Furnishing Knowledge®

VERIFIED by SCS GLOBAL SERVICES
ENVIRONMENTAL PRODUCT DECLARATION
BASED ON LCA

Declaration Owner

KI
1330 Bellevue Street, Green Bay, WI 54302
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KI is a contract furniture company that manufactures innovative furniture and movable wall systems for educational, university, business and government market.

Products

- Athens
- Connection Zone
- Enlite
- Hurry Up!
- Inquire
- InTandem
- Pillar
- Pirouette
- Portico
- Toggle
- Trek
- Workup

Functional Unit

The functional unit is one table, serving the function of a typical office table for a 10-year period. The reference unit used in the study is one complete table.

EPD Number and Period of Validity

SCS-EPD-04593
EPD Valid: July 31, 2017 through July 30, 2022

Product Category Rule

Product Category Rules in Accordance with ISO 14025. Product Group: UN CPC 3812 & 3814. Other Furniture used in Offices and Other Furniture N.E.C.. Version 1.1. International EPD System. 2014.

Program Operator

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SCSglobal SERVICES

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Disclaimers: *This EPD conforms to ISO 14025, 14040, and ISO 14044.*

Scope of Results Reported: *The PCR requirements limit the scope of the LCA metrics such that the results exclude environmental and social performance benchmarks and thresholds, and exclude impacts from the depletion of natural resources, land use ecological impacts, ocean impacts related to greenhouse gas emissions, risks from hazardous wastes and impacts linked to hazardous chemical emissions.*

Accuracy of Results: *Due to PCR constraints, this EPD provides estimations of potential impacts that are inherently limited in terms of accuracy.*

Comparability: *The PCR this EPD was based on 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.*

PCR review, was conducted by	The Technical Committee of the International EPD® System. Chair: Massimo Marino Contact via info@environdec.com.
Approved Date: July 31, 2017 – End Date: July 30, 2022	
Independent verification of the declaration and data, according to ISO 14025:2006	☐ internal ☑ external
Third party verifier	Tom Gloria, PhD, Industrial Ecology Consultants

ABOUT KI

At KI, we believe knowing our customers helps us serve them better. We listen. We observe. We understand that each customer has unique needs. So, we pride ourselves on helping our customers make smart contract furniture decisions by offering expert advice, design options and personalized solutions.

Since 1941, we've positioned KI as the contract furniture company that best understands the contract furniture industry and is committed to providing customers with the smart solutions. By targeting specific markets with solutions for business furniture, university furniture, educational furniture, healthcare furniture and government furniture, we can quickly respond to our customers' unique needs – including the choice to procure contract furniture according to what fits their ordering and fulfillment process. That's why we say we offer far more than furniture. We're Furnishing Knowledge.

PRODUCT DESCRIPTION

KI Office Tables are manufactured at an ISO 9001 facility in Bonduel and Green Bay, Wisconsin. A description of each product included in this EPD is shown below.

Athens

Athens tables bring people together, inspiring conversation and collaboration. Whether it's to grab a bite to eat or engage in lively conversation, the Athens table is perfect for cafes, lounges, student unions - anywhere people gather. Designed to complement virtually any decor, Athens cafeteria tables are available in a variety of sizes and finishes. Built to last, Athens bases are constructed of steel for superior wear versus cast-iron bases.

Connection Zone

Connection Zone's unique telescoping base supports change. Worksurfaces may be easily removed or added to a base - expanding or contracting work areas. Optional privacy screens, dividers and modesty panels enable users to define personal space and establish a higher degree of privacy in open, collaborative environments. Connection Zone Benching's innovative sliding worksurface offers easy access to power and the wire trough underneath the worksurface manages power cabling.

Enlite

Enlite® tables promote collaboration and communication through responsive design, efficient shapes and dependable strength. Whether you're looking for a small round table to outfit an impromptu meeting space, a large rectangular table for a more formal board room, or the ability to place several tables together to accommodate various learning and interactive environments, Enlite offers a table shape and size to fit your needs. Aesthetically, Enlite offers a modern look with perforated steel, solid steel or laminate end panels.

Hurry Up!

Designed by Giancarlo Piretti, Hurry Up! training tables are quick and easy to set up, reconfigure and store. The Hurry Up! Table flips, nests and rolls on heavy-duty casters. A simple one-step release allows this conference table top to flip and securely lock into place. The leg-within-leg nesting ability of the table and its narrow folded width let you make the most of storage space. Flip and nest several tables together for a single person to move at one time. A lightweight top option makes moving multiple tables even easier.

Inquire

The Inquire table may look like a standard table, but its distinctive design is anything but ordinary. Inquire table's unique appeal begins with sleek, fluted legs that flow seamlessly up to the table's worksurface. Straight or canted legs offer unique but complementary profiles, and locking casters or height-adjustable glides complete the distinctive Inquire look.

InTandem

The InTandem training table is the easiest way to access power and data for worksurfaces. Technicians can access wires, while users remain at the tables. InTandem training tables can be configured back-to-back or side-by-side. The contemporary table design supports any training environment. InTandem training tables are built tough to endure the day-to-day abuse of training environments. Our quality craftsmanship is backed by a lifetime warranty.

Pillar

Pillar tables are defined by clean lines, a simple leg, and a multitude of configurable top shapes. Simple and straightforward, Pillar tables provide a place to gather, an area to create, or a spot to focus. In education environments, Pillar tables empower learners to take an active role in their learning process. From elementary classrooms to corporate training rooms, users can arrange Pillar tables into endless configurations for that “just right” learning environment.

Pirouette

Designed by Giancarlo Piretti, the innovative articulating leg of Pirouette creates a leg-within-leg nesting solution unlike any other. As Pirouette's top is raised, the legs articulate. When in use, Pirouette's clean design profile sets it apart from standard nesting tables. Pirouette easily reconfigures and nests for simple storage and adaptability. Pirouette's unique design accommodates two-sided usage, giving ample leg room to those seated on either side of a table.

Portico

The clean, simple lines of the Portico table lend a uniform appearance to any room. Portico tables are affordable without sacrificing design options or durability. Portico tables are available in many shapes, sizes and leg styles, giving you the options to define the look and functionality of any environment. Optional casters allow the tables to move effortlessly and quickly. Colored end caps and trim pieces provide subtle accents or sharp contrasts. Specify Portico tables for an enjoyable, functional space at an economical price.

Toggle

Featuring value and versatility at its best, Toggle adjustable tables extend the benefits of electronically-modulated sit-stand work surfaces to everyone. Affordable features and durable design allow Toggle to transform the workplace with healthy flexibility and mass appeal. Toggle tables offer a wide-ranging height adjustment of 26 to 52 inches. Toggle's clean T-base design and absence of a low-hanging crossbar allow the table to be used from both sides, promoting user comfort and enhancing versatility.

Trek

Great design and superior functionality are hallmarks of Trek tables. Trek tables feature a modern look for any application. The angled profile of the Trek leg is a departure from typical floor-hugging bases. Oversized, two-toned glides and casters give the leg a dramatic finish. Unique edges offer subtle visual accents. For multi-purpose rooms that support conferencing or for training rooms with space issues, the flip top Trek table helps maximize limited storage space.

Workup

Movement is natural and necessary, and it should be encouraged in the workplace. Intuitive, height-adjustable work surfaces, such as KI's WorkUp® Adjustable Table, are the ideal solution. WorkUp delivers easy-to-use adjustability with a clean design and consistent profile. Within a classroom, library, or other learning environment, WorkUp offers the unique ability to adapt to users' needs and study styles. WorkUp provides a wide range of height-adjustability within an efficient statement of line.

