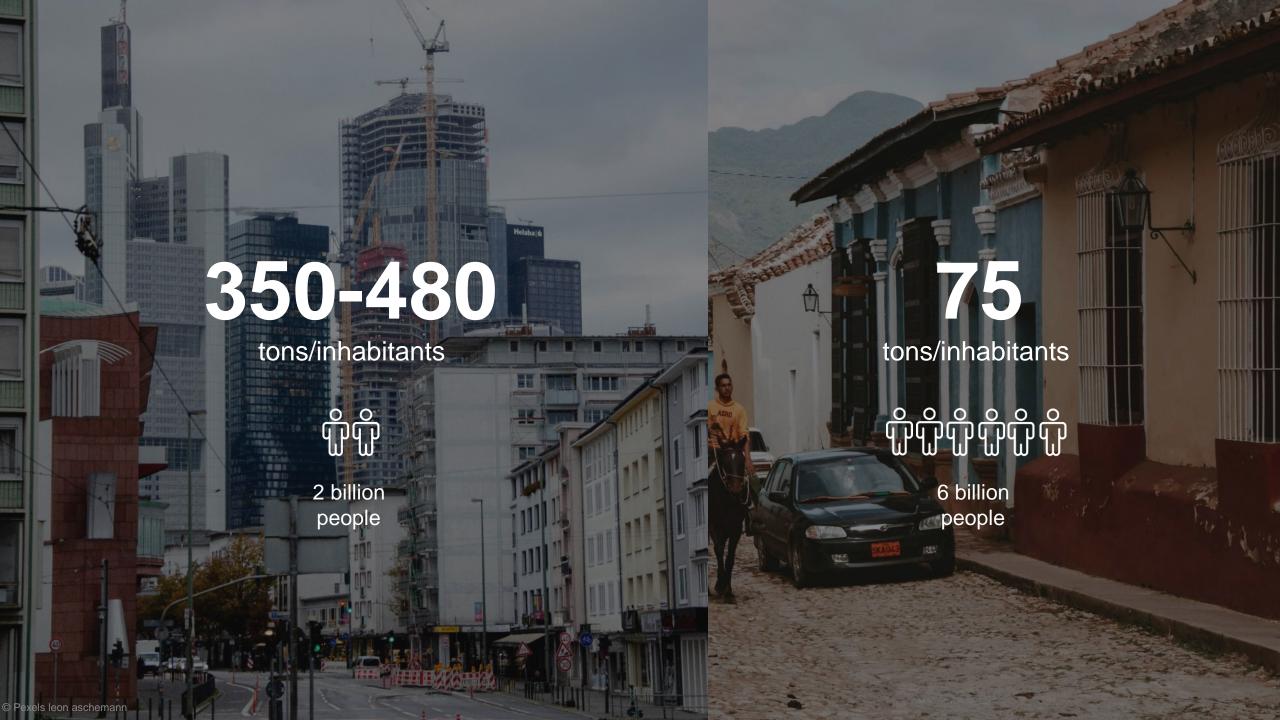
# Circular Construction We live Material Circularity





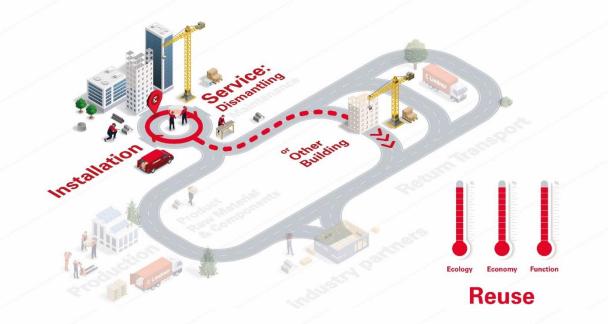


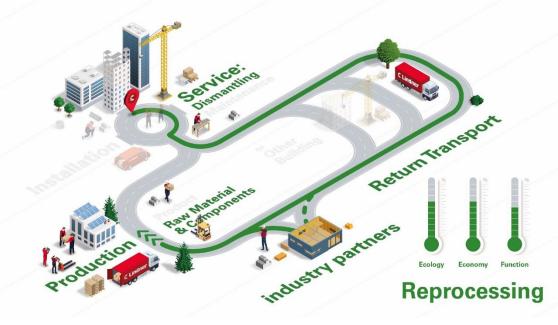
# We think in cycles











## Conserve

- After professional installation, the original product is used and maintained in the location for the longest possible period of time.
- The product is given optimum appreciation in this process.
- The conservation of the functional quality is guaranteed by services in form of maintenance or repair.





