# **Product Environmental Aspects Declaration**



No.AD-13-E269 Date of publication

May/30/2013

EP and IJ printer (PCR-ID:AD-04)



Canon http://canon.jp Canon Inc. TEL 03-3758-2111 Email eco@web.canon.co.jp

# imageRUNNER ADVANCE C7260

1) EP Printing 2) CL Print Speed: 55ppm 3) BW Print Speed: 60ppm (A4)
 4) Paper size: A3 maximum 5) Standardized automatic duplexing

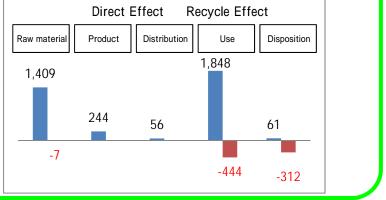


Environmental load of the Use stage is based on the supposition that the product prints 2,150,000 images for five years. Environmental impact by copypaper is not included.

Concurrentian and discharge	
Consumption and discharge in a life cycle	All the stage sum totals
Global warming (CO <sub>2</sub> equivalent)	3.62t (2.86t)
Acidification (SO <sub>2</sub> equivalent)	5.35kg (4.02kg)
Energy resources (crude oil equivalent)	66.9GJ (53.1GJ)

Figures in () indicated environmental impact including recycle effect . \*Note3

# Warming load CO<sub>2</sub> equivalent of each stage (kg)



Notes:

- 1 Original LCA data is available on PEIDS: Product Environmental Information Declaration Sheet, and Product Data Sheet.
- 2 Unified rules and requirements for EcoLeaf LCA, for intended product category, are available as a PCR: Product Category Rule. Visit EcoLeaf website under JEMAI homepage at http://www.ecoleaf-jemai.jp/eng/ for details.
- 3 Recycle Effect illustrates an indirect influence to other products/services.
- 4 Basic Units used for calculations are based on Japan domestic data at this time, due to a lack of base data to establish localized Basic Unit for overseas locations adequately.

This declaration was produced using Product Category Rule intended for a product model sold in the Japanese market and using the qualitative and quantitative data collected in Japan.

[Supplemental environmental information]

Certified Environmental Standards: Japan Eco Mark , International Energy Star Program, EU RoHS.

This product and its main components are produced in our factories certified to ISO14001 management system standard.

PCR review was conducted by : PCR Deliberation Committee, Jan. 1st, 2008, Name of reprentative: Youji Uchiyama, Univercity of Tsukuba, Graduate School Independent verification of the declaration and data, according to ISO14025 internal external Third party verifier: Hiroyuki Uchida Programme operator: Japan Environmental Management Association for Industry, ecoleaf@jemai.or.jp

In the case of an business entity certified as an Ecoleaf-data-collection system, the names of certification auditors are written. The EcoLeaf is an environmental labeling program that belongs to the ISO-Type category.

# Product Environmental Information Data Sheet (PEIDS)

Product Environmental	Information Data Sheet (PI	<u>EIDS)</u>		Statemental Aspects of
Document control no.	F-02B-03	Unit Function DB version	v 2.1	ECO LEAF
Product vendor	Canon Inc.	Characterization Factor DB version	v 2.1	製品環境情報
EcoLeaf registration no.	AD-13-E269	]		http://www.jemai.or.jp

PCR name	EP and IJ printer	Product type	imageRUNNER ADVANCE C7260				
PCR ID	AD-04	Product weight (kg)	269	Package (kg)	65	Weight total (kg)	334