PRODUCT SPECIFICATIONS

Product specifications of the KI Office Tables included in this EPD are shown in Table 1.

Table 1. *Product specifications of the KI Office Tables.*

Product Name	Worksurface Dimension	Worksurface Area (sq ft)	Model Number(s)
Athens	42″ diameter	9.6	AH3R449C
Connection Zone	24"x48"	8.0	CZBS/539427
Enlite	24"x48"	8.0	ETFX/506929; EY22/506929001
Hurry Up!	24"x48"	8.0	HUN/531840; HUN2/5318400001
Inquire	24"x48"	8.0	IQRT/518995
InTandem	24"x48"	8.0	TWS/528303; ITCL/528303
Pillar	24"x48"	8.0	PLRT/539859; PLP4/5398590001
Pirouette	24"x48"	8.0	PIFT/516049
Portico	24"x48"	8.0	PFIX/522405; PT22/5224050001
Toggle	24"x48"	8.0	TGSM/542592
Trek	24"x48"	8.0	TFX/485026; TT22/4850260001
Workup	24"x48"	8.0	WUCB/540756; BKCB/540756000

MATERIAL COMPOSITION

Table 2. *Material composition of the KI Office Tables and packaging. Results are shown on a mass basis (kg/unit) and as a percent of total. (Models: Athens, Connection Zone, Enlite, Hurry Up!, Inquire, InTandem)*

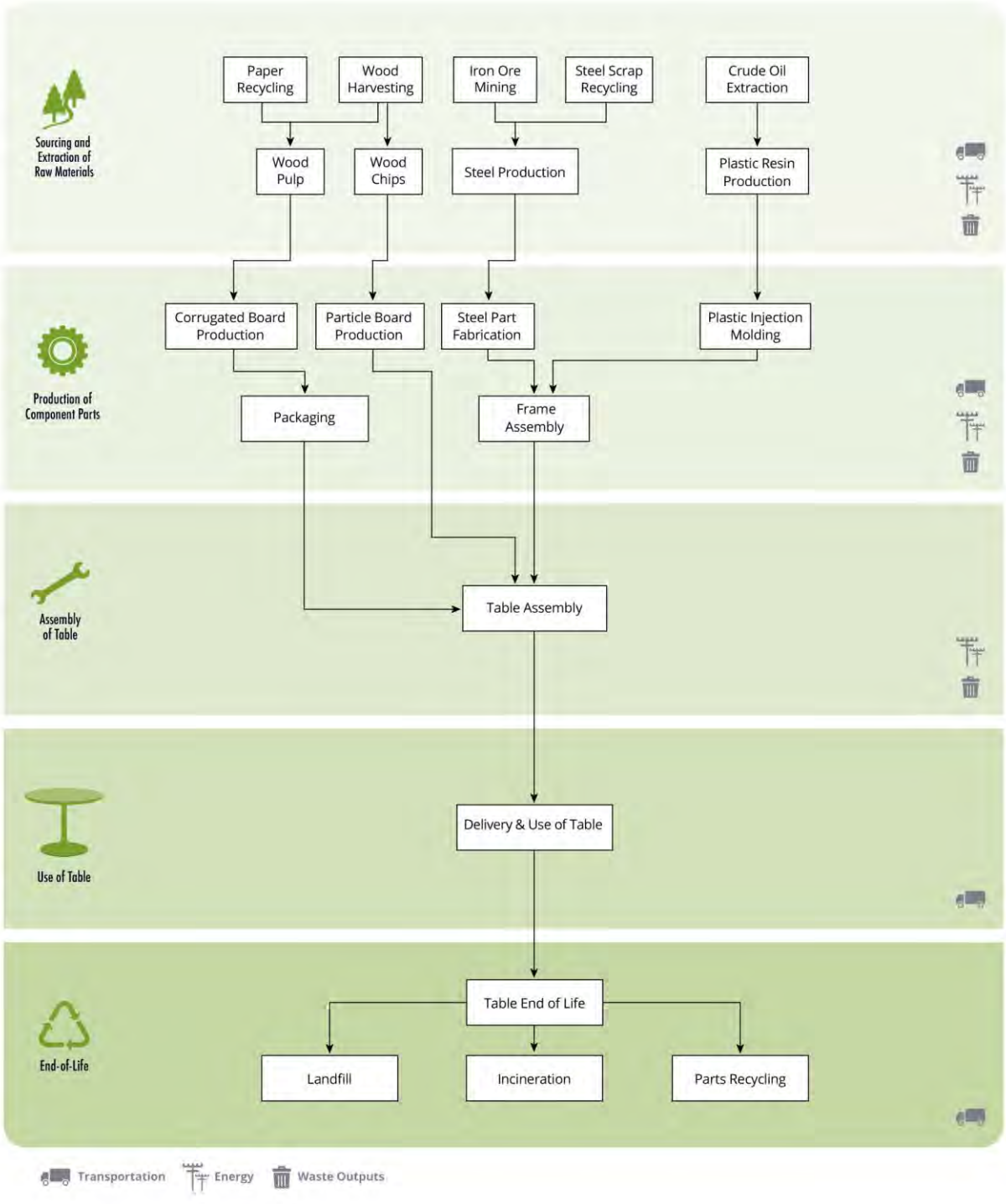
Material Type	Athens	Connection Zone	Enlite	HurryUp	Inquire	InTandem
Product						
Wood	26	36	18	18	18	18
	68%	61%	76%	51%	62%	64%
Steel	9.5	20	3.2	15	5.3	8.3
	25%	34%	14%	43%	18%	29%
Celloluse	2.1	1.8	1.2	1.2	1.2	1.2
	5.5%	3.0%	5.1%	3.4%	4.1%	4.3%
Other	0.34	0.55	0.38	0.19	3.7	0.42
	0.89%	0.93%	1.6%	0.54%	13%	1.5%
Plastic	0.30	0.60	0.84	0.53	0.30	0.30
	0.77%	1.0%	3.5%	1.5%	1.0%	1.0%
Zinc	-	$1.6x10^{-2}$	-	$2.4x10^{-2}$	-	$8.1x10^{-2}$
	-	0.03%	-	0.07%	-	0.28%
Plastic/Steel Composite	-	-	-	-	0.70	$5.5x10^{-2}$
	-	-	-	-	2.4%	0.19%
Product Total	**39**	**59**	**24**	**35**	**29**	**28**
	100%	**100%**	**100%**	**100%**	**100%**	**100%**
Packaging						
Corrugated	-	1.7	1.3	0.66	-	0.71
	0.0%	49%	71%	40%	0.0%	57%
Paper	0.44	1.6	0.44	0.90	0.44	0.44
	84%	46%	24%	55%	84%	36%
Plastic	$8.3x10^{-2}$	0.17	$8.3x10^{-2}$	$8.3x10^{-2}$	$8.3x10^{-2}$	$8.3x10^{-2}$
	16%	4.8%	4.6%	5.1%	16%	6.8%
Packaging Total	**0.53**	**3.5**	**1.8**	**1.6**	**0.53**	**1.2**
	100%	**100%**	**100%**	**100%**	**100%**	**100%**

Table 3. *Material composition of the KI Office Tables and packaging. Results are shown on a mass basis (kg/unit) and as a percent of total. (Models: Pillar, Pirouette, Portico, Toggle, Trek, Workup)*

