

An aerial photograph of a large cable-stayed bridge under construction. The bridge deck is partially completed and supported by a tall central pylon and several stay cables. Two large tower cranes are visible on either side of the bridge. The background shows a dense forest and a body of water.

Affärsdrivet klimatreduceringsarbete – Några goda exempel från utlandet

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CO₂-Performance Ladder (CO2PL), Nederländerna

- Ett certifieringssystem för företag
- Används i upphandling för järnvägsprojekt
- Används av beställare: offentliga myndigheter och kommuner
- Förslagen från olika entreprenörer rangordnas utifrån pris och företagets interna arbete med klimatgasreducering
- Entreprenörer och leverantörer minskar sina CO₂-utsläpp med cirka 1,3 % per år

Rabattsystem för minskning av klimatgasutsläpp i CO₂-PerformanceLadder

Level of Certification	Discount
Level 1	1%
Level 2	2%
Level 3	4%
Level 4	7%
Level 5	10%

Ett certifieringssystem, som används vid offentlig upphandling i Nederländerna

Level	1	2	3	4	5
A Insight	The company has partial insight into its energy consumption.	The company has an insight into its energy consumption.	The company has converted its energy consumption into CO ₂ emissions.	The company reports its carbon footprint in accordance with ISO 14064-1 for Scope 1, 2 & 3.	The company requires that its A-suppliers have a Scope 1 and 2 emissions calculation in accordance with ISO 14064-1.
B Reduction	The company investigates opportunities for reducing energy consumption.	The company has an energy reduction target, described in qualitative terms.	The company has quantitative CO ₂ reduction objectives for its own organisation.	The company has quantitative CO ₂ reduction objectives for Scope 1, 2 & 3 CO ₂ emissions.	The company reports on a structural and quantitative basis the results of the CO ₂ reduction objectives for Scope 1, 2 & 3.
C Transparency	The company communicates its energy reduction policy on an <i>ad hoc</i> basis.	The company communicates its energy policy internally (to a minimal degree) and possibly externally.	The company communicates about its carbon footprint and reduction objectives both internally and externally.	The company maintains dialogue with government bodies and NGOs about its CO ₂ reduction objectives and strategy	The company is publicly committed to a government or NGO CO ₂ emission reduction programme.
D Participation	The company is aware of sector and/or supply chain initiatives.	The company is a passive participant in initiatives aimed at reducing CO ₂ emissions in or outside the sector.	The company is an active participant in initiatives aimed at reducing CO ₂ emissions in or outside the sector.	The company initiates development projects that facilitate reductions in CO ₂ emissions in the sector.	The company takes an active part in setting up a sector-wide CO ₂ emission reduction programme in collaboration with the government or an NGO.

Audit checklist



CO₂-PERFORMANCE LADDER®

Working together to cut CO₂

ID	Aspect	Requirements	Score guidelines	Maximum score
1A	The company / tenderer has partial insight into energy consumption.	1.A.1. Identification and analysis of energy flows of the company and the projects for which a CO ₂ -related award advantage has been obtained, have taken place.	Fully (10) No (0)	10
		1.A.2. All energy flows of the company and the projects for which a CO ₂ -related award advantage has been obtained, have been demonstrably recorded.	Yes, clearly documented (10) One energy flow (5) No (0)	10
		1.A.3. This list is regularly followed up and kept up to date.	Yes, annually (5) No (0)	5
Minimum requirements for achieving level 1A minimum score = 20				25
2A	The company / tenderer has an insight into its own energy consumption.	2.A.1. All energy flows of the company and the projects for which a CO ₂ -related award advantage has been obtained, have been quantitatively recorded.	Yes, clearly documented (15) One energy flow (5) No (0)	15
		2.A.2. The list is complete, and is regularly - and demonstrably - followed up and kept up to date.	Yes, at least annually (5) No (0)	5
		2.A.3. The company has an up-to-date energy audit report for the company and the projects for which a CO ₂ -related award advantage has been obtained.	Yes (5) Yes, but only partially (e.g. a particular process or unit) (2) No (0)	5
Minimum requirements for achieving level 2A minimum score = 20				25
3A	The company / tenderer has converted its own energy consumption into CO ₂ emissions.	3.A.1. The company has a detailed and up-to-date emissions inventory for its scope 1 & 2 CO ₂ emissions in accordance with ISO 14064-1 for the company and the projects for which a CO ₂ -related award advantage has been obtained.	Yes (20) No (0)	20
		3.A.2. The 3.A.1 emissions inventory has been verified by a certifying organization to at least a limited degree of certainty.	Yes, annually (5) No (0)	5
Minimum requirements for achieving level 3A minimum score = 20				25

DuboCalc för hållbar upphandling av infrastrukturprojekt, Nederländerna

- Används av Rijkswaterstaat (myndighet för projektering, byggande, drift och underhåll av vägar och vattenleder)
- En programvara baserad på LCA- metodiken som beräknar miljöpåverkan från infrastrukturprojekt och sätter pris på den kommande miljöpåverkan (skuggpriser dvs priserna på varor som inte går att återanvända/återvinna, vilket bidrar till sämre miljö kvalitet).
- Används i upphandling
- Kräver en viss kompetens från användaren för att hantera programvaran.

