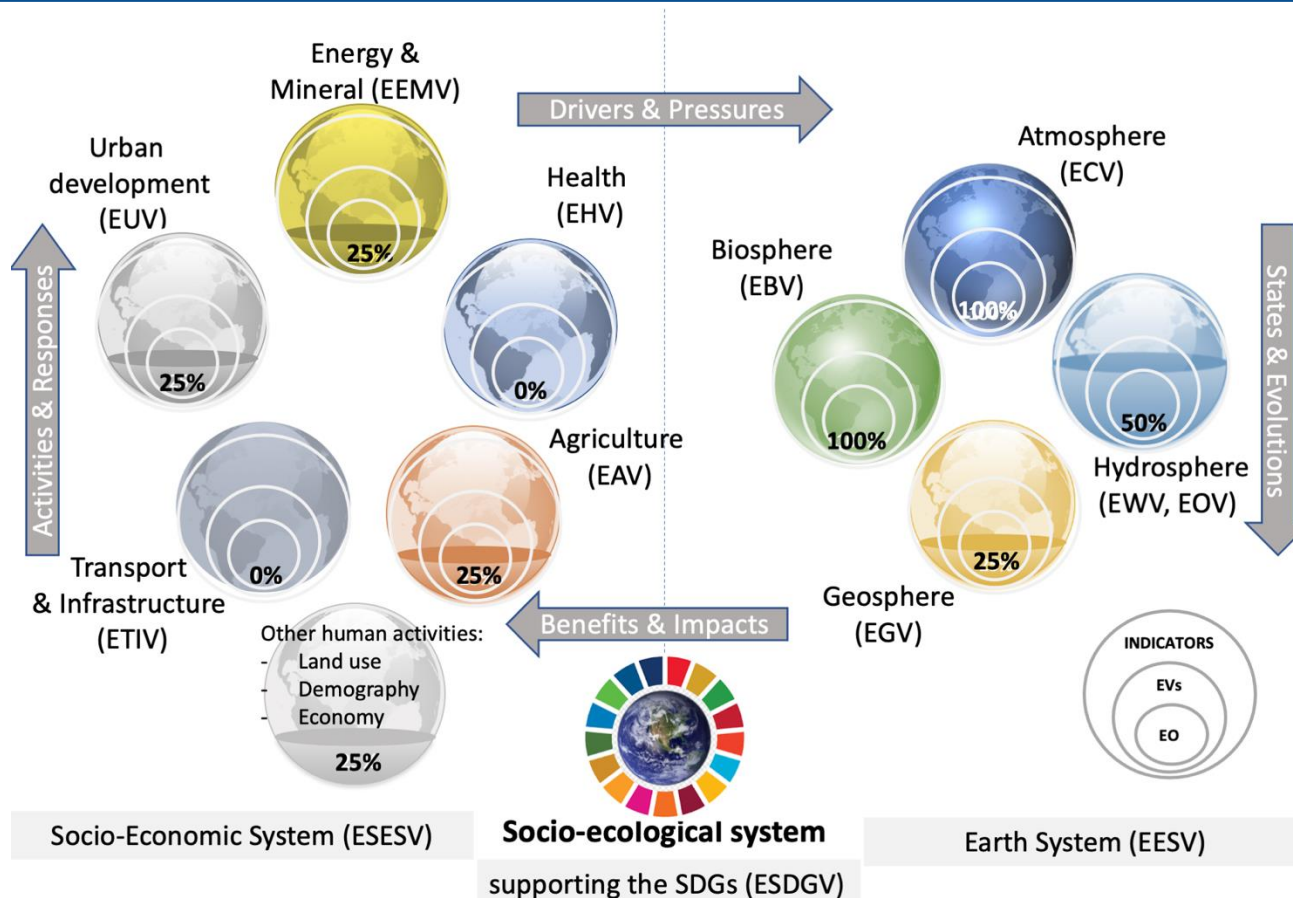
Erica Honeck ^{1*}, André Mascarenhas ^{2,3}, Benjamin Guinaudeau ¹, Atte Moilanen ^{4,5}, Arthur Sanguet ^{1,6}, Diana Denisa Rodila ^{1,7}, Anthony Lehmann ^{1,8}

- Green Infrastructure (GI) is increasingly being recognized as a strategic tool to better integrate nature's values into landscape planning decisions, and is incorporated into regional, national, and local biodiversity conservation action plans



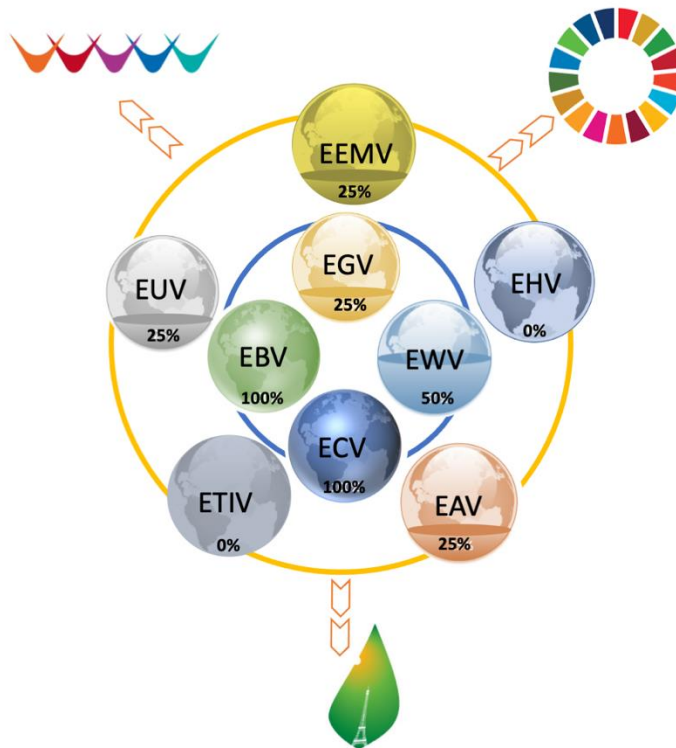
Honeck et al, Submitted to Ecological Indicators

Status of EVs development



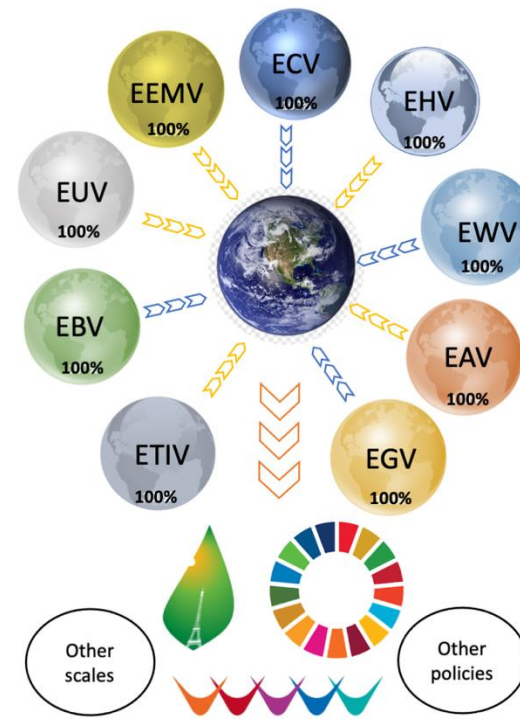
EVs for the socio-ecological Earth system

where we are...



GEO principal topics & priority policies

...where we need to go



Socio-Ecological Earth System

Some references from our group on EVs

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<https://doi.org/10.1016/j.oneear.2021.05.005>

Thank you for your attention



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