Material Type	Pillar	Pirouette	Portico	Toggle	Trek	Workup
Product						
Wood	18	18	18	18	18	18
	31%	56%	63%	32%	60%	36%
Steel	37	10	7.8	37	9.8	30
	65%	33%	27%	65%	32%	60%
Celloluse	1.2	1.2	1.2	1.2	1.2	1.2
	2.1%	3.8%	4.2%	2.1%	4.0%	2.4%
Other	0.47	0.33	1.3	0.23	0.42	0.27
	0.81%	1.0%	4.5%	0.41%	1.4%	0.54%
Plastic	0.30	0.84	0.31	0.30	0.63	0.30
	0.52%	2.6%	1.1%	0.52%	2.1%	0.59%
Zinc	-	1.2	-	-	-	-
	-	3.7%	-	-	-	-
Plastic/Steel Composite	0.31	-	0.13	-	-	$7.2x10^{-2}$
	0.53%	-	0.45%	-	-	0.14%
Nylon	-	-	-	-	-	$4.6x10^{-2}$
	-	-	-	-	-	0.09%
Product Total	**58**	**32**	**29**	**57**	**30**	**50**
	100%	**100%**	**100%**	**100%**	**100%**	**100%**
Packaging						
Corrugated	1.3	0.53	2.3	-	1.4	0.21
	71%	29%	81%	0.0%	72%	29%
Paper	0.44	1.2	0.44	0.44	0.44	0.44
	24%	66%	16%	84%	23%	60%
Plastic	$8.8x10^{-2}$	$8.3x10^{-2}$	$8.3x10^{-2}$	$8.3x10^{-2}$	$8.3x10^{-2}$	$8.3x10^{-2}$
	4.8%	4.6%	3.0%	16%	4.4%	11%
Packaging Total	**1.8**	**1.8**	**2.8**	**0.53**	**1.9**	**0.74**
	100%	**100%**	**100%**	**100%**	**100%**	**100%**

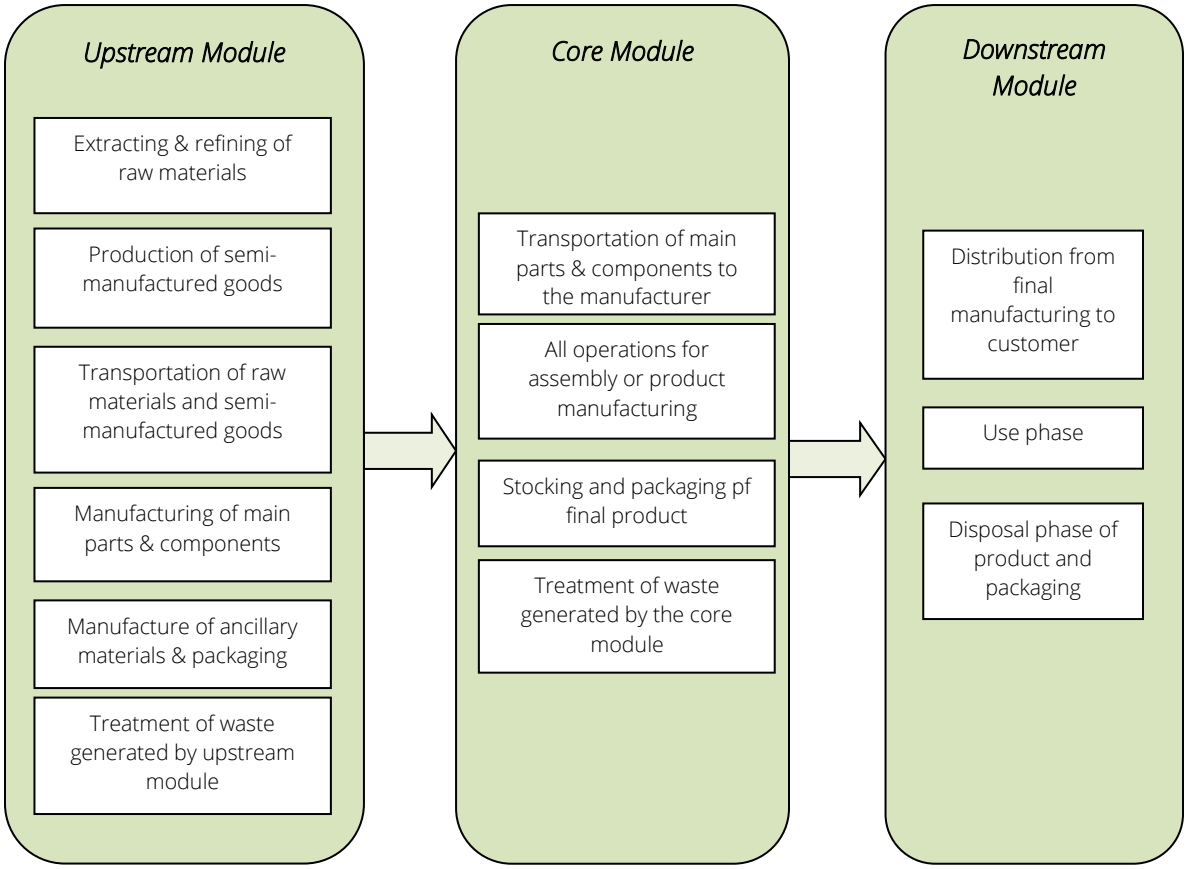
PRODUCT LIFE CYCLE FLOW DIAGRAM

The diagram below is a representation of the most significant contributions to the life cycle of KI Office Tables.



LIFE CYCLE ASSESSMENT STAGES

The system boundary is cradle-to-grave and includes resource extraction and processing, product manufacture and assembly, distribution/transport, use and maintenance, and end-of-life. The diagram below illustrates the life cycle stages included in this EPD.



LIFE CYCLE IMPACT ASSESSMENT

Impact category indicators are calculated using the CML-IA and TRACI 2.1 characterization methods. TRACI 2.1 impact category indicators include global warming potential (100 years), acidification potential, smog potential, ozone depletion potential, and eutrophication potential. CML-IA impact category indicators include global warming potential (100 years), acidification potential, eutrophication potential, Photochemical Ozone Creation potential, ozone depletion potential, and abiotic resource depletion, in accordance with the PCR. In addition, an estimate of the impacts from land use are reported (based on the ReCiPe methodology) as are human toxicity and ecotoxicity impacts (based on the USEtox methodology). The PCR requires that several parameters be reported in the EPD, including resource use, waste categories and output flows, and other environmental information. The results for these parameters per declared unit are also included below.
Note- INA = Indicator Not Assessed.