				Life Cycle Stage	Unit	Produ	ction	Distribution	Use	Disposition	Recycle
In/Out items Energy Consumption					Unit	Raw material	Product	Distribution	Use	Disposition	effect
		Energy	Consumption		MJ	2.35E+04	4.69E+03	7.59E+02	3.77E+04	1.99E+02	-1.38E+04
		Enorgy			Mcal	5.61E+03	1.12E+03	1.81E+02	9.01E+03	4.76E+01	-3.29E+03
				Coal	kg	2.35E+02	3.08E+01	1.77E-03	2.73E+02	9.62E-01	-1.66E+02
			Energy	Crude oil (as a fuel)	kg	2.05E+02	3.49E+01	1.66E+01	2.82E+02	2.41E+00	-9.01E+01
			Lifergy	Natural Gas	kg	4.52E+01	1.64E+01	2.56E-01	9.06E+01	5.03E-01	-1.93E+01
				Uranium ore	kg	4.33E-03	2.08E-03	1.20E-07	8.88E-03	6.50E-05	-5.43E-04
				Crude oil (as an ingredients)	kg	6.00E+01	0	0	9.18E+01	0	-7.15E+01
				Iron ore	kg	1.86E+02	0	0	1.48E+02	0	-1.63E+02
				Copper ore	kg	2.94E+00	0	0	2.37E-01	0	-7.18E-01
	E t			Bauxite	kg	6.49E+00	0	0	8.46E+00	0	-1.11E+01
	Resource Consumption from the environment	ss			Nickel ore	kg	3.95E-01	0	0	9.46E-02	0
	luno	Exhaustible resources		Chromium ore	kg	5.98E-01	0	0	1.79E-01	0	-3.94E-01
	ons	hau sou		manganese ore	kg	1.05E+00	0	0	8.00E-01	0	-1.77E-01
	e C	Ex	Matavial	Plumbous ore	kg	2.39E-01	0	0	1.93E-02	0	-5.83E-02
	the		Material	Tin ore	kg	0	0	0	0	0	0
	es o			Zinc ore	kg	2.35E+00	0	0	1.90E-01	0	-5.73E-01
	f R			Gold ore	kg	0	0	0	0	0	0
				Silver ore	kg	0	0	0	0	0	0
				Silica ore	kg	7.33E+00	0	0	1.97E+00	0	-2.01E+00
(0				Rock salt	kg	4.71E+01	0	0	1.74E+01	1.05E-01	-3.41E+01
inventory analyses				Limestone	kg	4.11E+01	0	0	3.05E+01	9.25E-01	-2.81E+01
naly				Natural soda ash	kg	4.88E-01	0	0	1.80E-02	0	-8.69E-02
y aı		Rer	newable	Wood	kg	8.10E+01	0	0	7.44E+01	0	-8.36E+01
tor			ources	Water	kg	1.10E+05	2.34E+04	1.35E+00	1.54E+05	7.86E+02	-3.37E+04
ver				CO <sub>2</sub>	kg	1.38E+03	2.42E+02	5.39E+01	1.82E+03	6.13E+01	-7.45E+02
드				SOx	kg	9.59E-01	1.83E-01	3.23E-02	1.37E+00	5.57E-02	-6.52E-01
				NOx	kg	1.53E+00	1.49E-01	2.44E-01	1.86E+00	1.51E-01	-9.70E-01
		to Atmosphere		N2 <sub>0</sub>	kg	1.03E-01	6.06E-03	9.16E-03	1.11E-01	2.76E-04	-6.42E-02
				CH <sub>4</sub>	kg	1.14E-02	5.57E-03	3.21E-07	2.36E-02	1.74E-04	-1.25E-03
				CO	kg	2.23E-01	3.59E-02	6.31E-02	3.41E-01	3.66E-02	-1.63E-01
	0			NMVOC	kg	2.24E-02	1.09E-02	6.29E-07	4.62E-02	3.41E-04	-2.46E-03
	Emission/Discharge to the environment			СхНу	kg	5.10E-02	1.12E-03	7.56E-03	4.73E-02	1.25E-03	-3.22E-02
	sche			dust	kg	1.83E-01	7.84E-03	2.39E-02	1.80E-01	9.48E-03	-1.28E-01
	virc			BOD		-	-	2.331-02	1.002-01	9.40∟-03	-1.200-01
	on/			COD	kg	-	-	-		-	-
	the	to Wat	tor cyctom	N total	kg	-	-	-	-	-	-
	to	to wat	ter system	P total	kg	-	-	-	-	-	-
				SS	kg	-	-	-	-	-	-
					kg	-	-	-	-	-	-
				Unspecified solid waste	kg	9.86E+00	0	0	1.37E+01	1.33E+02	-1.02E+01
		to So	oil system	Slag	kg	6.43E+01	0	0	4.54E+01	0	-5.02E+01
		10 30	n system	Sludge	kg	1.39E+01	0	0	1.81E+01	0	-2.37E+01
				Low emission radioactive waste	kg	3.03E-03	1.46E-03	8.39E-08	6.19E-03	4.54E-05	-3.80E-04
				Energy resources		4.05.00	0.000	1.005	0.005		0.000
	by Resource	Exh	austible	(crude oil equivalent)	kg	4.46E+02	9.15E+01	1.69E+01	6.39E+02	4.17E+00	-2.25E+02
Ŧ	Consumption	res	ources	Mineral resources (Iron ore equivalent)	kg	1.45E+03	0	0	3.84E+02	0	-6.50E+02
Impact assessment				Global warming (CO <sub>2</sub> equivalent)	kg	1.41E+03	2.44E+02	5.64E+01	1.85E+03	6.13E+01	-7.62E+02
t asse	by	to Atr	mosphere	Acidification (SO <sub>2</sub> equivalent)	kg	2.03E+00	2.87E-01	2.03E-01	2.67E+00	1.62E-01	-1.33E+00
Impac	Emission/Dis charge to the										
	environment	to Wat	ter system								
		to So	il system								

