



VALUING NATURE

Sustainability Assessment of Renewable energy

Associating Ecosystem Services and Life Cycle Assessment

December 2017 Edinburgh

Atta Ajayebi

Doctoral Researcher in Renewable Energies

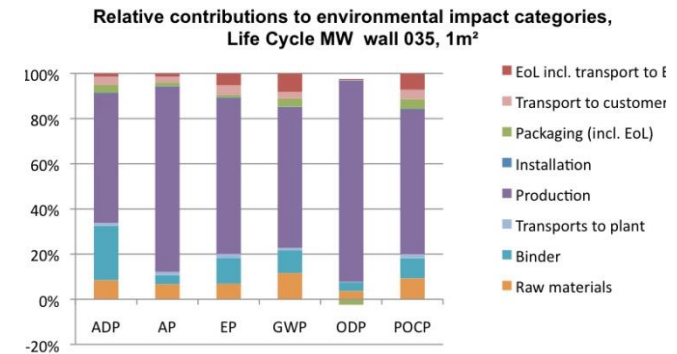
sa469@exeter.ac.uk



Environment and Sustainability Institute

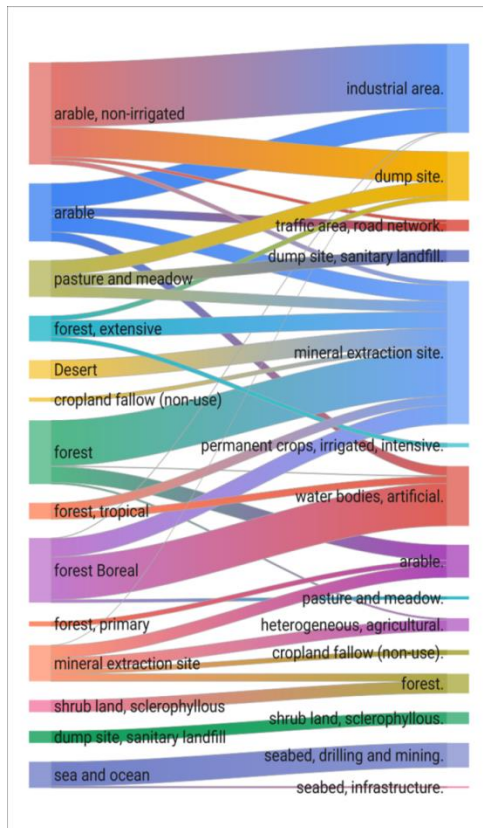
Life Cycle Assessment (LCA) and Ecosystem Services (ES)

- LCA is a sustainability assessment methodology. Ideally an environmental impact model should be able to predict where the emissions and other impacts are happening in order to be able to precisely assess them.
- My PhD attempts to make LCA spatially-explicit and associating it to Ecosystem Services (ES).
- ES are the benefits that humans freely gain from the natural environment and from properly-functioning ecosystems. It is possible to assign economic values to ES.



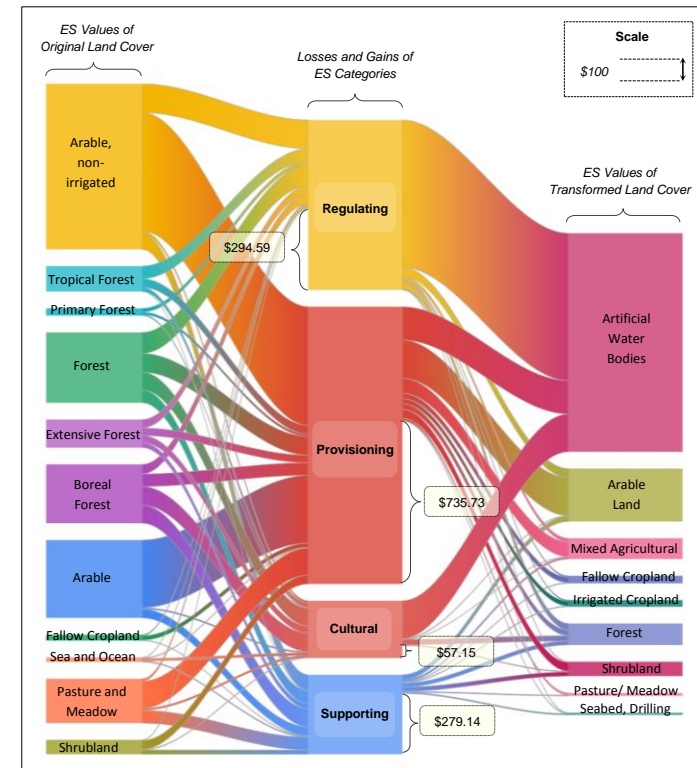
Case Study: Deployment of a solar farm in Cornwall

- Case study: Manufacturing of solar panels- Natural land transformation



Business Impact School

- Understanding the relationship between natural capital and economic activities.
- LCA results can be interpreted into monetary values of ecosystem services, thus showing how ecological damages are comparable to economic gains.
- Incorporating my research into decision-making or commercial tools, helping businesses, policy-makers, stakeholder etc.





European Regional
Development Fund
Investing in your Future



convergence
for economic
transformation

UNIVERSITY OF
EXETER

Thanks for listening!



Contact us:

Questions?

sa469@exeter.ac.uk

www.exeter.ac.uk/esi