

BioBuilding

lúdika architektar



BioBuilding: start small, think big.



HÖNNUNAR
SÍÐUR



HÚS









VICARIO

VICARIO





NYK LOGISTICS
& MEGACARRIER

www.nykline.com

ALDA

EIMSKIP

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EIMSKIP

EIMSKIP





1 ha industrial hemp sequesters 9-22 tonnes of CO₂ per year

1 ha woodland sequesters 2-6 tonnes of CO₂ per year



stalk diameter between 1-3 cm

hemp fibres

hemp shiv
approx. 43% of the plant

leaves



plant height
2-4m

section through stalk



hemp shiv

+



water

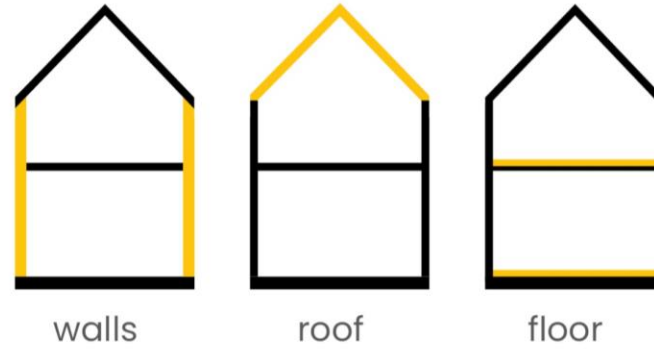
+



binder: lime mixture

=

hempcrete



↑ ↑ ↑
HEMPCRETE APPLICATIONS
↓ ↓ ↓



blocks



cast into formwork



timber cassettes





insulating



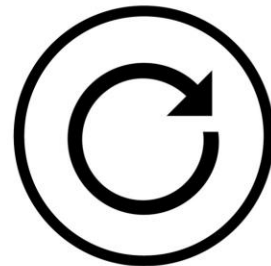
vapour permeable



mould resistant



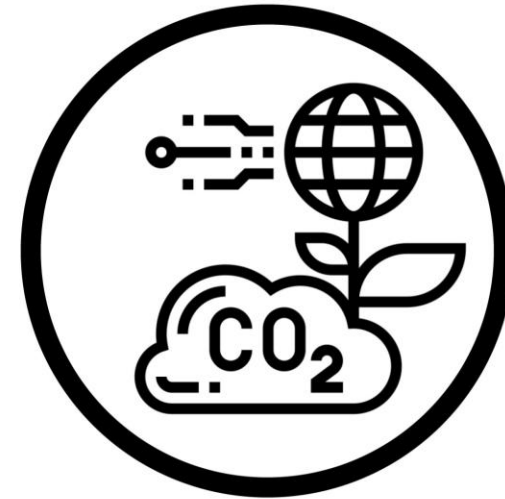
fire resistant



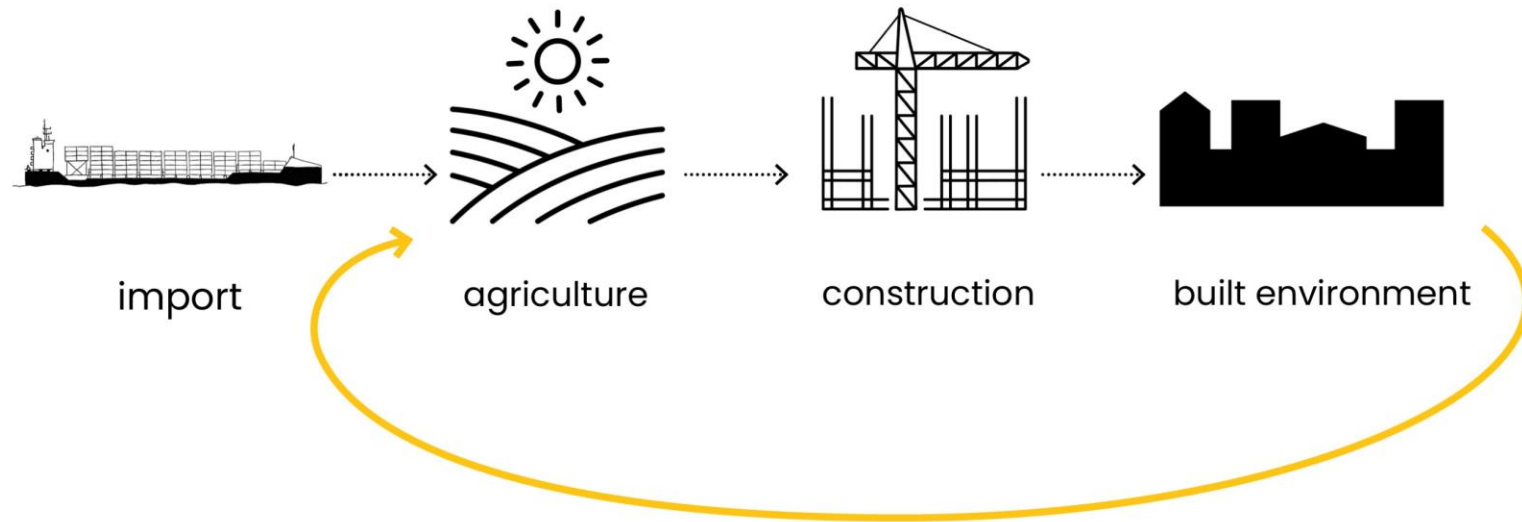
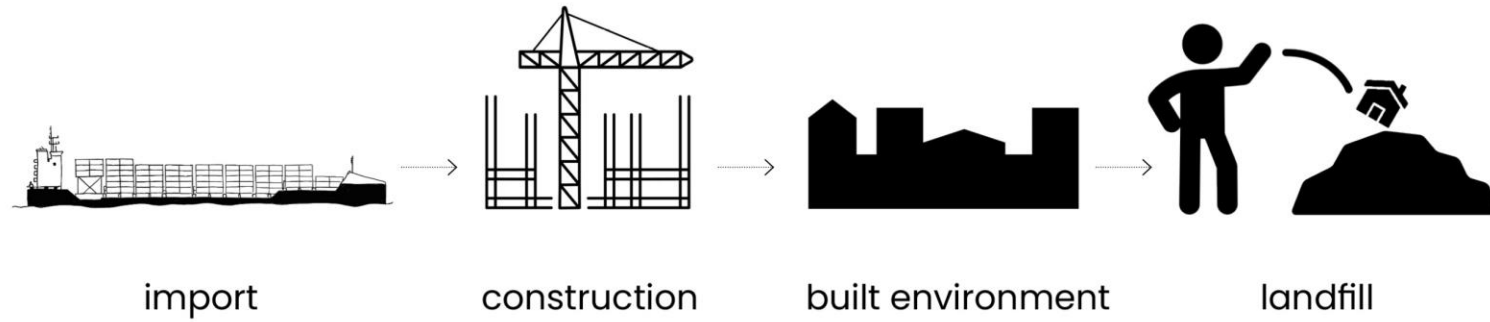
circular economy