[Notes for readers: EcoLeaf common rules]

I. Stage related

- A. "Production" stage is intended for two sub-stages listed below.
  - (1) "Raw material" production: consists of mining, transportation and raw material production.
  - (2) "Product" production: consists of the parts processing, assembly and installation.
- B. "Distribution" stage is intended for transportation of produced product.
  - Transportation of consumables and maintenance goods (e.g. replacement parts) for use of the product are included into "Use" stage.
- C. "Use" stage is intended for use of the product (active mode, standby mode, etc.) and production, transportation to disposal/recycle of consumables/maintenance goods (e.g. replacement parts).
- D. "Disposition/Recycle" stage is intended for environmental impacts by product disposition/recycle, and deduction by recycling (e.g. impact reduction of raw material production).
- E. "Recycle Effect" illustrates an indirect environmental influences to other products/services by use of reclaimed materials/parts, and/or by supply of used products to other businesses for material reclaim/parts reuse.
  - Case 1: Use of reclaimed materials/parts: Sum of increase of environmental impact by collection activities of used materials/parts, and decrease by volume reduction of used materials/parts.

Case 2: Supply of used products to other businesses for material reclaim/parts reuse: Sum of increase of environmental impact by materials/parts reclaiming process, and decrease by volume reduction of new materials/parts production.

II. Inventory analyses

A. Data of mineral ore on "Exhaustible resources" are presented in weight of pure ingredients (e.g. iron, aluminum) in the ore.

- B. Data on energy resources are presented based on origin in calorific value. e.g. Data on uranium ore presents weight of uranium concentrate, which is available for use as an atomic fuel.
- C. Data of discharge to water system are in actual figure (not calculated using unit function in inventory analyses).

# III Impact analyses

Result of the "Impact analyses" is found in converting results of inventory analyses into total amount of a reference material (e.g. CO<sub>2</sub> in case of "Global Warming").

- A. Impact "by resource consumption" represents magnitude of impacts to resource depletion.
- B. Impact "by emission/discharge to environment" represents magnitude of impacts to Atmosphere, Water and Soil system.