#### **Conserve in practice**

Circular product design metal ceilings LMD aurum

- Long-lasting design with high-quality materials to keep building products in (initial) use for as long as possible
- LMD ceiling systems can be dismantled non-destructively
   >> almost no irreversible connections such as bonding etc.



## **Conserve in practice**

Metal ceilings LMD aurum C2C® Certified Gold

 Production with closed water cycles and share of renewable energy over 50%

 Low-emission material components (far below limit values in AgBB measurements)

High recycling rate of all components

 Easy to inspect, non-destructive dismantling and almost completely recyclable

 Life cycle assessment in accordance with ISO 14040/44



# Reuse

 The primary product is dismantled and directly reused without any refurbishing.

 The product can be used either in the same or in a different building.





### **Reuse in practice**

#### Siemens Erlangen

- Removal of old floor slabs (built in 1972) in Erlangen
- Temporary storage and minor repairs to the surface covering
- Reinstallation of the tiles in the new
   Siemensstadt Square in Berlin
- Lindner as a permanent partner for recyclable finishing systems with support right from the planning phase



## Refurbish

- The original product's components are returned to production after disassembly.
- The components of the product are reprocessed and serve either the original or a new purpose.





#### Refurbish in practice

ReUsed product LOOP in HTC Villach, Austria

- Selection of fit-out systems for the rental spaces that are as modular and demountable as possible
- Use of refurbished raised access floor panels to implement the circular economy
- Saving over 70% CO<sub>2</sub> by choosing
   1,600 m<sup>2</sup> of LOOP prime floor panels



#### Refurbish in practice

ERGO Group AG – administration building, Munich

 Redesign and conversion of the atrium as part of the revitalization of the administration building

"Refresh" instead of replacing the existing wall panels

 Dismantling, sanding and repainting of the individual panels



# Reprocessing

 The individual components of the product are separated and reused as material in the manufacturing process.

 Left-over materials from production, reconstruction, construction sites or from industry partners are dissolved and used as raw substance for the manufacture of our products.

 Materials that cannot be recycled by ourselves end up in an external material or substance cycle.





### **Material reprocessing**

of building materials containing gypsum

- In the production process: cuttings, milling dust, sediments
- Construction site remains: cuttings/residual materials
- From deconstruction materials: deconstruction waste on the site
- → State supported project
   (German Federal Ministry for the Environment and Nature Conservation)
- → Gypsum panels can be processed up to 100% by low-energy thermal reactivation
- → Patented method



# Our goals

#### 51,350 tons

of recyclable gypsum are to be returned to the production cycle annually in the future.

#### 44,000 tons

of setting gypsum can be recovered from gypsum waste

#### 5,270 tons of CO<sub>2</sub>e

reduction through 53% process energy savings

#### 50,000 tons

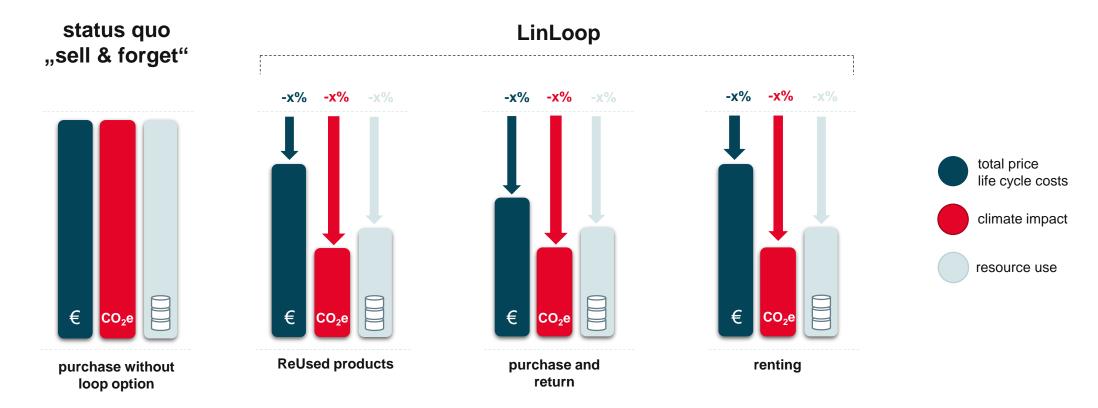
Primary raw materials are saved and thus less gypsum waste is deposited in landfills





