

# **Environmental Product Declarations - opportunities for bio-based materials**

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**Renuables**

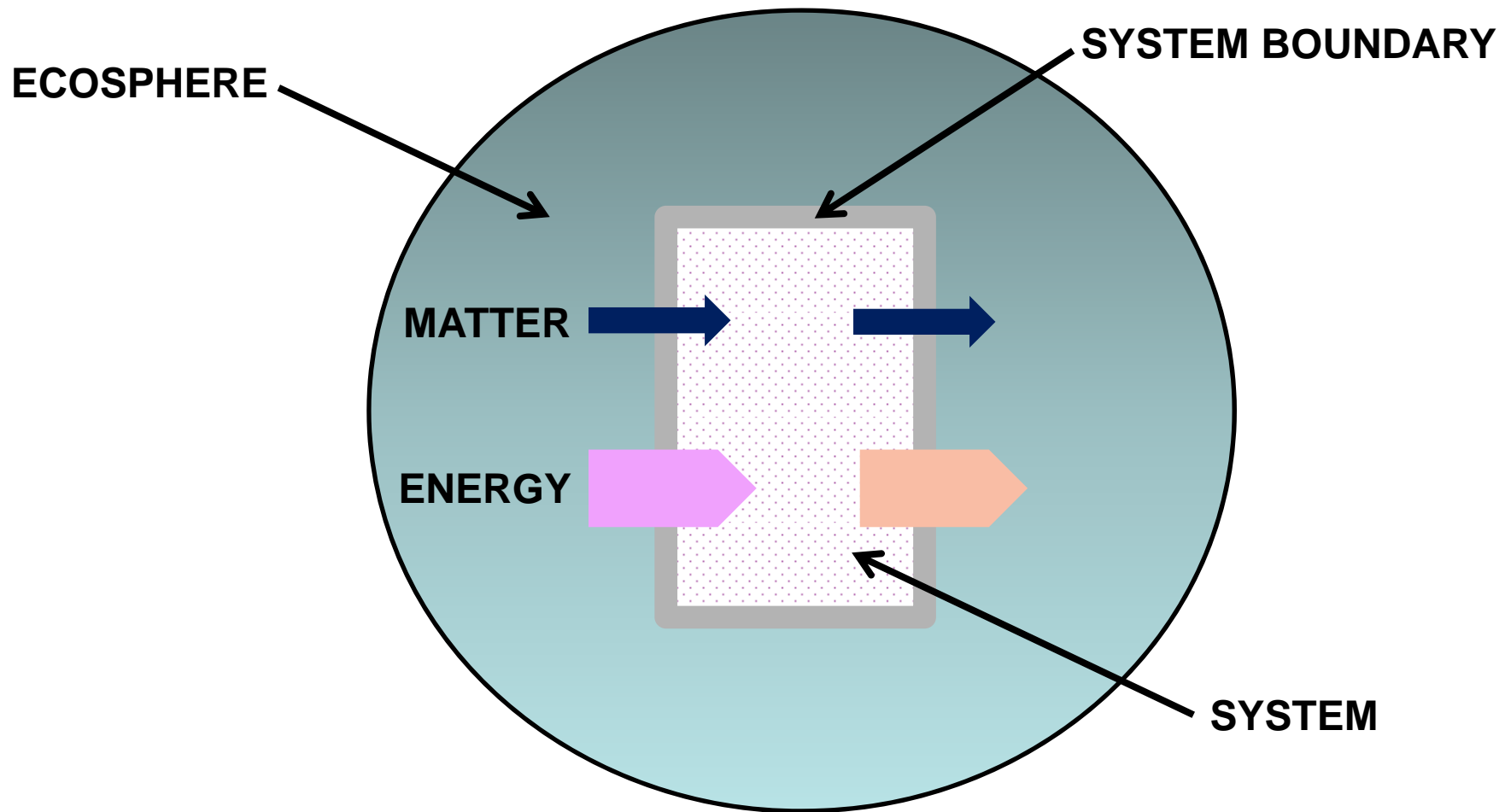
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# Principle of an LCA



