

Ideas for model extensions/development

- Integrate high volume products (e.g., cement) based on LCA data
 - ⇒ Add new (material) commodities and related supply and demand technologies
 - ⇒ Possibly modify GAMS code to allow triggering commodity flows by construction/decommissioning
 - ⇒ Quantify energy consumption and emissions connected to material use
 - ⇒ Analyze substitution of products (via scenario analysis), incl. the impact on decarbonization
- Explore alternative energy carriers (e.g., hydrogen, ammonia) including supply chains
 - ⇒ Add new (energy) commodities and related supply and demand technologies
 - ⇒ Analyze effects for South Africa's energy mix
- Representation of capital stocks in IO-IAM linkage
 - ⇒ Soft-linkage with data
- Quantification of a broader set of sustainability goals
 - ⇒ Incorporate SDG-related indicators into model and scenario analysis
- SSP implementation
 - ⇒ Develop other SSP variants beyond SSP2 by adjusting demand, techno-economic parameters, possibly adding/removing technologies/processes
- Combining LCA and IAMs to quantify environmental impacts
 - ⇒ Add alternative technology options with different levels of environmental impacts and cost