

Think[®]

AMERICAS, APAC





About this product

Think's® award-winning design re-imagined what an office chair could do, and how sustainable it could be. It's simple, weight activated controls allow anyone, anywhere to get comfortable and get to work.

One chair is required to meet the functional unit of seating one individual for a 10-year period.

Date of Issue: July 16, 2025 Date of Expiration: July 16, 2030

About this document

This declaration describes the Life Cycle Assessment of the Think office chair produced for the Americas and APAC markets by Steelcase Inc. in Mexico, China, India, and Malaysia. The assessment is performed according to the ISO standards 14040 (2006), 14044 (2006) and 14025 (2006), and BIFMA PCR for Seating: UNCPC 3811 (2020) to generate an EPD for business-to-business communication.

Learn more

- Explore Steelcase environmental philosophy and commitments overview.
- Find product details and sustainability certifications on Americas product page and Asia product page steelcase.com.
- See our product warranty.
- Contact epd@steelcase.com for any EPD-related questions or inquiries.

ASSESSMENT OVERVIEW

EPD commissioner	Steelcase® Inc
Corporate Address	901 44th Street SE Grand Rapids, Michigan 49508-7594 United States
Product group	Seating
Product name	Think
Product intended use	Office chair
Product reference service life	10 years
Reference standards	ISO 14025, ISO 14040, ISO 14044
EPD scope	Cradle to grave
EPD number	EPD11087
Date of issuance	July 16, 2025
Date of expiration	July 16, 2030
EPD type	Product specific
EPD Product Coverage	Think task chair/stool for the Americas and APAC markets, including the following codes: 465A000, 465A300, 465B300
Intended audience	Business to business
Year of reported manufacturer data	2023
Functional unit	One unit of seating to seat one individual for a reference service life of 10 years
Applicable markets/regions	Americas, APAC
LCA software and database version	GaBi 10.6.2.9; GaBi database, 2022.2
LCIA methodology and version number	TRACI 2.1
Program administrator	NSF Certification LLC 789 N. Dixboro, Ann Arbor, MI 48105 www.nsf.org
Reference PCR and version number	BIFMA PCR for Seating: UNCPC 3811 (2020)
PCR reviewer	Review Panel Chaired by Dr. Thomas Gloria
EPD reviewer	External review conducted by: June 1. Medicular Jim Mellentine, Thrive ESG This declaration and its Life Cycle Assessment was independently verified in accordance with ISO standards 14040 (2006), 14044 (2006), 14025 (2006), and BIFMA PCR for Seating UNCPC 3811 (2020).
LCA reviewer	External review conducted by: Jack Geibig, jgeibig@ecoform.com
Disclaimer	The product Life Cycle Assessment was conducted in accordance with ISO 14044, and the reference PCR. The PCR on which this EPD was based was written to determine the potential environmental
	impacts of a seating product from cradle to grave. It was not written to support comparative assertions. EPDs based on different PCRs, or different calculation models, may not be comparable. When attempting to compare EPDs or life cycle impacts of products from different companies, the user should be aware of the uncertainty in the final results, due to and not limited to, the practitioner's assumptions, the source of the data used in the study, and the specifics of the product modeled.

ASSESSMENT PARAMETERS

Functional unit

One unit of seating to seat one individual for a reference service life of 10 years. One product required to fulfill the functional unit under ANSI/BIFMA X5.4 2020.

Product scope

One Think task chair, produced in the Americas (product number 465A300), with plastic base, 3D knit on back with standard upholstery on seat, hard casters, 4D arms, lumbar assembly was modeled for this EPD. This office chair configuration is the bestselling of all configurations in this region.

One Think task chair, produced in APAC (product number 465A300), with a plastic base, 3D knit on back with standard upholstery on seat, hard casters, 4D arms, and lumbar assembly was modeled for this EPD. This office chair configuration is the best-selling of all configurations in this region.

One Think stool, produced in APAC (product number 465B000), with an aluminum base, upholstered back and seat, hard casters, 4D arms, lumbar assembly, and a headrest was modeled for this EPD. This stool configuration is considered to have the highest impacts of all configurations produced in APAC region, making this a conservative estimate.