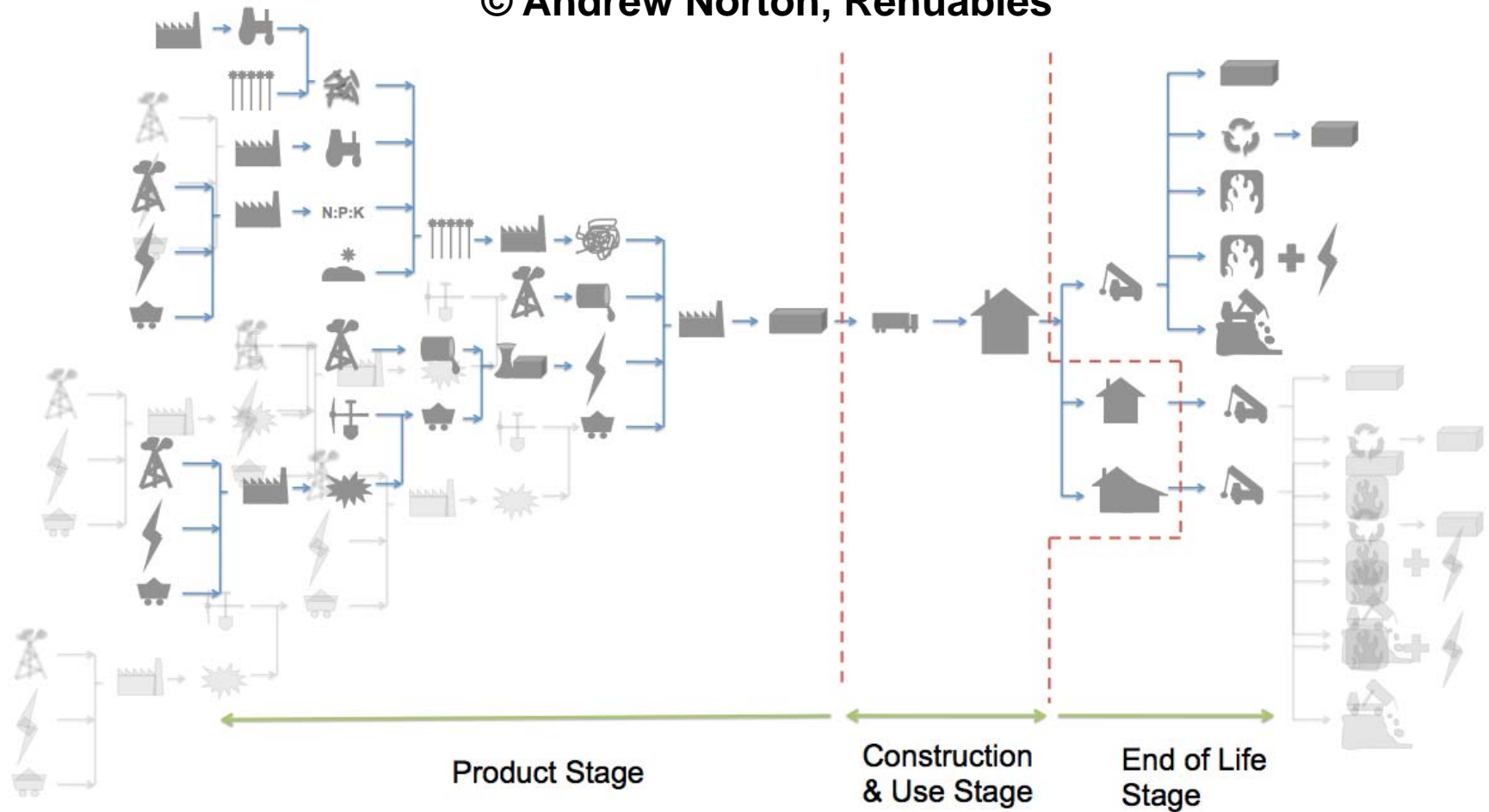
# Methodology of an LCA

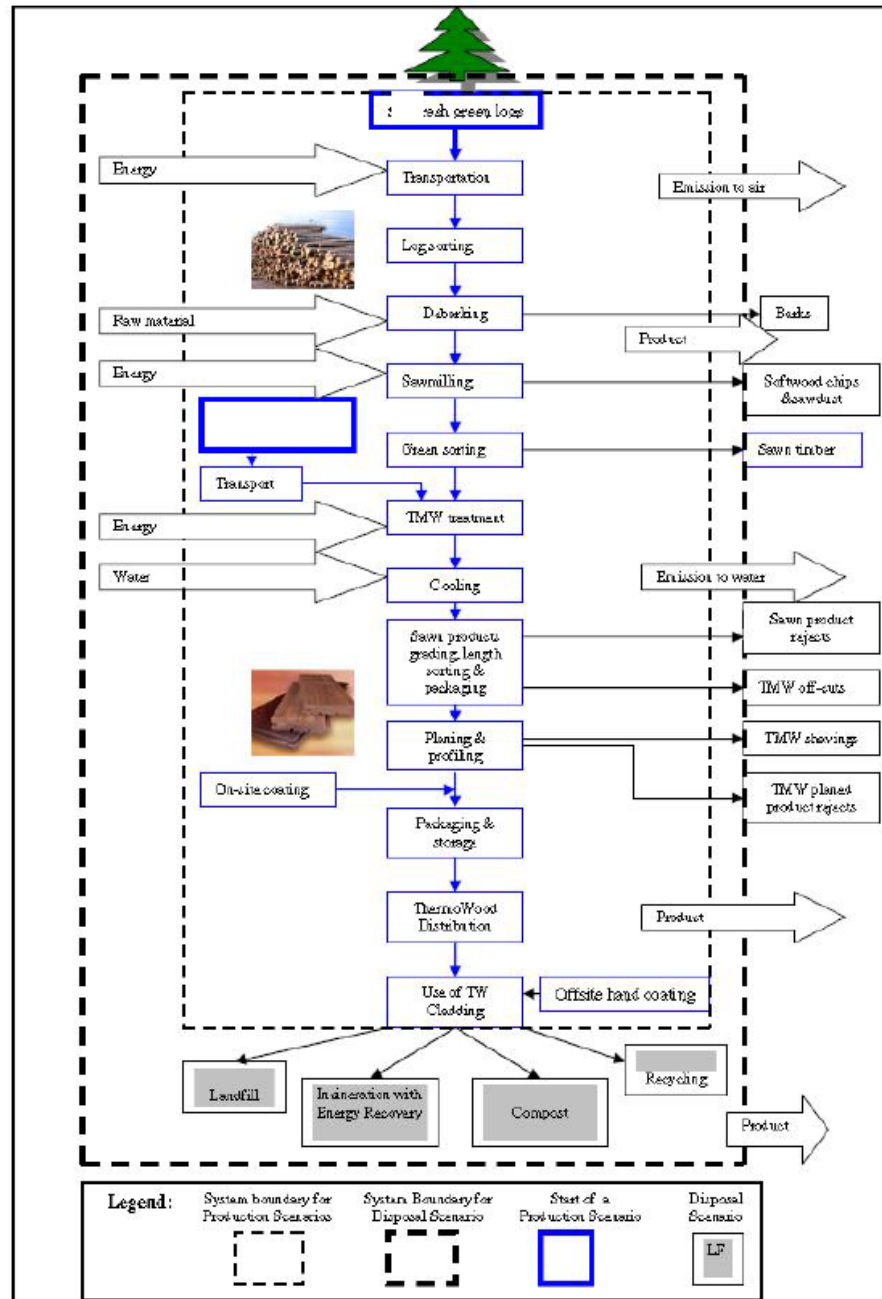
(1) Inventory

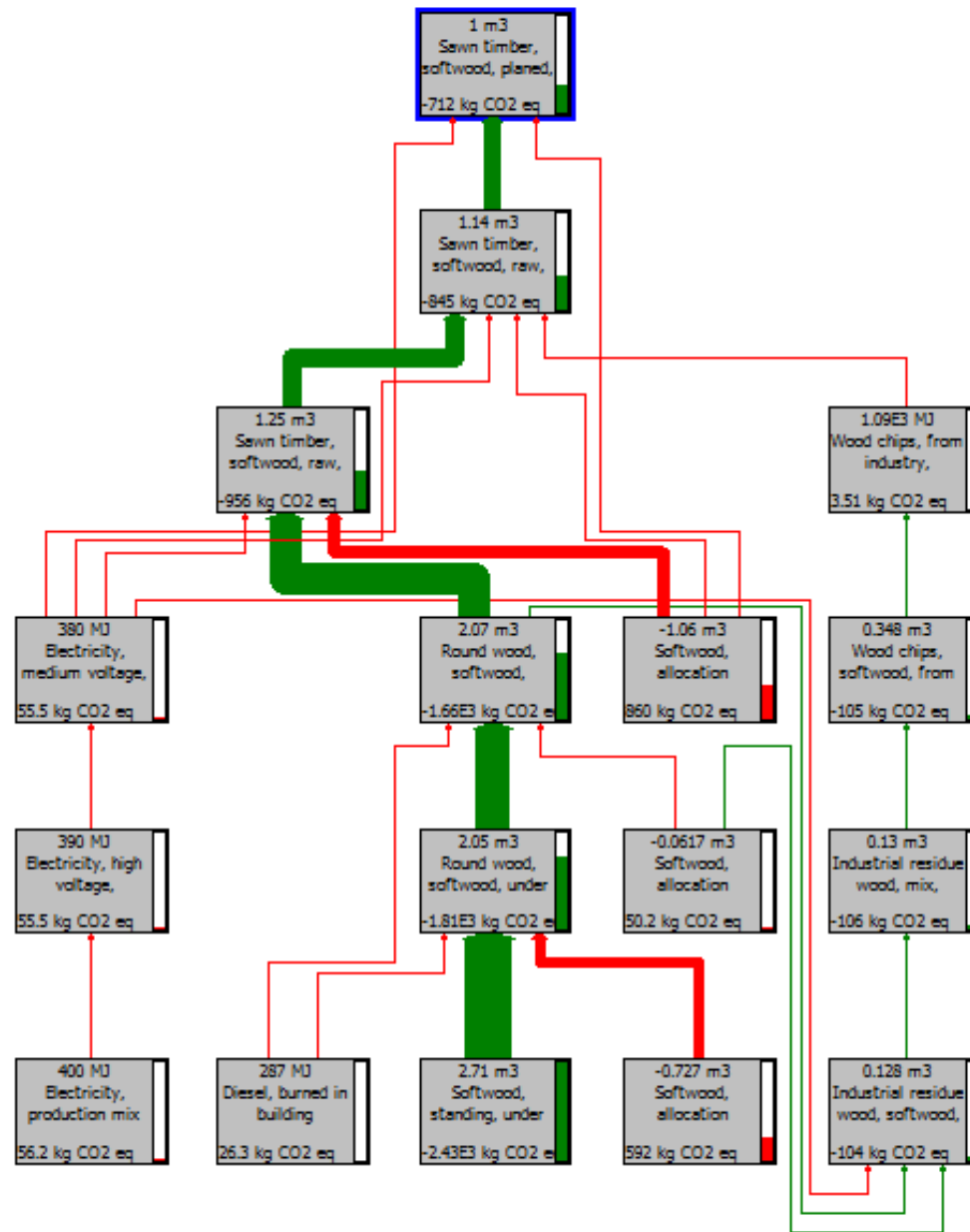
(2) Impact assessment

# Product over time

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# Impact categories

- Midpoint – similar environmental impacts (e.g., global warming potential, ozone layer depletion, freshwater eutrophication, etc.)
- Endpoint – evaluation of damage (e.g., species per year, disability adjusted life expectancy, etc.)