# LinLoop

## rethinking interior fitout





## LinLoop | ReUsed products

#### refurbish for ReUse

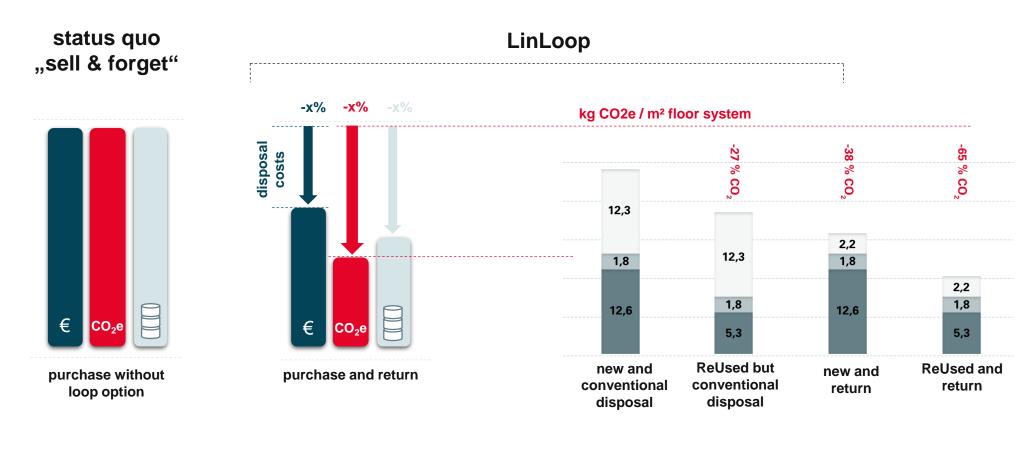
#### keyfacts about ReUsed products using the example of a reconditioned raised floor (LOOP prime)

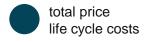
- Refurbished raised floors on five sides
- 595 mm x 595 mm
- Same and assured physical building properties as new products (statics, fire and sound insulation)
- 70% improved CO2 than new products
- High-quality materials and products that remain in cycle

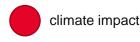


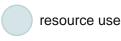
# LinLoop | purchase and return

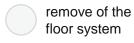
take care – give back



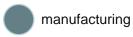














## LinLoop | purchase and return

## take care – give back

#### keyfacts about purchase with return:

- full purchase price customer is full owner, optional maintenance contract
- obligation on both sides to return / buy back of defined contractual items
- return after 10 to 30 years, announcement 12 months in advance
- residual value is agreed individually when the contract is concluded
  - >> project dependent calculation
  - >> usually covers the dismantling costs
- functionality assumed (not contaminated, misused, etc.)



## LinLoop | purchase and return

## take care – give back

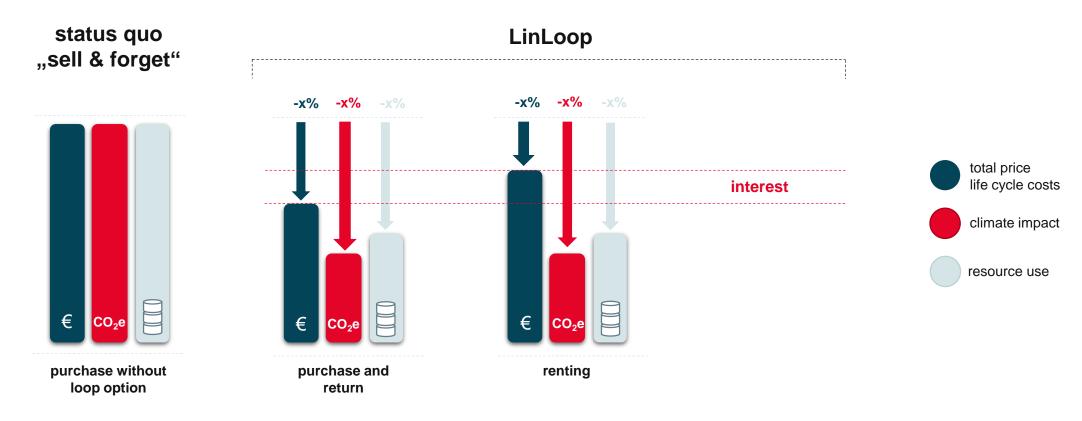
#### Add.vantage for our costumers

- sustainable investment / green finance
- active contribution to climate and resource protection and CO<sub>2</sub> savings
- no disposal costs and risk
- resale profit
- high-quality materials and products that remain in loop
- all-round carefree package: advice, planning, installation and dismantling everything from a single source!