acoustic



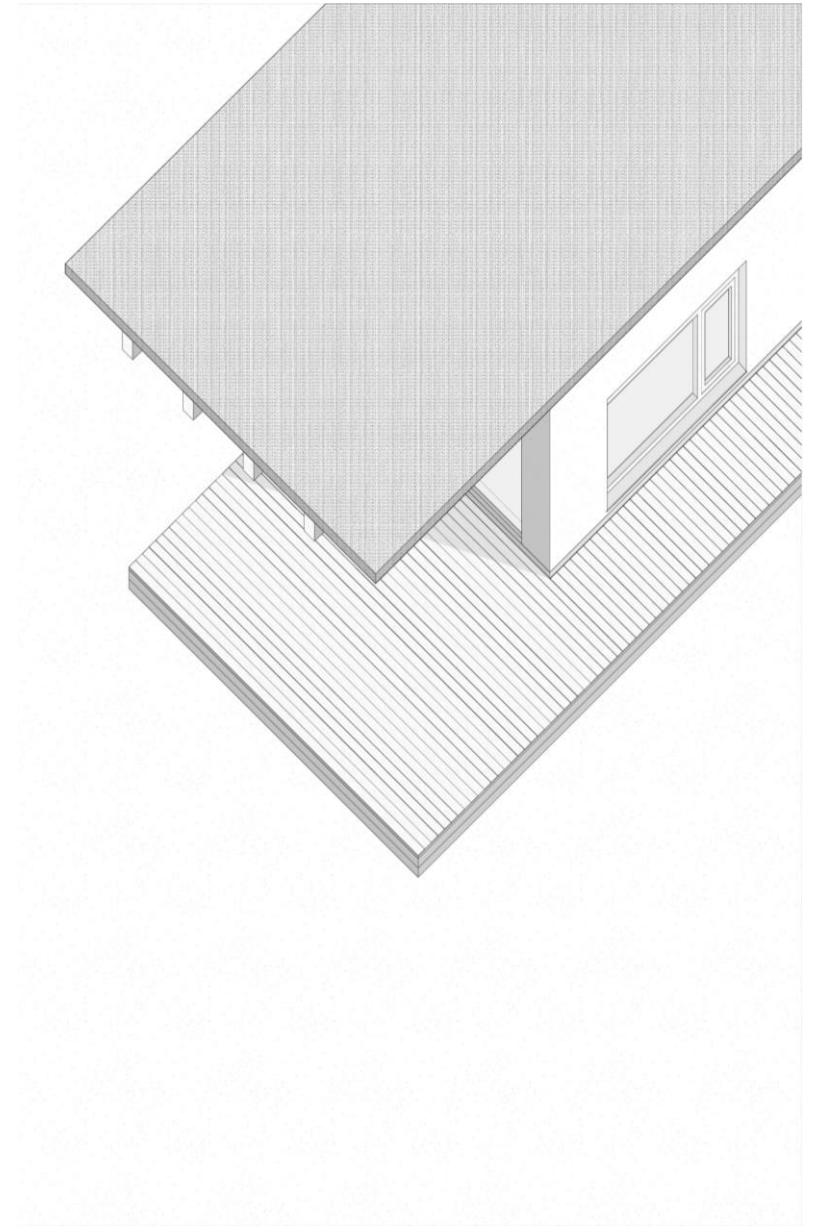