# EPD

Environmental Product Declaration

Type III environmental declaration

ISO 14025



# Product Category Rules (PCR)



Product Category Rules for preparing an environmental product declaration (EPD) for Product Group:

#### Building Envelope Thermal Insulation

The product group includes all commercially available building envelope thermal insulation regardless of material type, including but not limited to: cellular glass, mineral fibre insulation (slag or glass), cellulose-based insulation, textile-based insulation, and polymer-based insulation.

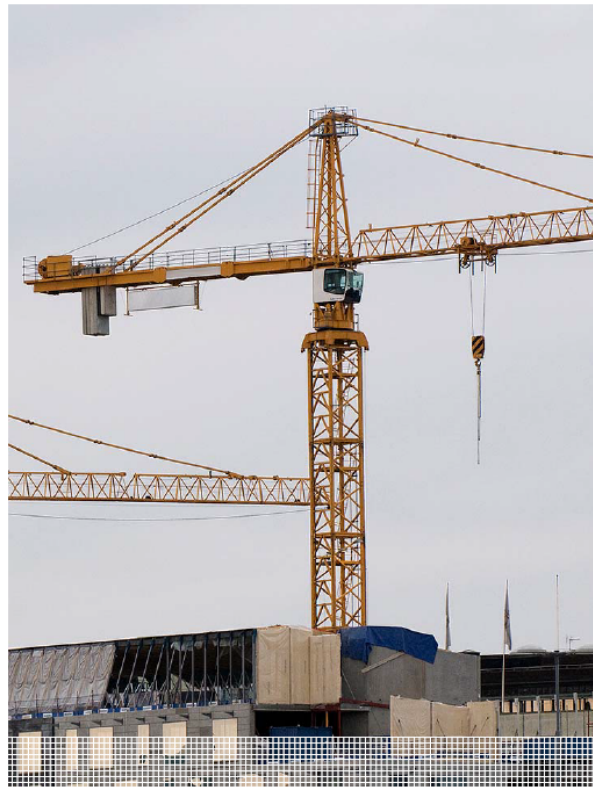
VERSION 1.2 October 29, 2013  
VALID THROUGH September 12, 2016

PRODUCT CATEGORY

PRODUCT CATEGORY RULES  
DATE 2013-03-16  
CONSTRUCTION PRODUCTS AND  
CPC 54 CONSTRUCTION SERVICES



2012-01  
VERSION 1.2



## PCR Guidance-Texts for Building-Related Products and Services

From the range of Environmental Product Declarations of Institute Construction and Environment e.V. (IBU)

### Part B: Requirements on the EPD for Wood based panels

[www.bau-umwelt.com](http://www.bau-umwelt.com)