Table 4. *Life cycle impact assessment results for the KI Athens Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	81	18	25	130
Acidification Potential	kg SO_2 eq	0.48	0.11	$5.5x10^{-2}$	0.65
Eutrophication Potential	kg N eq	0.32	$9.7x10^{-2}$	0.18	0.60
Smog Potential	kg O_3 eq	6.7	0.83	1.3	8.8
Ozone Depletion Potential	kg CFC-11 eq	$7.4x10^{-6}$	$7.5x10^{-7}$	$2.1x10^{-6}$	$1.0x10^{-5}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	82	19	28	130
Acidification Potential	kg SO_2 eq	0.47	0.11	$4.7x10^{-2}$	0.63
Eutrophication Potential	kg PO_4^{3-} eq	0.17	$4.4x10^{-2}$	$7.2x10^{-2}$	0.28
Photochemical Ozone Creation Potential	kg C_2H_4	$4.1x10^{-2}$	$5.3x10^{-3}$	$5.0x10^{-3}$	$5.1x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$7.5x10^{-6}$	$7.8x10^{-7}$	$2.1x10^{-6}$	$1.0x10^{-5}$
Abiotic Resource Depletion, elements	kg Sb eq	1.4	0.41	$3.1x10^{-2}$	1.8
Abiotic Resource Depletion, Fossil Fuels	MJ	1,100	230	180	1,500
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	1.4	0.41	$3.1x10^{-2}$	1.8
Human Toxicity, cancer	CTUh	$2.1x10^{-7}$	$3.9x10^{-10}$	$8.5x10^{-10}$	$2.1x10^{-7}$
Human Toxicity, non-cancer	CTUh	$3.7x10^{-9}$	$2.3x10^{-11}$	$3.8x10^{-11}$	$3.7x10^{-9}$
Land Use	Species*yr	$8.2x10^{-7}$	$1.3x10^{-8}$	$2.1x10^{-8}$	$8.5x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	1,200	310	180	1,700
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	440	7.7	3.1	450
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	5.0	0.59	0.17	5.8
Wastes and Outflows					
Hazardous Waste	kg	$6.4x10^{-3}$	$4.2x10^{-4}$	$1.3x10^{-4}$	$7.0x10^{-3}$
No-hazardous Waste	kg	15	5.3	37	57
Material for Recycling	kg	-	-	3.0	3.0

Table 5. *Life cycle impact assessment results for the KI Connection Zone Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	120	14	37	170
Acidification Potential	kg SO_2 eq	0.72	$8.0x10^{-2}$	$8.7x10^{-2}$	0.89
Eutrophication Potential	kg N eq	0.39	$7.1x10^{-2}$	0.25	0.71
Smog Potential	kg O_3 eq	10	0.71	2.0	13
Ozone Depletion Potential	kg CFC-11 eq	$1.1x10^{-5}$	$7.2x10^{-7}$	$3.3x10^{-6}$	$1.5x10^{-5}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	120	14	41	180
Acidification Potential	kg SO_2 eq	0.70	$8.3x10^{-2}$	$7.5x10^{-2}$	0.86
Eutrophication Potential	kg PO_4^{3-} eq	0.21	$3.3x10^{-2}$	0.10	0.35
Photochemical Ozone Creation Potential	kg C_2H_4	$5.0x10^{-2}$	$3.9x10^{-3}$	$7.3x10^{-3}$	$6.2x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$1.1x10^{-5}$	$7.4x10^{-7}$	$3.3x10^{-6}$	$1.5x10^{-5}$
Abiotic Resource Depletion, elements	kg Sb eq	1.6	1.4	$4.9x10^{-2}$	3.0
Abiotic Resource Depletion, Fossil Fuels	MJ	1,600	180	280	2,100
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	1.6	1.4	$4.9x10^{-2}$	3.0
Human Toxicity, cancer	CTUh	$2.9x10^{-7}$	$9.3x10^{-10}$	$1.5x10^{-9}$	$2.9x10^{-7}$
Human Toxicity, non-cancer	CTUh	$3.8x10^{-9}$	$4.3x10^{-11}$	$6.1x10^{-11}$	$4.0x10^{-9}$
Land Use	Species*yr	$1.1x10^{-6}$	$1.1x10^{-7}$	$3.3x10^{-8}$	$1.3x10^{-6}$
Use of Resources					
Non-renewable Material Resources	MJ eq	1,700	230	290	2,300
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	590	57	5.1	660
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	7.7	0.64	0.27	8.6
Wastes and Outflows					
Hazardous Waste	kg	$4.8x10^{-3}$	$3.2x10^{-4}$	$2.0x10^{-4}$	$5.3x10^{-3}$
No-hazardous Waste	kg	17	3.4	56	76
Material for Recycling	kg	-	-	8.0	8.0

Table 6. *Life cycle impact assessment results for the KI Enlite Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	45	22	18	85
Acidification Potential	kg SO_2 eq	0.28	0.13	$3.6x10^{-2}$	0.45
Eutrophication Potential	kg N eq	0.15	0.12	0.13	0.39
Smog Potential	kg O_3 eq	4.1	1.0	0.82	5.9
Ozone Depletion Potential	kg CFC-11 eq	$4.6x10^{-6}$	$9.3x10^{-7}$	$1.3x10^{-6}$	$6.9x10^{-6}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	46	23	20	88
Acidification Potential	kg SO_2 eq	0.27	0.14	$3.1x10^{-2}$	0.44
Eutrophication Potential	kg PO_4^{3-} eq	$8.5x10^{-2}$	$5.2x10^{-2}$	$5.1x10^{-2}$	0.19
Photochemical Ozone Creation Potential	kg C_2H_4	$2.2x10^{-2}$	$6.3x10^{-3}$	$3.5x10^{-3}$	$3.2x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$4.7x10^{-6}$	$9.6x10^{-7}$	$1.3x10^{-6}$	$7.0x10^{-6}$
Abiotic Resource Depletion, elements	kg Sb eq	0.78	0.77	$2.0x10^{-2}$	1.6
Abiotic Resource Depletion, Fossil Fuels	MJ	670	280	120	1,100
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.78	0.77	$2.0x10^{-2}$	1.6
Human Toxicity, cancer	CTUh	$1.4x10^{-7}$	$7.6x10^{-10}$	$4.8x10^{-10}$	$1.4x10^{-7}$
Human Toxicity, non-cancer	CTUh	$1.9x10^{-9}$	$3.3x10^{-11}$	$2.5x10^{-11}$	$1.9x10^{-9}$
Land Use	Species*yr	$5.4x10^{-7}$	$3.7x10^{-8}$	$1.4x10^{-8}$	$6.0x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	710	370	120	1,200
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	290	21	1.9	310
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	2.9	0.72	0.11	3.7
Wastes and Outflows					
Hazardous Waste	kg	$3.4x10^{-3}$	$5.0x10^{-4}$	$8.3x10^{-5}$	$4.0x10^{-3}$
No-hazardous Waste	kg	7.2	6.1	24	37
Material for Recycling	kg	-	-	2.2	2.2

Table 7. *Life cycle impact assessment results for the KI HurryUp! Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	92	15	20	130
Acidification Potential	kg SO_2 eq	0.55	$9.0x10^{-2}$	$5.1x10^{-2}$	0.69
Eutrophication Potential	kg N eq	0.42	$8.0x10^{-2}$	0.13	0.62
Smog Potential	kg O_3 eq	7.4	0.73	1.2	9.3
Ozone Depletion Potential	kg CFC-11 eq	$7.3x10^{-6}$	$6.9x10^{-7}$	$1.9x10^{-6}$	$9.9x10^{-6}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	94	16	22	130
Acidification Potential	kg SO_2 eq	0.54	$9.4x10^{-2}$	$4.4x10^{-2}$	0.68
Eutrophication Potential	kg PO_4^{3-} eq	0.21	$3.6x10^{-2}$	$5.3x10^{-2}$	0.30
Photochemical Ozone Creation Potential	kg C_2H_4	$4.2x10^{-2}$	$4.4x10^{-3}$	$3.9x10^{-3}$	$5.1x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$7.3x10^{-6}$	$7.1x10^{-7}$	$1.9x10^{-6}$	$1.0x10^{-5}$
Abiotic Resource Depletion, elements	kg Sb eq	0.83	0.67	$2.9x10^{-2}$	1.5
Abiotic Resource Depletion, Fossil Fuels	MJ	1,200	190	170	1,500
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.83	0.67	$2.9x10^{-2}$	1.5
Human Toxicity, cancer	CTUh	$1.5x10^{-7}$	$6.0x10^{-10}$	$1.0x10^{-9}$	$1.5x10^{-7}$
Human Toxicity, non-cancer	CTUh	$2.0x10^{-9}$	$2.9x10^{-11}$	$3.5x10^{-11}$	$2.1x10^{-9}$
Land Use	Species*yr	$6.1x10^{-7}$	$6.2x10^{-8}$	$1.9x10^{-8}$	$6.9x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	1,300	260	170	1,700
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	340	32	3.1	370
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	5.2	0.58	0.16	5.9
Wastes and Outflows					
Hazardous Waste	kg	$5.3x10^{-3}$	$3.5x10^{-4}$	$1.1x10^{-4}$	$5.8x10^{-3}$
No-hazardous Waste	kg	18	4.2	32	54
Material for Recycling	kg	-	-	5.4	5.4