Applicable markets and regions

Manufacturing location

Reynosa, Mexico

465A000, 465A300, 465B000, 465B300 465A000, 465A300, 465B000, 465B300

Dongguan, China Pune, India

Kuala Lumpur, Malaysia

Product SKUs within the variation allowance

APAC

Americas

Assessment goal and scope

The potential environmental impacts of Think and its packaging throughout its entire life cycle - including raw materials extraction, production, transport, use, and end of life - were assessed. In the absence of primary information, the GaBi database was used for secondary data.

The life cycle stages included in this assessment follow the BIFMA PCR for Seating: UNCPC 3811 (2020). Material acquisition and pre-processing (including transportation), production, distribution, use and end-of-life are assessed for the seating product.

Assessment boundary

The Life Cycle Assessment considers the full life cycle of the product as described here, cradle to grave. Life cycle stages included in this assessment follow the BIFMA PCR for Seating: UNCPC 3811 (2020). Life cycle stages and phases are presented according to the PCR for seating.

		Stage	Status
₹	Cradle to inbound gate MATERIALS ACQUISITION	A1. Raw material supply	✓
6 √	Raw material extraction, pre-processing and transportation. Transportation up to the factory gate and internal transport.	A2. Transport	√
7	Gate to gate PRODUCTION PROCESS External and internal manufacturing of products, ancillary materials, parts, packaging.	A3. Manufacturing	✓
		A4. Transport	√
	Gate to grave DISTRIBUTION, USE AND END OF LIFE	A5. Installation	√
		B1. Use	√
		B2. Maintenance/cleaning	√
		B3. Repair	√
.□.		B4. Replacement	✓
		B5. Refurbishment	✓
	Distribution of products, installation, use and end of life.	B6. Operational energy use	√
		B7. Operational water use	√
		C1. Disassembly	√
		C2. Transport	✓
		C3. Waste processing	√
		C4. Disposal	√
	Beyond the boundary	D. Reuse/recovery	

AMERICAS CONFIGURATION RESULTS

The product composition 465A300, packaging composition, recycled content, and recyclability visuals below relate specifically to the task chair made in the Americas region, consisting of a plastic base, 3D knit on back with standard upholstery on seat, hard casters, 4D arms, lumbar assembly.

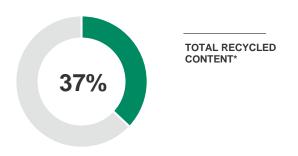
Product composition

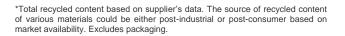
Material	Weight (kg)	Weight (%)	Resource Type
Steel	5.187	32.09%	Recycled, virgin non-renewable
Nylon (PA6 and PA66)	5.698	35.25%	Virgin non- renewable
Aluminum	1.903	11.77%	Recycled, virgin non-renewable
Polypropylene (PP)	1.361	8.42%	Virgin non- renewable
Polyurethane (PU)	0.791	4.89%	Virgin non- renewable
Stainless Steel	0.404	2.50%	Virgin renewable
Polyoxymethy- lene (POM)	0.230	1.43%	Virgin non- renewable
ABS	0.122	0.75%	Virgin non- renewable
Other	0.398	2.46%	Virgin non- renewable
Zamak	0.071	0.44%	Virgin non- renewable
Total	16.165	100%	

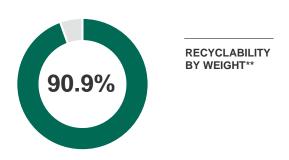
Product packaging composition

Material	Weight (kg)	Weight (%)	Resource Type
Cardboard	2.337	86.65%	Renewable
Paper	0.204	7.56%	Renewable
PE foam	0.099	3.67%	Non-renewable
LDPE	0.017	0.62%	Non-renewable
PP	0.040	1.48%	Renewable
HDPE	0.001	0.02%	Non-renewable
Total	2.698	100.00%	

Product recycled content* and recyclability** summary







**Recyclability: this recyclability rate is the maximum amount of the product that is recyclable, based on the availability of recycling facilities in the specified regions and the ability of the product to be disassembled. Note that, per the requirements of the PCR, the end-f-life results presented in this EPD were calculated using the US EPA's recycling rates within the 2020 Municipal Solid Waste Report for parts that can be disassembled. Excludes packaging.