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DOORS

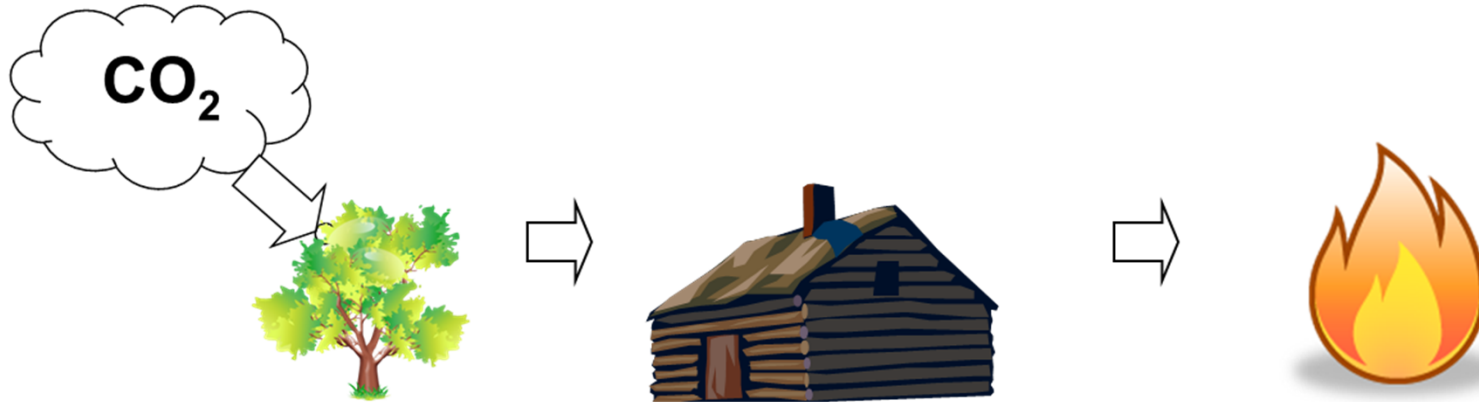
WINDOWS

EN 15804

ISO 14025

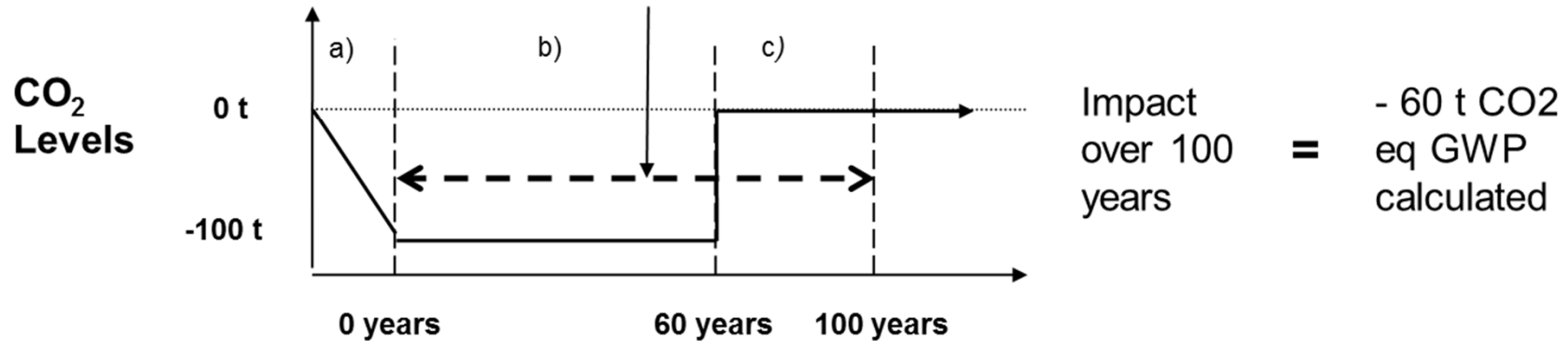
ISO 14040, 14044

# Dealing with biogenic carbon



Calculation period

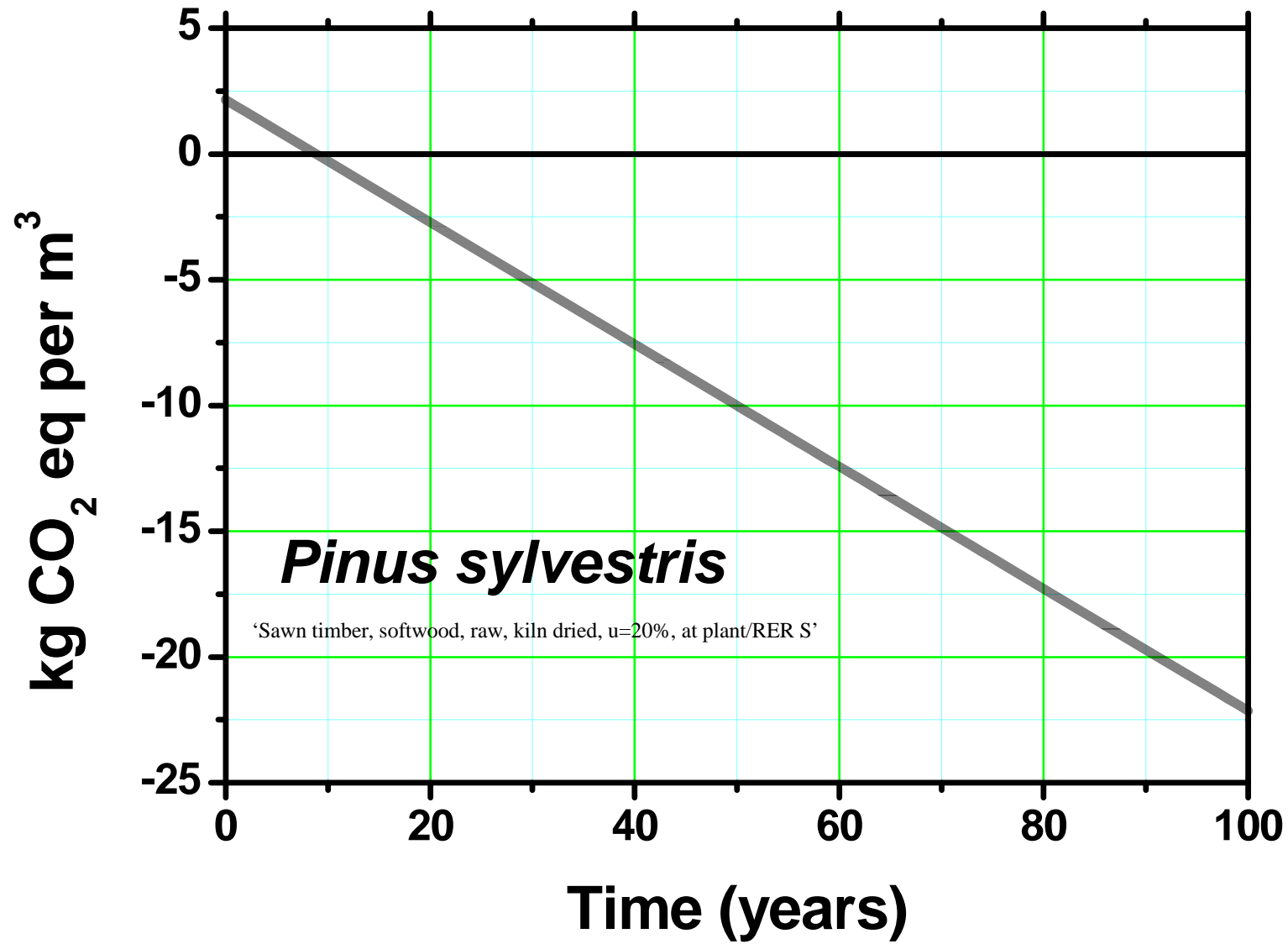
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# Biogenic carbon

- PAS 2050 (2011)
- International Reference Life Cycle Data (ILCD) Handbook, EC JRC (Institute for Environment and Sustainability)
- Pr-EN 16485 'Round and sawn timber - Environmental Product Declarations - Product category rules for wood and wood-based products for use in construction'



# Standards

ISO 14025:2006 Environmental labels and declarations – Type III environmental declarations – principles and procedures

ISO 14040:2006 Environmental management – life cycle assessment – principles and framework.

ISO 14044:2006 Environmental management – life cycle assessment – requirements and guidelines.

ISO 21930:2007 Sustainability in building construction – Environmental declaration of building products (superseded in Europe by EN 15804).

PAS 2050:2011 Specification for the assessment of the life cycle greenhouse gas emissions of goods and services.

EN 15804 :2012 Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products.



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- LCAs, Carbon footprints, EPDs, Materials and Energy Research and many advisory roles

