NORDIC LCA GUIDE FOR INFRASTRUCTURE
AN OVERVIEW

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Joint effort between NPRA, STA and FTIA
NordLCA project initiated in 2017
Draft prepared by Norsus during 2018
Final version by Norsus, Destia and Tyréns – http://www.nordfou.org/
• Provide support for LCA implementation in decision making across planning process stages
• Narrow the room for interpretation in existing standards – provide consistency and comparability
• LCA and EPD methodology
• Applicable standards for LCA and Civil Engineering Works
• Considerations when comparing projects
• Feasibility studies
• Early planning
• Design
• Construction
• Operation & Maintenance
• Goal and Scope
• Product System
• Functional Unit
• System Boundaries
• Data Quality
- Transportation system
- Project
- Element
- Component
- Material
Based on PCRs for road and rail

Feasibility & Early planning - One complete project

Road infrastructure: one km of road (option to use m² available).

Rail infrastructure: one km of railway
• Specific boundary definition across all planning process stages
• Based on existing standards
• Management of activities requiring specific consideration addressed
• 60 years suggested

• Longer or shorter assessment period may be defined when supported by the study goal and product system definition
• Progressive scale-up of quality requirements
• Focus on generic vs specific/EPD data
• Assumptions on technology development over study period
• LCA integration to planning process stages
• Management of study definition aspects for each planning process stage
• Hands-on tool when developing LCA studies for infrastructure in the Nordics
• LCA practitioner & target audience
• LCA tool and database
• Planning process stage
• Goal and scope
• Further recommendations
• Adaptation to country specific infrastructure planning stages
• Refined Goal and Scope
• Harmonisation to commonly used tools
Environmental Product Declarations in green procurement

Defining environmental performance goals and metrics
• Considerations on methodology – compliance to standards
• Used LCA tools & databases – compliance to this guide
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