Table 8. *Life cycle impact assessment results for the KI Inquire Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	75	13	20	110
Acidification Potential	kg SO_2 eq	0.44	$7.5x10^{-2}$	$4.2x10^{-2}$	0.55
Eutrophication Potential	kg N eq	0.22	$6.7x10^{-2}$	0.15	0.43
Smog Potential	kg O_3 eq	6.9	0.58	0.96	8.4
Ozone Depletion Potential	kg CFC-11 eq	$5.5x10^{-6}$	$5.3x10^{-7}$	$1.6x10^{-6}$	$7.6x10^{-6}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	77	13	23	110
Acidification Potential	kg SO_2 eq	0.42	$7.9x10^{-2}$	$3.6x10^{-2}$	0.53
Eutrophication Potential	kg PO_4^{3-} eq	0.13	$3.0x10^{-2}$	$6.0x10^{-2}$	0.22
Photochemical Ozone Creation Potential	kg C_2H_4	$2.9x10^{-2}$	$3.6x10^{-3}$	$3.9x10^{-3}$	$3.7x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$5.5x10^{-6}$	$5.5x10^{-7}$	$1.6x10^{-6}$	$7.6x10^{-6}$
Abiotic Resource Depletion, elements	kg Sb eq	0.85	0.41	$2.3x10^{-2}$	1.3
Abiotic Resource Depletion, Fossil Fuels	MJ	1,100	160	140	1,400
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.85	0.41	$2.3x10^{-2}$	1.3
Human Toxicity, cancer	CTUh	$1.4x10^{-7}$	$2.8x10^{-10}$	$6.2x10^{-10}$	$1.4x10^{-7}$
Human Toxicity, non-cancer	CTUh	$1.9x10^{-9}$	$1.8x10^{-11}$	$3.0x10^{-11}$	$2.0x10^{-9}$
Land Use	Species*yr	$5.6x10^{-7}$	$1.0x10^{-8}$	$1.6x10^{-8}$	$5.9x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	1,200	220	140	1,500
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	300	6.5	2.3	310
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	4.3	0.42	0.13	4.8
Wastes and Outflows					
Hazardous Waste	kg	$4.4x10^{-2}$	$2.9x10^{-4}$	$9.8x10^{-5}$	$4.4x10^{-2}$
No-hazardous Waste	kg	11	3.6	28	43
Material for Recycling	kg	-	-	1.9	1.9

Table 9. *Life cycle impact assessment results for the KI InTandem Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	62	7.3	18	87
Acidification Potential	kg SO_2 eq	0.37	$4.2x10^{-2}$	$4.0x10^{-2}$	0.45
Eutrophication Potential	kg N eq	0.25	$3.8x10^{-2}$	0.12	0.41
Smog Potential	kg O_3 eq	5.0	0.35	0.91	6.3
Ozone Depletion Potential	kg CFC-11 eq	$5.4x10^{-6}$	$3.4x10^{-7}$	$1.5x10^{-6}$	$7.2x10^{-6}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	63	7.6	20	91
Acidification Potential	kg SO_2 eq	0.36	$4.4x10^{-2}$	$3.4x10^{-2}$	0.43
Eutrophication Potential	kg PO_4^{3-} eq	0.13	$1.7x10^{-2}$	$5.1x10^{-2}$	0.20
Photochemical Ozone Creation Potential	kg C_2H_4	$2.9x10^{-2}$	$2.1x10^{-3}$	$3.6x10^{-3}$	$3.4x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$5.4x10^{-6}$	$3.5x10^{-7}$	$1.5x10^{-6}$	$7.2x10^{-6}$
Abiotic Resource Depletion, elements	kg Sb eq	0.79	0.60	$2.2x10^{-2}$	1.4
Abiotic Resource Depletion, Fossil Fuels	MJ	830	95	130	1,100
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.79	0.60	$2.2x10^{-2}$	1.4
Human Toxicity, cancer	CTUh	$1.4x10^{-7}$	$3.5x10^{-10}$	$6.6x10^{-10}$	$1.4x10^{-7}$
Human Toxicity, non-cancer	CTUh	$1.9x10^{-9}$	$1.7x10^{-11}$	$2.8x10^{-11}$	$2.0x10^{-9}$
Land Use	Species*yr	$5.7x10^{-7}$	$2.1x10^{-8}$	$1.5x10^{-8}$	$6.0x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	890	120	130	1,200
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	310	12	2.3	320
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	3.8	0.27	0.12	4.2
Wastes and Outflows					
Hazardous Waste	kg	$4.8x10^{-3}$	$1.7x10^{-4}$	$9.1x10^{-5}$	$5.0x10^{-3}$
No-hazardous Waste	kg	11	1.9	27	40
Material for Recycling	kg	-	-	3.2	3.2

Table 10. *Life cycle impact assessment results for the KI Pillar Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	180	19	27	220
Acidification Potential	kg SO_2 eq	0.94	0.11	$8.0x10^{-2}$	1.1
Eutrophication Potential	kg N eq	0.89	$9.8x10^{-2}$	0.14	1.1
Smog Potential	kg O_3 eq	11	0.86	1.9	14
Ozone Depletion Potential	kg CFC-11 eq	$1.2x10^{-5}$	$8.0x10^{-7}$	$3.1x10^{-6}$	$1.6x10^{-5}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	180	19	29	230
Acidification Potential	kg SO_2 eq	0.94	0.11	$6.9x10^{-2}$	1.1
Eutrophication Potential	kg PO_4^{3-} eq	0.43	$4.4x10^{-2}$	$5.9x10^{-2}$	0.53
Photochemical Ozone Creation Potential	kg C_2H_4	$7.7x10^{-2}$	$5.3x10^{-3}$	$5.1x10^{-3}$	$8.8x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$1.2x10^{-5}$	$8.2x10^{-7}$	$3.1x10^{-6}$	$1.6x10^{-5}$
Abiotic Resource Depletion, elements	kg Sb eq	0.92	0.77	$4.6x10^{-2}$	1.7
Abiotic Resource Depletion, Fossil Fuels	MJ	2,100	240	270	2,600
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.92	0.77	$4.6x10^{-2}$	1.7
Human Toxicity, cancer	CTUh	$1.6x10^{-7}$	$7.0x10^{-10}$	$2.0x10^{-9}$	$1.6x10^{-7}$
Human Toxicity, non-cancer	CTUh	$2.3x10^{-9}$	$3.0x10^{-11}$	$5.6x10^{-11}$	$2.4x10^{-9}$
Land Use	Species*yr	$7.2x10^{-7}$	$3.6x10^{-8}$	$3.1x10^{-8}$	$7.8x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	2,300	310	280	2,800
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	430	21	5.6	460
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	9.3	0.62	0.26	10
Wastes and Outflows					
Hazardous Waste	kg	$8.6x10^{-3}$	$4.2x10^{-4}$	$1.7x10^{-4}$	$9.2x10^{-3}$
No-hazardous Waste	kg	38	5.1	50	93
Material for Recycling	kg	-	-	12	12