# LinLoop | renting

## renting is the new buying





# LinLoop | renting

### renting is the new buying

#### keyfacts about rental models

- reversible expansion products
- 5 to 10 years: 40% to 90% of the standard using period of 12 years
- notice period: 12 months (with partial takeover of remaining rent)
- no purchase: can only be extended as a follow-up contract
- deposit: 6 months' rent
- insurance by costumer
- modifications possible, rent adjustment at cost



## LinLoop | renting

## renting is the new buying

#### Add.vantage for our costumers

- sustainable investment / green finance
- active contribution to climate and resource protection and CO<sub>2</sub> savings
- No disposal costs / risk
- savings on dismantling costs
- pay as you earn: no pre-financing improves liquidity and equity ratio and shortens the balance sheet
- high-quality materials and products that remain in loop
- all-round carefree package: advice, planning, installation and dismantling everything from a single source!



# Floor systems

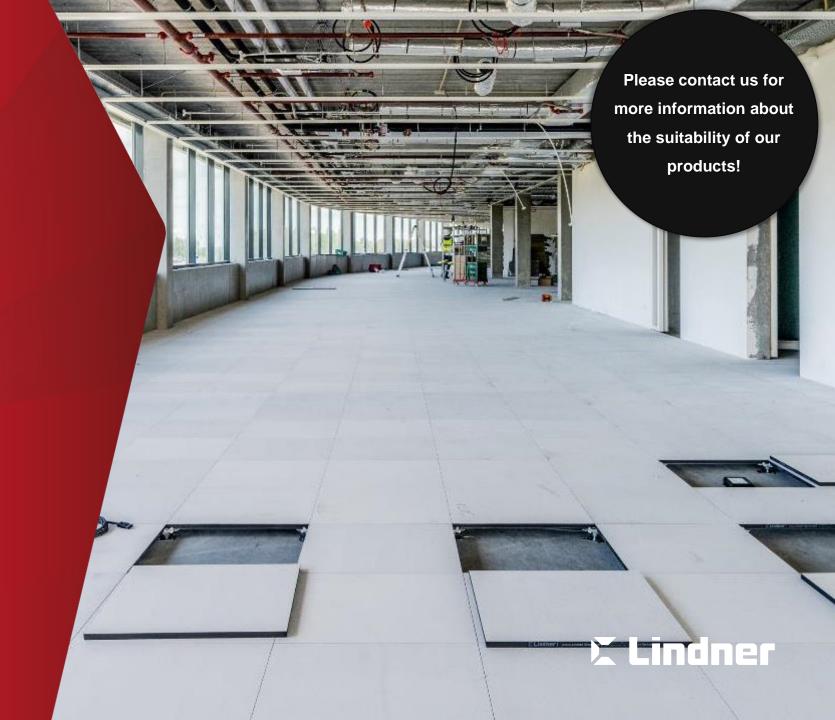
appropriate for renting and purchase and return

#### raised floor systems

- NORTEC aurum | power
- LOOP aurum | prime
- LIGNA power
- RELIFE
- ALUVENT
- PRODATA

#### Coverings

- parquet planks magnet system | click system
- textile Fabromont | Interface | Desso
- ceramics Minero/Eterna | CLASSEN



# Ceiling systems

appropriate for renting and purchase and return

metal ceilings

LMD-B 100 | LMD-B 110 | LMD-E 200 | LMD-E 210 | LMD-E 213 | LMD-E 214 | LMD-DS 315 | LMD-DS 320 | LMD-K 420 | LMD-St 213 | LMD-St 214 | LMD-St 215

heated and chilled ceilings

Plafotherm® B 100 | Plafotherm® B 110 | Plafotherm® E 200 | Plafotherm® E 210

Plafotherm® E 213 | Plafotherm® E 214 | Plafotherm® DS 315 | Plafotherm® DS 320

Plafotherm® St 213 | Plafotherm® St 312 | Plafotherm® DS Tabs 78 / 125

Hybrid ventilation elements | convection elements

baffle ceilings

LMD-L 601 | LMD-L 607 | LMD-L 608 | LMD-L 609 | LMD-L LAOLA Plafotherm® -L 608 | Plafotherm® -L 609