Results for the task chair configuration 465A300 made in the Americas region, consisting of a plastic base, 3D knit on back with standard upholstery on seat, hard casters, 4D arms, lumbar assembly are shown below.

Life cycle impact by category and stage

Environmental impacts were calculated using the GaBi software platform. Impact results according to the BIFMA PCR have been calculated using TRACI 2.1 characterization factors, as well as LCI indicators for primary energy and water usage. Results presented in this report are for one seat maintained for one individual for 10 years. Additionally, the results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks.

	Life cycle stages					
	Unit	Materials acquisition	Production process	Distribution & Use	End of life	Totals
*Global warming potential excluding biogenic carbon (100 years) Warming of the atmosphere caused by the global release of greenhouse gases.	kg CO2 eq	7.00E+01	1.62E+01	5.29E+00	3.28E+00	9.47E+01
*Acidification Emissions that increase the acidity of the environment due to various chemical reactions and/or biological activity, or by natural circumstances.	kg SO2 eq	2.81E-01	4.60E-02	3.45E-02	6.30E-03	3.68E-01
*Photochemical ozone creation (Smog) Through various chemical reactions, which occur between nitrogen oxides (NOx) and volatile organic compounds (VOCs) in sunlight.	kg O3 eq	3.72E+00	6.01E-01	7.19E-01	1.46E-01	5.18E+00
*Eutrophication Enrichment of an aquatic ecosystem with nutrients (nitrates, phosphates) that accelerate biological productivity and an undesirable accumulation of algal biomass.	kg N eq	1.38E-02	6.29E-03	2.55E-03	1.24E-03	2.39E-02
*Ozone depletion Reduction of the stratospheric ozone layer due to anthropogenic emissions of ozone depleting substances.	kg CFC-11 eq	7.75E-08	1.45E-10	1.58E-14	1.71E-12	7.77E-08
Primary energy demand Energy consumption at the source.	MJ	1.03E+03	2.35E+02	6.51E+01	1.04E+01	1.34E+03
Net freshwater usage Freshwater used and otherwise not recoverable.	kg	2.40E+03	1.14E+02	0.00E+00	1.04E+01	2.52E+03

Methods: TRACI 2.1

Global warming potential summary



APAC STOOL CONFIGURATION RESULTS

The product composition, packaging composition, recycled content, and recyclability visuals below relate specifically to the configuration with the highest impacts made in APAC, consisting of a stool with an aluminum base, upholstered back and seat, hard casters, 4D arms, lumbar assembly, and a headrest.

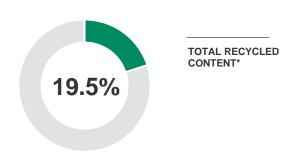
Product composition

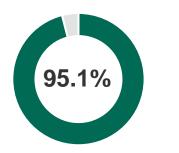
Material	Weight (kg)	Weight (%)	Resource Type
Nylon (PA6 and PA66)	6.844	31.61%	Virgin non- renewable
Steel	5.696	26.31%	Recycled, virgin non-renewable
Aluminum	5.547	25.62%	Recycled, non- renewable
Polypropylene (PP)	1.490	6.88%	Virgin non- renewable
Polyurethane (PU)	0.811	3.75%	Virgin non- renewable
Polyoxymethy- lene (POM)	0.754	3.48%	Virgin non- renewable
Polyester Fabric	0.272	1.26%	Virgin non- renewable
Other	0.235	1.08%	Virgin non- renewable
Total	21.649	100%	

Product packaging composition

Material	Weight (kg)	Weight (%)	Resource Type
Cardboard	3.370	90.72%	Renewable
Polytheylene (PE)	0.294	7.91%	Non-renewable
Paper	0.051	1.36%	Renewable
Total	3.715	100%	

Product recycled content* and recyclability** summary





RECYCLABILITY BY WEIGHT**

^{*}Total recycled content based on supplier's data. The source of recycled content of various materials could be either post-industrial or post-consumer based on market availability. Excludes packaging.

^{**}Recyclability: this recyclability rate is the maximum amount of the product that is recyclable, based on the availability of recycling facilities in the specified regions and the ability of the product to be disassembled. Note that, per the requirements of the PCR, the end-of-life results presented in this EPD were calculated using the US EPA's recycling rates within the 2020 Municipal Solid Waste Report for parts that can be disassembled. Excludes packaging.