Table 11. *Life cycle impact assessment results for the KI Pirouette Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	84	21	20	130
Acidification Potential	kg SO_2 eq	0.53	0.13	$4.7x10^{-2}$	0.70
Eutrophication Potential	kg N eq	0.39	0.11	0.13	0.64
Smog Potential	kg O_3 eq	6.8	1.0	1.1	8.9
Ozone Depletion Potential	kg CFC-11 eq	$6.8x10^{-6}$	$9.5x10^{-7}$	$1.8x10^{-6}$	$9.6x10^{-6}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	85	22	22	130
Acidification Potential	kg SO_2 eq	0.52	0.13	$4.1x10^{-2}$	0.70
Eutrophication Potential	kg PO_4^{3-} eq	0.20	$5.1x10^{-2}$	$5.5x10^{-2}$	0.30
Photochemical Ozone Creation Potential	kg C_2H_4	$3.8x10^{-2}$	$6.2x10^{-3}$	$3.9x10^{-3}$	$4.8x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$6.9x10^{-6}$	$9.7x10^{-7}$	$1.8x10^{-6}$	$9.6x10^{-6}$
Abiotic Resource Depletion, elements	kg Sb eq	0.83	0.70	$2.6x10^{-2}$	1.6
Abiotic Resource Depletion, Fossil Fuels	MJ	1,100	270	150	1,500
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.83	0.70	$2.6x10^{-2}$	1.6
Human Toxicity, cancer	CTUh	$1.5x10^{-7}$	$7.7x10^{-10}$	$8.1x10^{-10}$	$1.5x10^{-7}$
Human Toxicity, non-cancer	CTUh	$2.0x10^{-9}$	$3.8x10^{-11}$	$3.3x10^{-11}$	$2.1x10^{-9}$
Land Use	Species*yr	$6.0x10^{-7}$	$8.9x10^{-8}$	$1.8x10^{-8}$	$7.0x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	1,200	360	160	1,700
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	330	45	2.7	380
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	4.8	0.81	0.15	5.8
Wastes and Outflows					
Hazardous Waste	kg	$8.2x10^{-3}$	$4.9x10^{-4}$	$1.1x10^{-4}$	$8.7x10^{-3}$
No-hazardous Waste	kg	15	5.9	30	51
Material for Recycling	kg	-	-	4.2	4.2

Table 12. *Life cycle impact assessment results for the KI Portico Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	65	31	20	120
Acidification Potential	kg SO_2 eq	0.38	0.17	$4.4x10^{-2}$	0.60
Eutrophication Potential	kg N eq	0.25	0.15	0.13	0.53
Smog Potential	kg O_3 eq	5.5	1.5	1.0	8.0
Ozone Depletion Potential	kg CFC-11 eq	$5.4x10^{-6}$	$1.5x10^{-6}$	$1.7x10^{-6}$	$8.6x10^{-6}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	66	32	22	120
Acidification Potential	kg SO_2 eq	0.37	0.17	$3.8x10^{-2}$	0.58
Eutrophication Potential	kg PO_4^{3-} eq	0.13	$6.8x10^{-2}$	$5.4x10^{-2}$	0.25
Photochemical Ozone Creation Potential	kg C_2H_4	$2.9x10^{-2}$	$9.3x10^{-3}$	$3.9x10^{-3}$	$4.3x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$5.4x10^{-6}$	$1.6x10^{-6}$	$1.7x10^{-6}$	$8.6x10^{-6}$
Abiotic Resource Depletion, elements	kg Sb eq	0.81	1.1	$2.5x10^{-2}$	1.9
Abiotic Resource Depletion, Fossil Fuels	MJ	900	360	140	1,400
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.81	1.1	$2.5x10^{-2}$	1.9
Human Toxicity, cancer	CTUh	$1.4x10^{-7}$	$2.1x10^{-9}$	$6.9x10^{-10}$	$1.5x10^{-7}$
Human Toxicity, non-cancer	CTUh	$1.9x10^{-9}$	$9.7x10^{-11}$	$3.1x10^{-11}$	$2.1x10^{-9}$
Land Use	Species*yr	$5.6x10^{-7}$	$7.8x10^{-8}$	$1.7x10^{-8}$	$6.6x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	960	440	150	1,500
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	310	49	2.5	360
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	3.9	1.5	0.14	5.6
Wastes and Outflows					
Hazardous Waste	kg	$1.7x10^{-2}$	$7.3x10^{-4}$	$1.0x10^{-4}$	$1.8x10^{-2}$
No-hazardous Waste	kg	11	5.6	28	45
Material for Recycling	kg	-	-	4.3	4.3

Table 13. *Life cycle impact assessment results for the KI Toggle Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	190	25	26	240
Acidification Potential	kg SO_2 eq	1.1	0.15	$7.7x10^{-2}$	1.3
Eutrophication Potential	kg N eq	0.88	0.13	0.14	1.2
Smog Potential	kg O_3 eq	15	1.1	1.8	17
Ozone Depletion Potential	kg CFC-11 eq	$1.4x10^{-5}$	$9.9x10^{-7}$	$3.0x10^{-6}$	$1.8x10^{-5}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	190	26	28	240
Acidification Potential	kg SO_2 eq	1.1	0.15	$6.7x10^{-2}$	1.3
Eutrophication Potential	kg PO_4^{3-} eq	0.44	$5.8x10^{-2}$	$6.2x10^{-2}$	0.56
Photochemical Ozone Creation Potential	kg C_2H_4	$8.2x10^{-2}$	$7.1x10^{-3}$	$4.9x10^{-3}$	$9.4x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$1.4x10^{-5}$	$1.0x10^{-6}$	$3.0x10^{-6}$	$1.8x10^{-5}$
Abiotic Resource Depletion, elements	kg Sb eq	0.97	0.41	$4.4x10^{-2}$	1.4
Abiotic Resource Depletion, Fossil Fuels	MJ	2,300	310	260	2,900
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.97	0.41	$4.4x10^{-2}$	1.4
Human Toxicity, cancer	CTUh	$1.6x10^{-7}$	$5.0x10^{-10}$	$2.0x10^{-9}$	$1.6x10^{-7}$
Human Toxicity, non-cancer	CTUh	$2.3x10^{-9}$	$2.9x10^{-11}$	$5.4x10^{-11}$	$2.4x10^{-9}$
Land Use	Species*yr	$7.3x10^{-7}$	$1.5x10^{-8}$	$3.0x10^{-8}$	$7.8x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	2,500	420	270	3,200
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	430	9.1	5.3	450
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	9.3	0.77	0.25	10
Wastes and Outflows					
Hazardous Waste	kg	$9.0x10^{-3}$	$5.6x10^{-4}$	$1.7x10^{-4}$	$9.7x10^{-3}$
No-hazardous Waste	kg	42	7.1	49	98
Material for Recycling	kg	-	-	9.9	9.9

