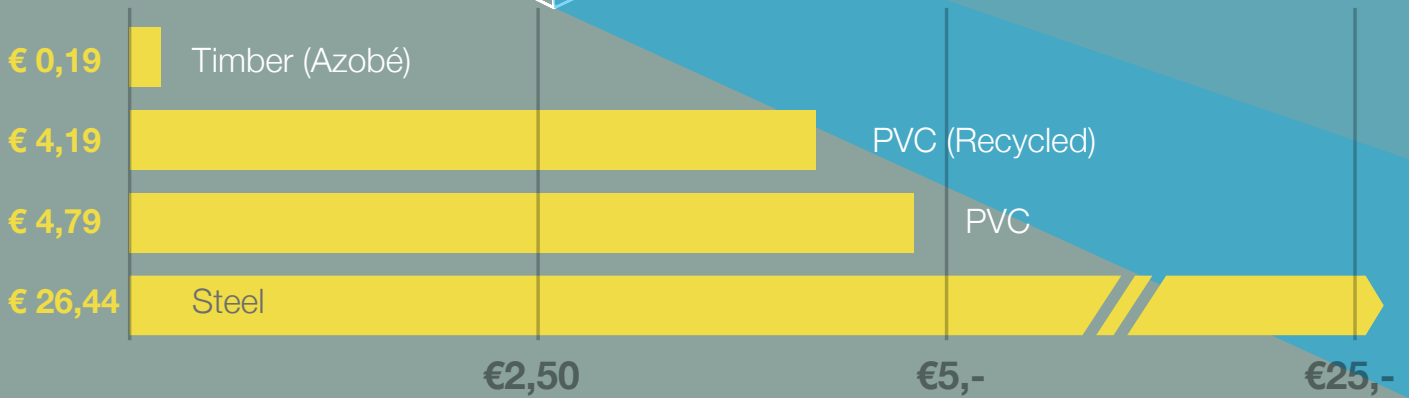
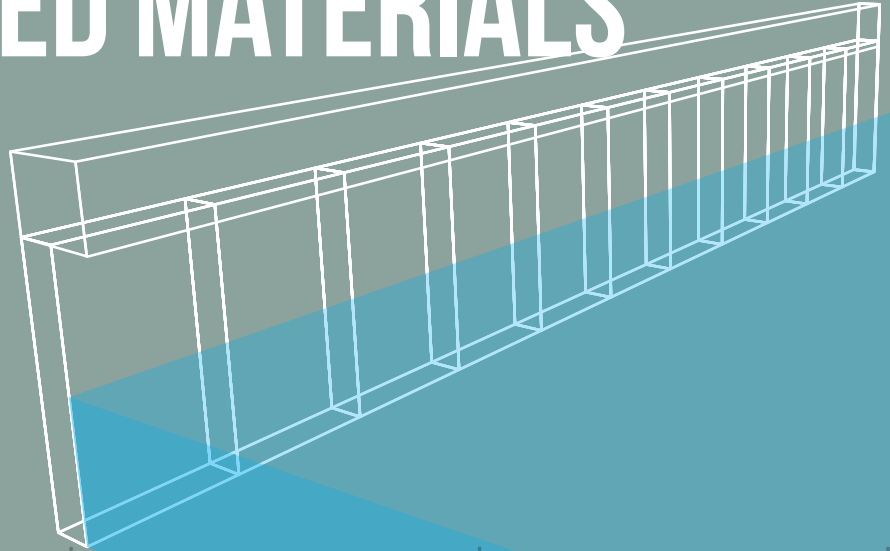


ENVIRONMENTAL IMPACT OF SELECTED MATERIALS

How to make a difference as a civil / hydraulic engineering project manager or consultant



STEEL & PLASTIC

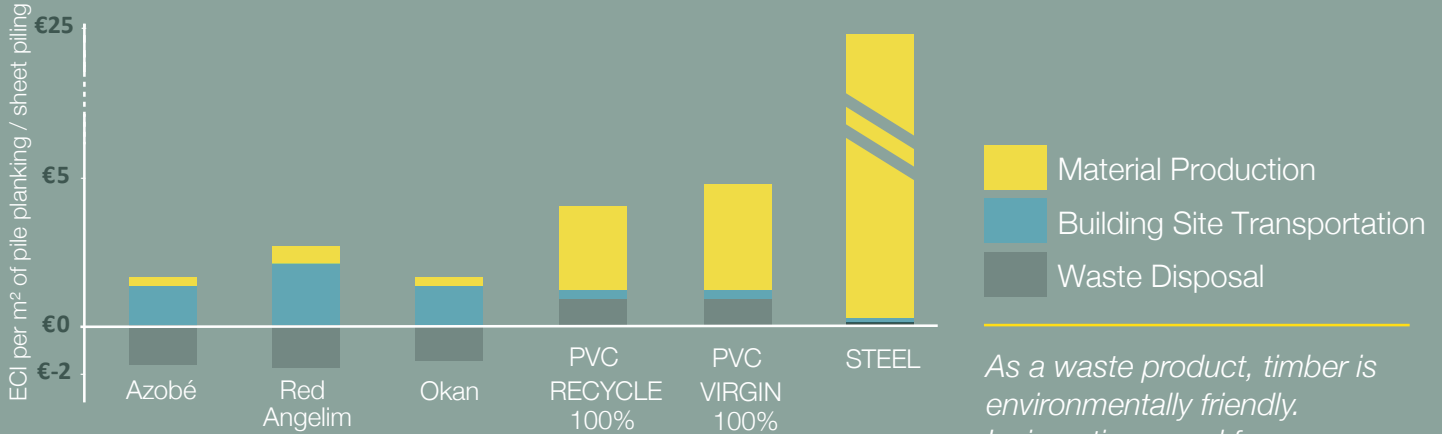
- Climate**
Production generates CO₂ emissions
- Raw Materials**
Depletion of scarce resources

CERTIFIED TIMBER

- Climate**
Production **absorbs** CO₂
- Raw Materials**
Use of renewable resources

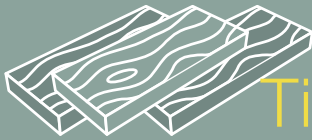


FOOD FOR THOUGHT



As a waste product, timber is environmentally friendly. Incinerating wood for power generation purposes also has environmental benefits compared to burning fossil fuels.

MATERIALS STUDIED



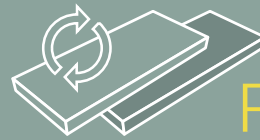
Timber

Three types of tropical hardwood from sustainably managed forests (50 mm thick, 5 m long, timber waling: 150 x 100)



Steel

Cold-rolled PW3030 cross-section



Plastic

GW 460/5.5 Omega plastic (100% virgin and 100% recycled)

ENVIRONMENTAL IMPACTS ASSESSED



Toxicity (soil, freshwater, brackish water, human)



Ozone Layer



Eutrophication



Acidification



Climate (CO₂)



Resource Depletion

Sources:

EY Climate Change & Sustainability Services performed a life cycle assessment of timber pile planking on behalf of VVNH and FSC® Nederland. The LCA consisted of a study of three timbers in accordance with NENISO 14040/14044/14025 standards and an exploratory study comparing timber, steel and plastic. Both studies used the SBK's Bepalingsmethode Milieuprestatie Gebouwen en GWW-werken ('Environmental Performance Determination Methods for Buildings and Civil / Hydraulic Engineering Works')

FSC® F000222