Results for the configuration with the highest impacts produced in the APAC consisting of a stool with an aluminum base, upholstered back and seat, hard casters, 4D arms, lumbar assembly, and a headrest are shown below.

Life cycle impact by category and stage

Environmental impacts were calculated using the GaBi software platform. Impact results according to the BIFMA PCR have been calculated using TRACI 2.1 characterization factors, as well as LCI indicators for primary energy and water usage. Results presented in this report are for one seat maintained for one individual for 10 years. Additionally, the results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks.

	Life cycle stages					
	Unit	Materials acquisition	Production process	Distribution & Use	End of life	Totals
*Global warming potential excluding biogenic carbon (100 years) Warming of the atmosphere caused by the global release of greenhouse gases.	kg CO2 eq	1.56E+02	1.44E+01	1.51E+00	5.46E+00	1.77E+02
*Acidification Emissions that increase the acidity of the environment due to various chemical reactions and/or biological activity, or by natural circumstances.	kg SO2 eq	5.66E-01	7.58E-02	1.79E-02	7.74E-03	6.67E-01
*Photochemical ozone creation (Smog) Through various chemical reactions, which occur between nitrogen oxides (NOx) and volatile organic compounds (VOCs) in sunlight.	kg O3 eq	7.69E+00	1.10E+00	3.98E-01	9.31E-02	9.28E+00
*Eutrophication Enrichment of an aquatic ecosystem with nutrients (nitrates, phosphates) that accelerate biological productivity and an undesirable accumulation of algal biomass.	kg N eq	1.42E+01	1.71E+00	1.60E-01	4.10E-01	1.65E+01
*Ozone depletion Reduction of the stratospheric ozone layer due to anthropogenic emissions of ozone depleting substances.	kg CFC-11 eq	9.06E-11	3.34E-10	2.94E-15	4.08E-14	4.24E-10
Primary energy demand Energy consumption at the source.	MJ	2.36E+03	4.17E+02	2.06E+01	1.79E+01	2.81E+03
Net freshwater usage Freshwater used and otherwise not recoverable.	kg	7.02E+02	5.83E+01	3.18E-01	1.28E+01	7.74E+02

*Methods: TRACI 2.1

Global warming potential summary



177 kg total CO₂ eq footprint

APAC TASK CHAIR INDIA CONFIGURATION RESULTS

The product composition, packaging composition, recycled content, and recyclability visuals below relate specifically to the task chair configuration with 3D knit back, upholstered seat, hard casters, 4D arms, lumbar assembly, and plastic base.

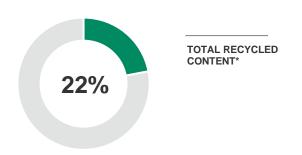
Product composition

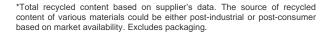
Material	Weight (kg)	Weight (%)	Resource Type
Nylon (PA6 and PA66)	6.802	39.93%	Recycled, virgin non-renewable
Steel	5.577	32.74%	Recycled, virgin non-renewable
Aluminum	1.785	10.48%	Recycled, non- renewable
Polypropylene (PP)	1.377	8.09%	Virgin non- renewable
Polyurethane (PU)	0.811	4.76%	Virgin non- renewable
Polyoxymethy- lene (POM)	0.232	1.36%	Virgin non- renewable
Polyester Fabric	0.272	1.60%	Virgin non- renewable
Other	0.176	1.03%	Virgin non- renewable
Total	17.033	100%	

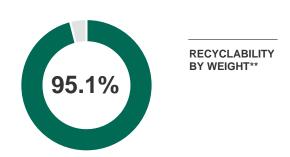
Product packaging composition

Material	Weight (kg)	Weight (%)	Resource Type
Cardboard	2.93	87.20%	Renewable
Polyethylene (PE)	0.1	2.98%	Non-renewable
Paper	0.08	2.38%	Renewable
PP	0.05	1.49%	Non-renewable
PE foam	0.2	5.95	Non-renewable
Total	3.36	100%	

Product recycled content* and recyclability** summary







^{**}Recyclability: this recyclability rate is the maximum amount of the product that is recyclable, based on the availability of recycling facilities in the specified regions and the ability of the product to be disassembled. Note that, per the requirements of the PCR, the end-of-life results presented in this EPD were calculated using the US EPA's recycling rates within the 2020 Municipal Solid Waste Report for parts that can be disassembled. Excludes packaging.