Milieu-effectcategorie	Equivalent eenheid	Schaduwprijs [€ / kg equivalent]	
Uitputting abiotische grondstoffen (exclusief fossiele energiedragers) – ADP	Sb eq	€ 0,16	Grondstoffen
Uitputting fossiele energiedragers – ADP	Sb eq	€ 0,16	
Klimaatsverandering – GWP 100 j.	CO ₂ eq	€ 0,05	
Aantasting ozonlaag – ODP	CFK-11 eq	€ 30	
Fotochemische oxidantvorming – POCP	C ₂ H ₂ eq	€ 2	
Verzuring – AP	SO ₂ eq	€ 4	
Vermesting – EP	PO ₄ eq	€ 9	
Humane toxiciteit – HTP	1,4-DCB eq	€ 0,09	Emissies
Zoetwater aquatische ecotoxiciteit – FAETP	1,4-DCB eq	€ 0,03	
Zoetwaterbodem ecotoxiciteit - FSETP	1,4-DCB eq	€ 0,02	
Mariene aquatische ecotoxiciteit - MAETP	1,4-DCB eq	€ 0,0001	
Mariene bodem ecotoxiciteit - MSETP	1,4-DCB eq	€ 0,0003	
Terrestrische ecotoxiciteit – TETP	1,4-DCB eq	€ 0,06	

1-puntsscore (schaduwprijs)

Green star, Australien

TO CLAIM THE INNOVATION CHALLENGE IN BUILDING PROJECTS

- To claim this Innovation Challenge your project team must:
 - Bevisa att andelen av produkter och byggmaterial, som har använts har tredjeparts verifierade miljövarudeklarationer (EPD)
 - Bevisa att andelen av sådana produkter och material med EPD är övervägande utifrån hela projekts kostnad
 - EPD ska vara framtagna i enlighet med internationella standarder

BREEAM Norway

Examples of use of EPDs at Bellona-huset (ca 2011)

Bellonahuset							
	Referansebygg	Tonn CO2	Prosjektert (generiske utslipp)	Tonn CO2	As built	Tonn Co2	
	Generiske data		Generiske data		Generiske data / EPD		
Yttervegger	Kun teglfasader	58	Puss- og glassfasade	32	Pussfasade StoVentec og glassfasade (generisk)	32	
	Alu.vinduer	172	Trevinduer	35	Trevinduer, Lian, ingen EPD (generisk)	35	
	Gips	281	Gips	281	Gips, Norgips standard gipsplate 12,5mm, EPD	19	
	Isol.	16	Isol. mm	16	Rockwool, EPD	9	
	Betong	84	Betong	84	Norbetong Fabrikkbetong B35M35, EPD	50	
	Trestendere	5	Trestendere	4	Trestendere (generisk)	4	
	Trestender	1	Trestender	1	Isotrestender Moelven, EPD	1,6	
	Sum yttervegg	616	Sum yttervegg	453	Sum yttervegg	150,6	
	Innervegger	Kun gips innervegger	11	Gipsvegger og systemvegger m glassfronter	3	Gipsvegger og systemvegger m glassfronter (generisk)	3
		Betong	40	Betong	40	Norbetong Fabrikkbetong B35M35 fra EPD	25
Sum innervegg		51	Sum innervegg	43	Sum innervegg	28	
Dekker	Gipshimling	105	Min.ull himling Linoleumsbelegg	45	Ecophone, master A	45	
	Vinylbelegg	0,115	Betong	0,095	Forbo linoleum	0,095	
	Betong	280	Armering	280	Norbetong Fabrikkbetong B35M35, EPD	179	
	Armering	98	Øvrig	98	Dok 100% skrapjern fra Celsa	98	
	Øvrig	5	Sum dekker	5	Øvrig	5	
	Sum dekker	488		428	Sum dekker	327	
Tak	PVC-takbelegg	30	Asfalt takbelegg	3	ICOpal Base og topp, Miljødeklarasjon (svensk)	8	
	Isolasjon	18	Isolasjon	18	Støpeplate Rockwool 40 cm, EPD	9	
	Treterrasse	4	Treterrasse	4	Kebonyterrasse	4	
	Sum tak	99	Sum tak	72	Sum tak	21	
Grunn	Betong	114	Betong	114	Norbetong Fabrikkbetong B35M35, EPD	67	
	Armering	20	Armering	20	Dok 100% skrapjern fra Celsa	20	
		134		134		87	
Dører, trapper		97		97		97	
Div		88		88		88	
Totalutslipp		1547		1289		799	

Source: Aspelin Ramm / NGBC 2011