

 **Positive Impact (Maximise)**

 **Negative Impact (Minimise)**

Technology / Product (direct 1st order effects)

Capture (e.g. of waste or emissions)

Resource use during production

Energy / resource and emissions during use

Waste generated during disposal

Application of Technology / Product (indirect 2nd order effects)

Substitution (e.g. of paper through digitalisation)

Optimisation (e.g. of energy usage & processes)

Induction (of resource consumption, e.g. energy)

Obsolescence (e.g. via shorter product life cycles)

Societal & Structural Change (systemic 3rd order effects)

Incentivisation (e.g. of fuel saving drive styles)

Decision making (e.g. via agent based models)

Rebound effects (e.g. via additional consumption)

New risks (e.g. via rising network vulnerability)