

Environmental Impact: Experience Curves and LCI updating

- We discussed the assessment of future energy systems, based on two approaches
- LCI updating based on literature estimates for future (sometimes with learning curves underlying
- Experience curves: top down and for LCI components
- Con's of experience curves
 - Does not account for radical technology changes
 - Is not (in principle) aware of technical or physical constraints



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- LCI updating is able to account for disruptive technologies and radical innovations
- Con's of LCI updating
 - Very time consuming exercise
 - Requires estimates on all (important) LCI parameters
- ExCurve approach likely works well for energy intensive technologies
 - Separate the effect of changes in energy mix to assess “actual” technological progress
- Non-energy technologies and processes with high emissions (e.g. lime production) or other impacts (toxicity) remain a (big) question?



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- System boundaries are equally important for LCA and experience curves
- When system boundaries for ExCurve are wide, they could describe a market (rather than a technology) and work well for EIA

