

Standardization and how to calculate

Documenting environmental performance and impact

Short intro to session 3

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EPD's in InfraLCA

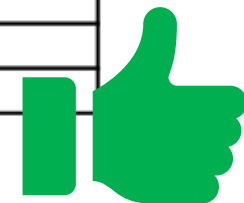
- Environmental Product Declaration
- PDF-document – table values with emissionfactors
- Standardised
- Third-part verified
- Already a requirement in many tendering procedures



Eco platform



Miljøkategori	Enhed	Miljøpåvirkning pr. funktionel enhed			
		A1-A5	B1-B7	C1-C4	D
Global opvarmning	kg CO ₂ -eq				
Ozon udtømning	kg CFC-11-eq				
Forsuring	kg SO ₂ -eq				
Eutrofiering	kg (PO ₄) ³⁻¹ -eq				
Fotokemisk ozondannelse	kg ethene-eq				
Udtynding af abiotiske ikke -fossile ressourcer	kg Sb-eq				
Udtynding af abiotiske ikke -fossile ressourcer	MJ				
... og mange flere	...				





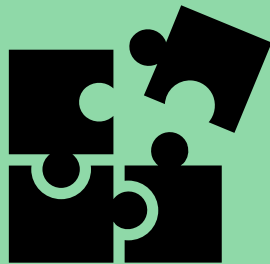
LCA in the DRD – focus



Low complexity



User friendly



Fit to current systems



Transparent

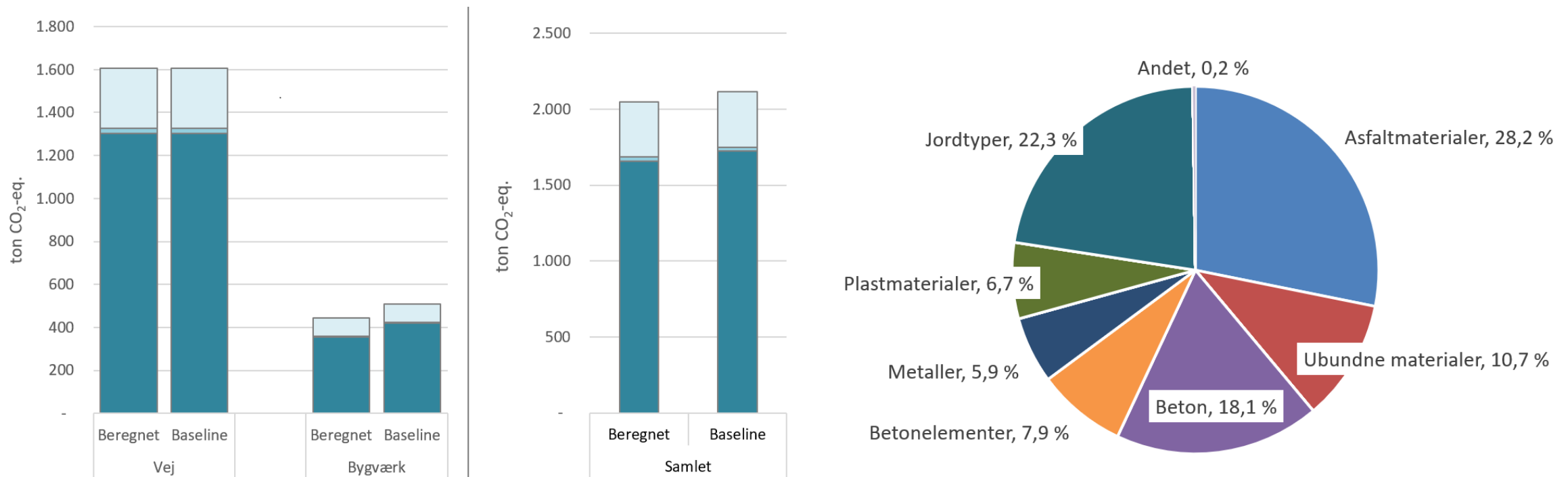


One common
model



InfraLCA in the DRD

A very good example of (nordic) collaboration





InfraLCA in VD

- All phases can be included but we have to start somewhere
 - **A1-A3 production of materials and products**
 - A4 material transport
 - A5 installation
 - B4 material replacement

Production stage				Construction process stage				Use stage				End of life stage				Resource recovery stage	
Raw materials	Transport	Manufacturing	Transport	Construction	Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D	
X	X	X	X	MND	MND	MND	MND	X	MND	MND	MND	MND	MND	MND	MND	MND	



New EPD standard (EN15804:19)

Production stage				Construction process stage				Use stage				End of life stage				Resource recovery stage
Raw materials	Transport	Manufacturing	Transport	Construction Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction	Transport	Waste processing	Disposal	Reuse- Recovery- Recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	MND	MND	MND	MND	X	MND	MND	MND	MND	MND	MND	MND	MND

Production stage				Construction process stage				Use stage				End of life stage				Resource recovery stage
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A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	x	x	x	x	x

- Now includes end-of-life and recycling potential
- What does that mean? More data, updating data, and more



New EPD standard

Parameter	Enhed
GWP	[kg CO ₂ -eq.]
ODP	[kg CFC11 eq.]
AP	[kg SO ₂ -eq.]
EP	[kg PO ₄ ³⁻ -eq.]
POCP	[kg ethene-eq.]
ADPE	[kg Sb-eq.]
ADPF	[MJ]

➔

Parameter	Enhed
GWP-total	[kg CO ₂ eq.]
GWP-fossil	[kg CO ₂ eq.]
GWP-bio	[kg CO ₂ eq.]
GWP-luluc	[kg CO ₂ eq.]
ODP	[kg CFC 11 eq.]
AP	[mol H ⁺ eq.]
EP-fw	[kg PO ₄ eq.]
EP-mar	[kg N eq.]
EP-ter	[mol N eq.]
POCP	[kg NMVOC eq.]
ADP-mm ¹	[kg Sb eq.]
ADP-fos ¹	[MJ]
WDP ¹	[m ³]

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- What does that mean? More data, updating data, and more



EPD-timeline

- Is there a bottleneck to perform analyses for climate impact?
- Does availability of data enable analyses to the desired degree?