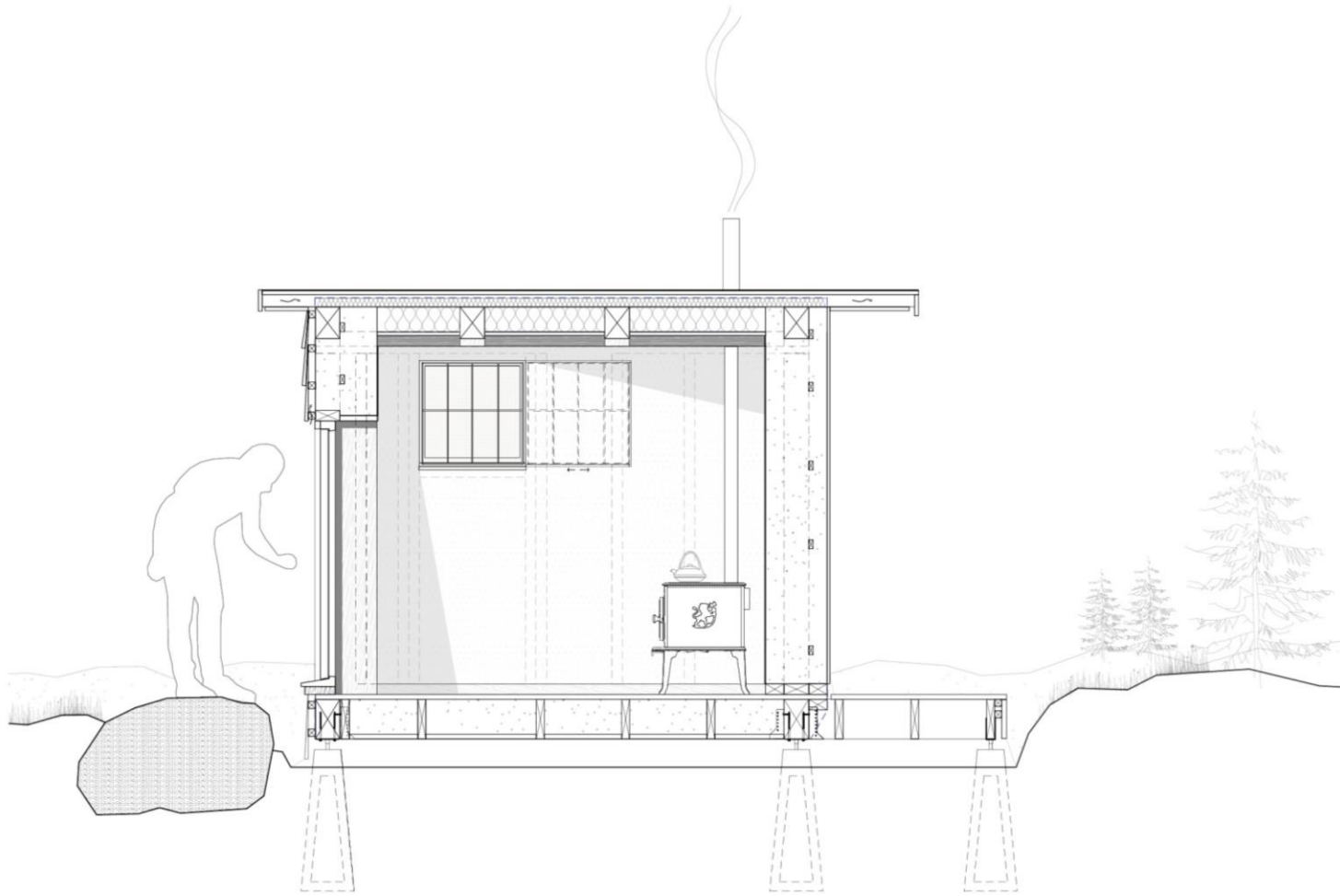
SEQUESTERS CO₂