sound absorber MUTE+®



Partitions and room-in-room systems

appropriate for renting and purchase and return

glass partitions

Life Pure 620 | Life Clear | Life Stereo 125 | Life Contour 126

room-in-room systems

FLEXShell | Cube solo | Cube duo | CAS Rooms

doors for system partition walls

each incl. frame: ATB 42 | ATB 68 | ATB 100 | GTB 10 | GTB 13

Plus Acoustic Metal



# Evidence for Circular products

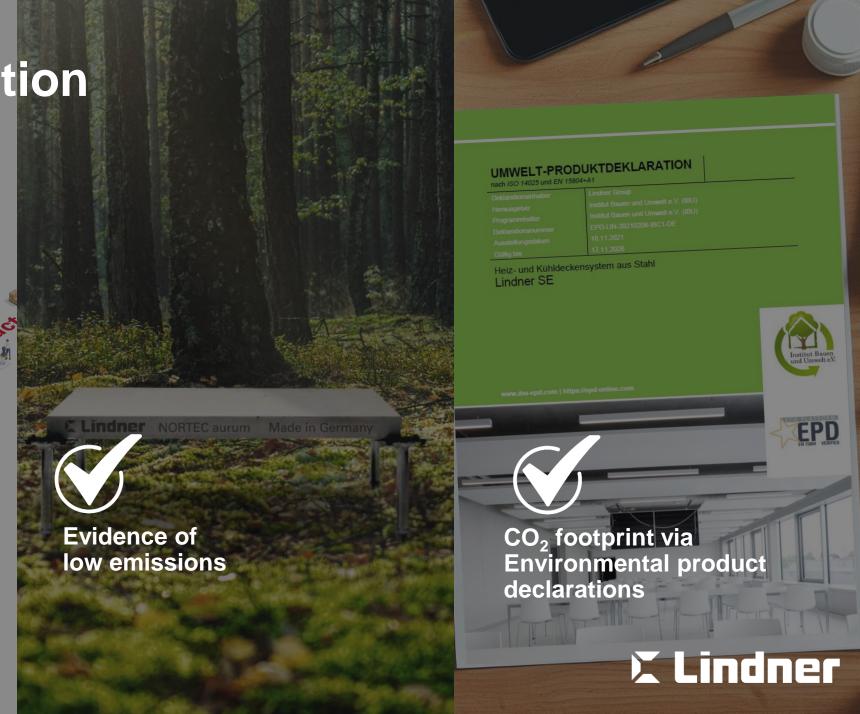


# **Product information**

For circular products



Cradle to Cradle® Certified



# **EU Taxonomy and ESG**Facing challenges together





EU Taxonomy: "the green credit card"