Results for the task chair produced in India. This configuration has 3D knit back, upholstered seat, hard casters, 4D arms, lumbar assembly, and plastic base.

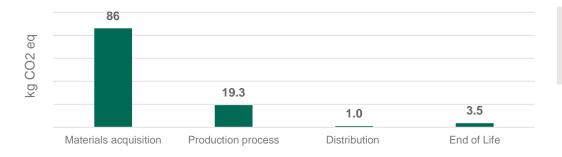
Life cycle impact by category and stage

Environmental impacts were calculated using the GaBi software platform. Impact results according to the BIFMA PCR have been calculated using TRACI 2.1 characterization factors, as well as LCI indicators for primary energy and water usage. Results presented in this report are for one seat maintained for one individual for 10 years. Additionally, the results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks.

	Life cycle stages					
	Unit	Materials acquisition	Production process	Distribution & Use	End of life	Totals
*Global warming potential excluding biogenic carbon (100 years) Warming of the atmosphere caused by the global release of greenhouse gases.	kg CO2 eq	8.60E+01	1.93E+01	9.99E-01	3.54E+00	1.10E+02
*Acidification Emissions that increase the acidity of the environment due to various chemical reactions and/or biological activity, or by natural circumstances.	kg SO2 eq	3.77E-01	2.94E-03	6.57E-03	3.87E-01	7.73E-01
*Photochemical ozone creation (Smog) Through various chemical reactions, which occur between nitrogen oxides (NOx) and volatile organic compounds (VOCs) in sunlight.	kg O3 eq	4.93E+00	6.41E-02	1.80E-01	5.18E+00	1.04E+01
*Eutrophication Enrichment of an aquatic ecosystem with nutrients (nitrates, phosphates) that accelerate biological productivity and an undesirable accumulation of algal biomass.	kg N eq	2.48E-02	3.08E-04	1.45E-03	2.65E-02	5.30E-02
*Ozone depletion Reduction of the stratospheric ozone layer due to anthropogenic emissions of ozone depleting substances.	kg CFC-11 eq	8.23E-08	4.19E-15	2.64E-14	8.23E-08	1.65E-07
Primary energy demand Energy consumption at the source.	MJ	1.98E+03	4.90E+00	9.82E+00	2.00E+03	3.99E+03
Net freshwater usage Freshwater used and otherwise not recoverable.	kg	3.10E+03	1.26E+00	1.05E+01	3.11E+03	6.22E+03

*Methods: TRACI 2.1

Global warming potential summary



110 kg total CO₂ eq footprint

APAC TASK CHAIR MALAYSIA CONFIGURATION RESULTS

The product composition, packaging composition, recycled content, and recyclability visuals below relate specifically to the task chair configuration with 3D knit back, upholstered seat, hard casters, 4D arms, lumbar assembly, and plastic base.

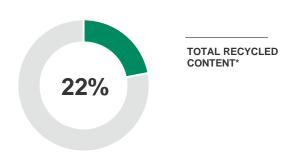
Product composition

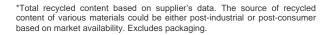
Material	Weight (kg)	Weight (%)	Resource Type
Nylon (PA6 and PA66)	6.931	40.06%	Recycled, virgin non-renewable
Steel	5.558	32.12%	Recycled, virgin non-renewable
Aluminum	1.785	10.32%	Recycled, non- renewable
Polypropylene (PP)	1.814	10.48%	Virgin non- renewable
Polyurethane (PU)	0.700	4.05%	Virgin non- renewable
Polyoxymethy- lene (POM)	0.232	1.34%	Virgin non- renewable
Polyester Fabric	0.125	0.72%	Virgin non- renewable
Other	0.159	0.92%	Virgin non- renewable
Total	17.304	100%	

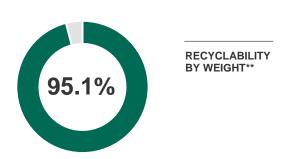
Product packaging composition

Material	Weight (kg)	Weight (%)	Resource Type		
Cardboard	5.210	99.05%	Renewable		
LLDPE	0.040	0.76%	Non-renewable		
PE foam	0.010	0.19%	Non-renewable		
Total	5.260	100%			