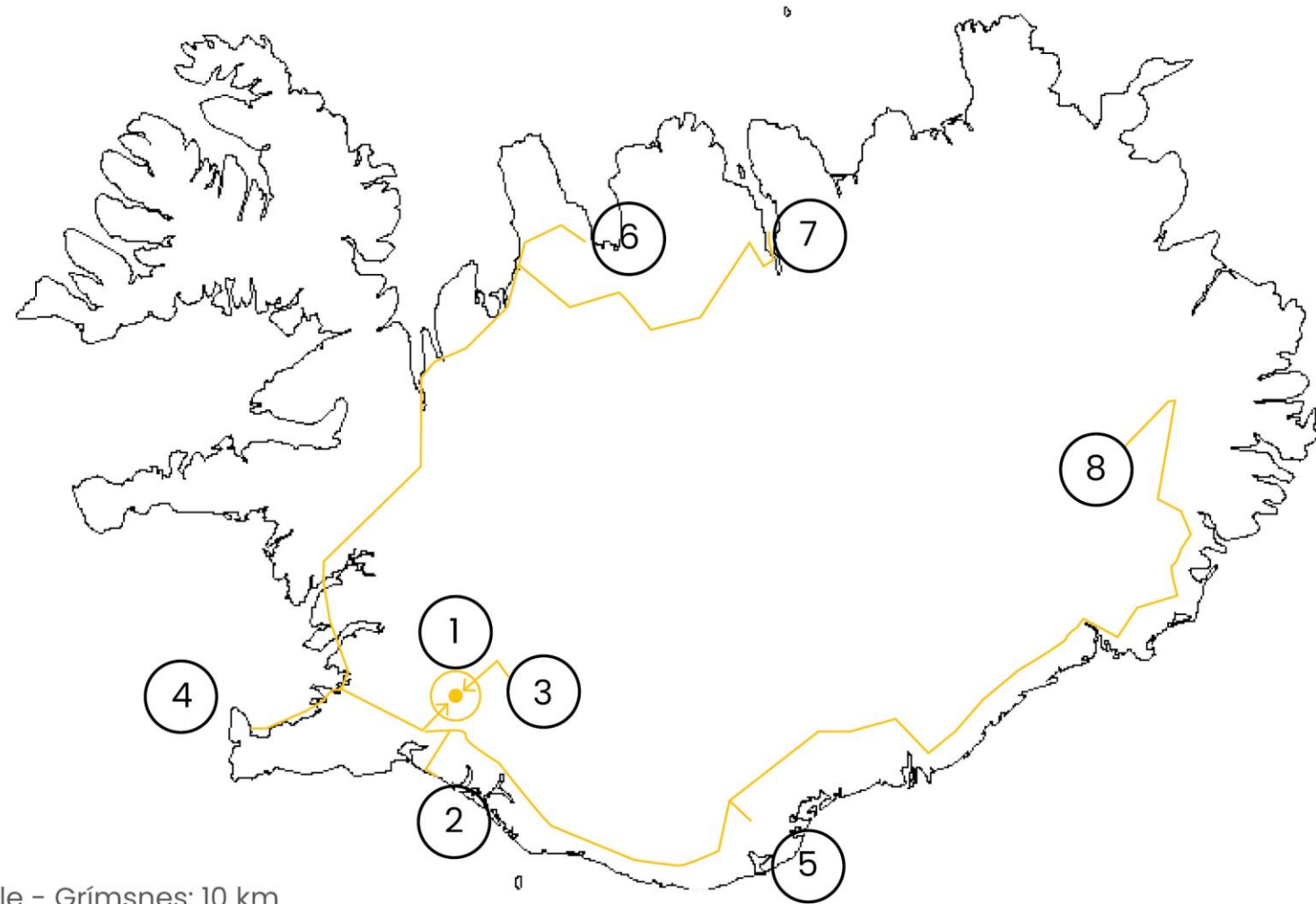






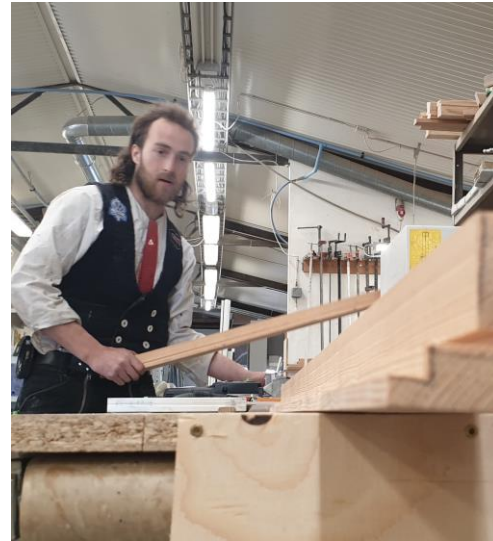
1. External wall performance
2. Temperature and humidity content
3. Air tightness
4. External finishes
5. Weathering and durability
6. Drying time
7. LCA





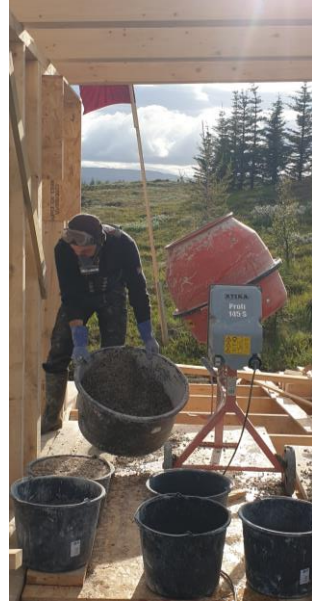
1. Volcanic rubble - Grímsnes: 10 km
2. Seaweed- Sólfangari: 40 km
3. Glulam - Límtré Vírnet Fluðir: 41 km
4. Footings - Íslandshús Reykjanes: 115 km
5. Hemp - Sandhóll South Iceland: 215 km
6. Stonewool - Sauðkraukur: 351 km
7. Larch shingles - Akureyi: 464 km
8. Poplar structural+cladding timber - Egillstaðir: 620 km























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