Table 14. *Life cycle impact assessment results for the KI Trek Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	67	21	19	110
Acidification Potential	kg SO_2 eq	0.39	0.12	$4.4x10^{-2}$	0.55
Eutrophication Potential	kg N eq	0.26	0.11	0.13	0.49
Smog Potential	kg O_3 eq	5.3	0.95	1.0	7.3
Ozone Depletion Potential	kg CFC-11 eq	$6.0x10^{-6}$	$8.8x10^{-7}$	$1.7x10^{-6}$	$8.6x10^{-6}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	68	21	21	110
Acidification Potential	kg SO_2 eq	0.38	0.13	$3.8x10^{-2}$	0.54
Eutrophication Potential	kg PO_4^{3-} eq	0.13	$4.9x10^{-2}$	$5.2x10^{-2}$	0.24
Photochemical Ozone Creation Potential	kg C_2H_4	$3.0x10^{-2}$	$5.9x10^{-3}$	$3.8x10^{-3}$	$3.9x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$6.0x10^{-6}$	$9.1x10^{-7}$	$1.7x10^{-6}$	$8.6x10^{-6}$
Abiotic Resource Depletion, elements	kg Sb eq	0.80	0.79	$2.5x10^{-2}$	1.6
Abiotic Resource Depletion, Fossil Fuels	MJ	910	260	150	1,300
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.80	0.79	$2.5x10^{-2}$	1.6
Human Toxicity, cancer	CTUh	$1.4x10^{-7}$	$7.5x10^{-10}$	$7.6x10^{-10}$	$1.5x10^{-7}$
Human Toxicity, non-cancer	CTUh	$2.0x10^{-9}$	$3.2x10^{-11}$	$3.1x10^{-11}$	$2.0x10^{-9}$
Land Use	Species*yr	$5.8x10^{-7}$	$3.8x10^{-8}$	$1.7x10^{-8}$	$6.3x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	980	350	150	1,500
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	310	22	2.6	340
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	4.1	0.68	0.14	4.9
Wastes and Outflows					
Hazardous Waste	kg	$4.5x10^{-3}$	$4.7x10^{-4}$	$1.0x10^{-4}$	$5.1x10^{-3}$
No-hazardous Waste	kg	12	5.7	29	46
Material for Recycling	kg	-	-	4.1	4.1

Table 15. *Life cycle impact assessment results for the KI WorkUp Office Table. Results are shown per unit of product.*

Impact Category	Units	Raw Material Extraction & Processing (Upstream Module)	Production (Core Module)	Distribution, Use & End-of-Life (Downstream Module)	Total
TRACI 2.1 LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	150	28	24	200
Acidification Potential	kg SO_2 eq	0.79	0.16	$6.9x10^{-2}$	1.0
Eutrophication Potential	kg N eq	0.73	0.15	0.13	1.0
Smog Potential	kg O_3 eq	9.7	1.3	1.6	13
Ozone Depletion Potential	kg CFC-11 eq	$1.0x10^{-5}$	$1.1x10^{-6}$	$2.7x10^{-6}$	$1.4x10^{-5}$
CML-IA LCIA Results					
Global Warming Potential, 100 year	kg CO_2 eq	150	29	26	200
Acidification Potential	kg SO_2 eq	0.78	0.17	$6.0x10^{-2}$	1.0
Eutrophication Potential	kg PO_4^{3-} eq	0.35	$6.6x10^{-2}$	$5.6x10^{-2}$	0.47
Photochemical Ozone Creation Potential	kg C_2H_4	$6.5x10^{-2}$	$8.0x10^{-3}$	$4.6x10^{-3}$	$7.8x10^{-2}$
Ozone Depletion Potential	kg CFC-11 eq	$1.0x10^{-5}$	$1.2x10^{-6}$	$2.7x10^{-6}$	$1.4x10^{-5}$
Abiotic Resource Depletion, elements	kg Sb eq	0.89	0.47	$3.9x10^{-2}$	1.4
Abiotic Resource Depletion, Fossil Fuels	MJ	1,700	350	230	2,300
Toxicity & Land Use LCIA Results					
Ecotoxicity	CTUe	0.89	0.47	$3.9x10^{-2}$	1.4
Human Toxicity, cancer	CTUh	$1.5x10^{-7}$	$6.1x10^{-10}$	$1.7x10^{-9}$	$1.5x10^{-7}$
Human Toxicity, non-cancer	CTUh	$2.2x10^{-9}$	$3.3x10^{-11}$	$4.8x10^{-11}$	$2.3x10^{-9}$
Land Use	Species*yr	$6.8x10^{-7}$	$2.0x10^{-8}$	$2.6x10^{-8}$	$7.2x10^{-7}$
Use of Resources					
Non-renewable Material Resources	MJ eq	1,900	470	240	2,600
Non-Renewable Energy Resources	MJ eq	INA	INA	INA	INA
Renewable Material Resources	MJ eq	-	-	-	-
Renewable Energy Resources	MJ eq	400	12	4.7	420
Secondary Material Resources	kg	-	-	-	-
Secondary Energy Resources	MJ eq	Negligible	Negligible	Negligible	Negligible
Recovered Energy Flows	MJ eq	Negligible	Negligible	Negligible	Negligible
Water Use	kg	7.8	0.87	0.22	8.9
Wastes and Outflows					
Hazardous Waste	kg	$7.9x10^{-3}$	$6.3x10^{-4}$	$1.5x10^{-4}$	$8.7x10^{-3}$
No-hazardous Waste	kg	31	8.0	44	83
Material for Recycling	kg	-	-	8.8	8.8

ADDITIONAL ENVIRONMENTAL INFORMATION

Portico Office Table is 3rd party certified level® 1.

The following KI Office Table products included in this EPD are 3rd party certified level® 2: Athens, Connection Zone, Enlite, Hurry Up!, Inquire, InTandem, Pirouette, Toggle, Trek, and Workup.

KI Office Tables support a healthy indoor environment through emissions testing. The following KI Office Tables are certified Indoor Advantage™ Gold, qualify for LEED low-emitting materials credits, comply with ANSI/BIFMA X7.1/M7.1, and meet CA 01350 air emissions requirements: Athens, Connection Zone, Enlite, Hurry Up!, Inquire, InTandem, Pirouette, Portico, Toggle, Trek, and Workup.

FSC® certified wood can be ordered upon request.

SUPPORTING TECHNICAL INFORMATION

Unit processes are developed with SimaPro 8.3 software, drawing upon data from multiple sources. Primary data were provided by KI and some of its suppliers for their manufacturing processes. The primary sources of secondary LCI data are from Ecoinvent Database.