Product recycled content* and recyclability** summary







^{**}Recyclability: this recyclability rate is the maximum amount of the product that is recyclable, based on the availability of recycling facilities in the specified regions and the ability of the product to be disassembled. Note that, per the requirements of the PCR, the end-of-life results presented in this EPD were calculated using the US EPA's recycling rates within the 2020 Municipal Solid Waste Report for parts that can be disassembled. Excludes packaging.

Results for the task chair produced in Malaysia. This configuration has 3D knit back, upholstered seat, hard casters, 4D arms, lumbar assembly, and plastic base.

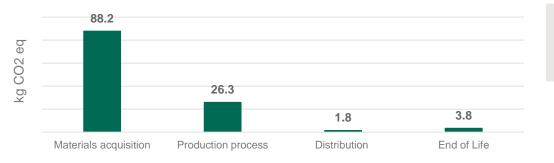
Life cycle impact by category and stage

Environmental impacts were calculated using the GaBi software platform. Impact results according to the BIFMA PCR have been calculated using TRACI 2.1 characterization factors, as well as LCI indicators for primary energy and water usage. Results presented in this report are for one seat maintained for one individual for 10 years. Additionally, the results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins, or risks.

		Life cycle stages				
	Unit	Materials acquisition	Production process	Distribution & Use	End of life	Totals
*Global warming potential excluding biogenic carbon (100 years) Warming of the atmosphere caused by the global release of greenhouse gases.	kg CO2 eq	8.82E+01	2.63E+01	1.83E+00	3.81E+00	1.20E+02
*Acidification Emissions that increase the acidity of the environment due to various chemical reactions and/or biological activity, or by natural circumstances.	kg SO2 eq	2.90E-01	9.84E-02	1.27E-02	6.74E-03	4.08E-01
*Photochemical ozone creation (Smog) Through various chemical reactions, which occur between nitrogen oxides (NOx) and volatile organic compounds (VOCs) in sunlight.	kg O3 eq	3.71E+00	1.47E+00	2.57E-01	1.84E-01	5.62E+00
*Eutrophication Enrichment of an aquatic ecosystem with nutrients (nitrates, phosphates) that accelerate biological productivity and an undesirable accumulation of algal biomass.	kg N eq	1.57E-02	1.33E-02	7.67E-04	1.53E-03	3.14E-02
*Ozone depletion Reduction of the stratospheric ozone layer due to anthropogenic emissions of ozone depleting substances.	kg CFC-11 eq	7.08E-08	1.70E-09	6.22E-15	2.72E-14	7.25E-08
Primary energy demand Energy consumption at the source.	MJ	1.67E+03	5.28E+02	1.26E+01	1.01E+01	2.22E+03
Net freshwater usage Freshwater used and otherwise not recoverable.	kg	2.98E+03	5.73E+02	9.69E-01	1.08E-02	3.55E+03

*Methods: TRACI 2.1

Global warming potential summary



120 kg total CO₂ eq footprint

ADDITIONAL ENVIRONMENTAL INFORMATION

Indoor air: Steelcase seating products are certified with SCS's Indoor Advantage Gold™ program, conforming to the ANSI/BIFMA Furniture Emissions Standard (M7.1/X7.1-2011 R2021) and CDPH/EHLB Standard Method (CA 01350) v1.2-2017 for seating. The certification can be found <u>here</u>.

Note, a previous version of this EPD presented results specific to the stool configuration of Think.

REFERENCES

Life Cycle Assessment, LCA Report for Steelcase. WAP Sustainability Consulting. August 2023.

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ISO 14025:2006 Environmental Labels and Declarations - Type III Environmental Declarations - Principles and Procedures.

ISO 14040:2006 Environmental Management – Life Cycle Assessment – Principles and Framework, Requirements and Guidelines.

ISO 14044:2006 Environmental Management - Life cycle assessment - Requirements and Guidelines.

ISO 14044: 2006/ Amd 1:2017 Environmental Management – Life cycle assessment – Requirements and Guidelines – Amendment 1.



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