Classification system for sustainable economic activities and green investments



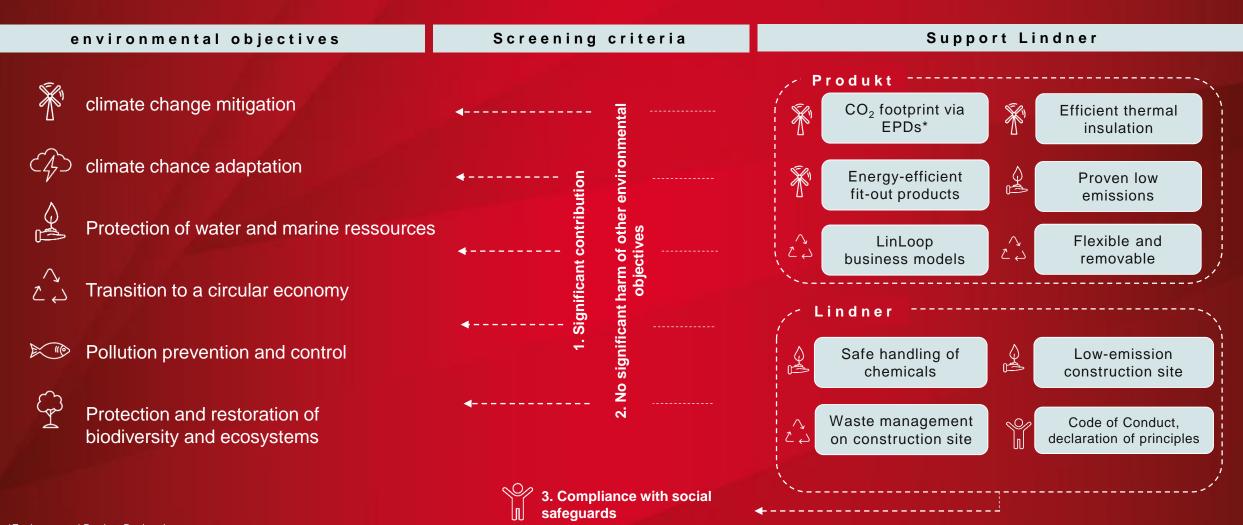
## **EU Taxonomy**

- Our products and services are designed to meet the technical assessment criteria, DNSH specifications\* and minimum social protection requirements are met.
- If the client/developer is aiming for a project in accordance with the EU Taxonomy Regulation, we supply products with the appropriate certificates.



# **EU Taxonomy**

How does Lindner support the implementation of the EU taxonomy in new buildings and renovations?





#### **ESG** verification

The EU taxonomy requires defined ESG verifications for buildings.

 These can be confirmed with a separate ESG verification.

 Here too, our products make a positive contribution to the ESG verification of your building by third parties.





## **ESG** reporting

 In the future, more and more companies will be required to publish sustainability reports.

 Lindner delivers ecological and social added value as a company and through our products.

 As a part of your value chain, we can make an important contribution to your sustainability reporting.



# **ESG** reporting

Lindner's add.vantage for your non-financial reporting (CSRD)

Services requirements of the ESG reporting standards Add.vantage Add.vantage through circular **Environment [E]** Social [S] **Governance** [G] Add.vantage through General business models LinLoop employee-oriented office ESRS S1 ESRS<sub>1</sub> ESRS S1 **ESRS E1** (DE/AT) planning: **Business conduct** own workforce climate change Workplace Innovation ESRS 2 ESRS S2 Active contribution to climate workers in the value Product **ESRS E2** protection through CO2 savings pollution Add.vantage through Conservation of resources material health: ESRS S3 ESRS E3 No disposal (elimination of costs) affected communities water and marine Healthier fit-out systems and risk) with verified low emission ESRS S4 values (VOC, formaldehyde) Positive financial impact ESRS S4 ESRS E4 biodiversity consumers and Cradle to Cradle certified® end users Add.vantage through energy products **ESRS E5** efficency: ressource use and circular economy · Energy savings through efficient thermal insulation

Lindner's contribution

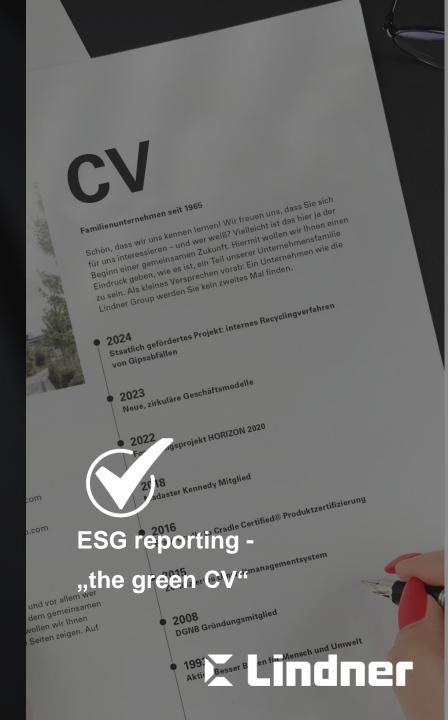
**ESG und EU Taxonomy** 

Facing challenges together

**EUTaxonomy** -"the green credit card"



"the green ID"



How to improve a perfect product?

# Reuse it!



## Add...

## knowlegde / evidence / information

- Cradle to Cradle Certified® products program https://www.lindner-group.com/en/expertise/green-building/cradle-to-cradle-certifiedr/
- Building certification https://www.lindner-group.com/en/expertise/green-building/building-certification-systems/
- Environmental Product Declarations https://ibu-epd.com/en/published-epds/
- Self declarations https://www.lindner-group.com/en/productfinder/
- Sustainability
  https://www.lindner-group.com/en/company/sustainability/
- References https://www.lindner-group.com/en/references/

#### **Further information:**

Cradle to Cradle Certified® is a registered trademark of the Cradle to Cradle Products Innovation Institute.



# **Lindner**