Table 16. *Data sources used for the LCA study.*

Material	Material Dataset	Processing Dataset	Publication Date
PRODUCT COMPONENT			
Paint	Carbon black {GLO} | market for | Alloc Rec	included with material dataset	2016
Plastics (HDPE, PP)	Polyethylene, high density, granulate {GLO} | market for | Alloc Rec; Polypropylene, granulate {GLO}| market for | Alloc Rec	Injection moulding {GLO}| market for | Alloc Rec	2016; 2016
Nylon	Nylon 6 {GLO}| market for | Alloc Rec; Nylon 6-6 {GLO}| market for | Alloc Rec	Injection moulding {GLO}| market for | Alloc Rec	2016; 2016
ABS	Acrylonitrile-butadiene-styrene copolymer {GLO} | market for | Alloc Rec	Injection moulding {GLO}| market for | Alloc Rec	2016; 2016
Steel - various grades	Steel, low-alloyed {GLO} | market for | Alloc Rec; Steel, low-alloyed {RoW} | steel production, electric, low-alloyed | Alloc Rec	Metal working, average for steel product manufacturing {GLO}| market for | Alloc Rec	2016; 2016
Zinc	Zinc {GLO}| market for | Alloc Rec; Zamak3 {GLO}| market for linerboard | Alloc Rec	included with material dataset	2016
Adhesive	Chemical, organic {GLO}| market for | Alloc Rec	included with material dataset	2016; 2016
Wood fibers	Medium density fibreboard {GLO} | market for | Alloc Rec	included with material dataset	2016; 2016
Cellulose	Carboxymethyl cellulose, powder {GLO}| market for | Alloc Rec	included with material dataset	2016; 2016
Cellulose/Polyester resin composite	Carboxymethyl cellulose, powder {GLO}| market for | Alloc Rec; Polyester resin, unsaturated {GLO} | market for | Alloc Rec	Injection moulding {GLO}| market for | Alloc Rec	2016; 2016
PACKAGING			
Plastics	Packaging film, low density polyethylene {GLO} | market for | Alloc Rec; Polyvinylchloride, bulk polymerised {GLO} | market for | Alloc Rec; Polyethylene terephthalate, granulate, amorphous {GLO} | market for | Alloc Rec	included with material dataset	2016
Cardboard	Linerboard {RoW} | market for linerboard | Alloc Rec	included with material dataset	2016
Packaging paper	Kraft paper, unbleached {GLO} | market for | Alloc Rec; Graphic paper 100% recycled {GLO} | market for | Alloc Rec	included with material dataset	2016
TRANSPORTATION			
Truck	Transport, freight, lorry 16-32 metric ton, EURO4 {GLO}| market for | Alloc Rec	NA	2016
Rail	Transport, freight, train {US}| market for | Alloc Rec	NA	2016
Ship	Transport, freight, sea, transoceanic ship {GLO}| market for | Alloc Rec	NA	2016

NA is not applicable

Data Quality

Data Quality Parameter	Data Quality Discussion
Time-Related Coverage: Age of data and the minimum length of time over which data is collected	Manufacturer-supplied data (primary data) are based on 2016 annual production. Representative datasets (secondary data) used for upstream and background processes are generally less than 10 years old (typically 2007 or more recent). All of the data used represented an average of at least one year's worth of data collection, and up to three years in some cases.
Geographical Coverage: Geographical area from which data for unit processes is collected to satisfy the goal of the study	The data used in the analysis provide the best possible representation available with current data. Actual processes for upstream operations are primarily North American. Secondary data used in the assessment are generally representative of North American or European operations. Data for European operations are considered sufficiently similar to actual processes. Data representing product disposal are based on US statistics.
Technology Coverage: Specific technology or technology mix	For the most part, data are representative of the actual technologies used for processing, transportation, and manufacturing operations. In some cases, specific information regarding metal and plastic component manufacturing was not available. Representative steel fabrication datasets are used to represent the actual processes. Similarly, representative plastic injection molding datasets are used to represent production of plastic components.
Precision: Measure of the variability of the data values for each data expressed	Precision of results are not quantified due to a lack of data. Data collected for operations were typically averaged for one or more years and over multiple operations, which is expected to reduce the variability of results.
Completeness: Percentage of flow that is measured or estimated	The LCA model included all known mass and energy flows for production of the table. In some instances, surrogate data used to represent upstream and downstream operations may be missing some data which is propagated in the model. No known processes or activities contributing to more than 1% of the total environmental impact for each indicator are excluded. In total, these missing data represent less than 5% of the mass or energy flows.
Representativeness: Qualitative assessment of the degree to which the data set reflects the true population of interest	Data used in the assessment represent typical or average processes as currently reported from multiple data sources, and are therefore generally representative of the range of actual processes and technologies for production of these materials. Considerable deviation may exist among actual processes on a site-specific basis; however, such a determination would require detailed data collection throughout the supply chain back to resource extraction.
Consistency: Qualitative assessment of whether the study methodology is applied uniformly to the various components of the analysis	The consistency of the assessment is considered to be high. Data sources of similar quality and age are used; with a bias towards Ecoinvent data where available. Different portions of the product life cycle are equally considered; however, it must be noted that final disposition of the product is based on assumptions of current average practices in the United States.
Reproducibility: Qualitative assessment of the extent to which information about the methodology and data values would allow an independent practitioner to reproduce the results reported in the study	Based on the description of data and assumptions used, this assessment would be reproducible by other practitioners. All assumptions, models, and data sources are documented.
Sources of the Data: Description of all primary and secondary data sources	Data representing energy use at the KI Bonduel, WI facility represent an annual average and are considered of high quality due to the length of time over which these data are collected, as compared to a snapshot that may not accurately reflect fluctuations in production. Secondary LCI datasets from the Ecoinvent database are used as appropriate.
Uncertainty of the Information: Uncertainty related to data, models, and assumptions	Uncertainty related to the table materials and packaging is low. Actual supplier data for upstream operations was not available for all suppliers and relied upon use of existing representative datasets. These datasets contained relatively recent data (<10 years), but lacked geographical representativeness. Uncertainty related to the impact assessment methods used in the study are high. The impact assessment method required by the PCR includes impact potentials, which lack characterization of providing and receiving environments or tipping points.

Allocation

Resource use at the Bonduel, Wisconsin facility (e.g., water and energy) was allocated to the product based on the unit price as a fraction of the total facility sales.

The furniture product includes recycled materials, which are allocated using the recycled content allocation method (also known as the 100-0 cut off method). Using the recycled content allocation approach, system inputs with recycled content do not receive any burden from the previous life cycle other than reprocessing of the waste material. At end of life, materials which are recycled leave the system boundaries with no additional burden.

Impacts from transportation were allocated based on the mass of material and distance transported.

System Boundaries

The system boundaries of the life cycle assessment for the office tables was cradle-to-grave. A description of the system boundaries for this EPD are as follows:

- Raw Material Extraction and Processing stage – This stage includes extraction of virgin materials and reclamation of non-virgin feedstock. This includes the extraction of all raw materials, including the transport to the manufacturing site. Resource use and emissions associated with both the extraction of the raw materials used in the tables, as well as those associated with the processing of raw materials and table component manufacturing are included. Impacts associated with the transport of the processed raw materials to manufacturing facilities (upstream transport) are also included in this stage.
- Core - Production stage – This stage includes all the relevant manufacturing processes and flows, excluding production of capital goods, infrastructure, production of manufacturing equipment, and personnel-related activities. This stage includes the impacts from energy use and emissions associated with the processes occurring at Bonduel, WI facility, as well as the production of the product packaging materials.
- Downstream –
    - Distribution, Storage and Use stage – This stage includes the delivery of the KI Tables to the point of use (downstream transportation), storage of the product and maintenance of the table for a period of 10 years.
    - Disposal stage – The end-of-life stage includes transport of the table to material reclamation or waste treatment facilities. Emissions from disposal of table components in a landfill or from incineration are included. Packaging disposal is also included in this phase.

Cut-off criteria

According to the PCR, cumulative omitted mass or energy flows within the product boundary shall not exceed 5%. In the present study, except as noted, all known materials and processes were included in the life cycle inventory.

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