# IV Data entry format

- A. Exponential notation, after the decimal point to two, should be used.
- B. Indicate "0" instead exponential notation, if the result of calculation or estimation is considered as "zero" or negligible in comparison to related results.
- C. Indicate "-" if calculation nor estimation can not be done, in order to differentiate to indicate "zero".
- (BGD for material production are for production from mineral ore. Those data do not include reclaiming processes like recovery from scrap.)

[Notes for readers: Target product specific]

1. "Raw material" in Production:

This product uses carrier (electrographic developer) in the image development process.

# 2. "Product" in Producton:

# 3. Distribution:

Distance of domestic transportation is regarded as 100km according to PCR(AD-04).

# 4. Use:

- Based on the PCR, energy consumption and print volume are calculated from TEC method.
- 2,920,000 sheets are printed during the use period of 5 years.
- Environmental burden of "producing" and "disposal and recycling" of consumable goods are allocated to this stage.
- The coverage on the paper is 5%(A4) by using standard chart.
- Distance of domestic transportation of consumable goods is regarded as 100km according to PCR.
- Color print ratio is equal to black-and-white print ratio.

# 5. Disposal and recycle:

6. Others:

This declaration was produced using Product Category Rule intended for a product model sold in the Japanese market and using the qualitative and quantitative data collected in Japan.

#### Form3 (F-03-03)

#### Product data sheet



 Construction
 F-03-03

 Product vendor
 Canon Inc.

 EcoLEaf registration no.
 AD-13-E269

PCR name	EP and IJ printer (PCR-ID: AD-04)	Product type	imageRUNNER ADVANCE C7260				
LCA/LCIA in units of:	1 Product weight (kg)		269				334

## 1. Product information (per unit): parts etc. by material and by process/assembly method

			Breakdown of primary materials		Math breakdown of p	Math breakdown of parts, which need to apply Processing / Assembly Base Units (Parts B, C)			
	Material name	Weight (kg)	Material name	Weight (kg)	Process name	Weight (kg)	Process name	Weight (kg)	
	Ordinary steel	1.79E+02	Glass	2.59E+00	Press molding:Iron	1.80E+02	Parts assembly	2.63E+02	
	Stainless steel	2.47E+00	Paper	2.37E+01	Press molding:Nonferrous metal	7.75E+00			
ğ	Aluminium	6.14E+00	PCB	1.09E+01	Injection molding	7.27E+01			
odt	Other metals	4.76E+00	Wood	3.04E+01					
۲ ۲	Thermoplastic resin	6.80E+01			Glass molding	2.55E+00			
	Thermosetting resin	0.00E+00	Recycled plastic	4.36E+00					
	Rubber	1.43E+00							
	Subtotal	2.62E+02	Subtotal	7.20E+01					
			Total	3.34E+02	Subtotal	2.63E+02	Subtotal	2.63E+02	

[Note]

#### 2. Production site information (per unit): Consumption and discharge/emission for production/processing/assembly within the site.

SUX and	SOX and NOX should be indicated in SO2, NO2 equivalent.									
Consumption	Classification	Energy	Energy	Energy	Material	Material	Material			
	Distribution	Electricity(kWh)	Kerosene(kg)	Furnace urban gas(m <sup>3</sup> )	Industrial water(kg)	Clean water(kg)	Groundwater(kg)			
	Quantity	2.04E+02	0.00E+00	1.27E+00	8.00E+01	4.21E-01	3.81E+01			
	Note									
~ e	Classification									
sion	Distribution									
E mission / Discharge	Quantity									
	Note									
[Note]										

#### 3. Distribution stage information (per unit): means, distance, loading ratio, consumptions and emissions/discharges.

c	Means of transportation	Diesel truck:4ton	Diesel truck:15ton	Freight by ship			
outio	Conditions	Load(kg·km)	Load(kg·km)	Load(kg·km)			
istrib	Quantity	3.33E+04	9.33E+04	8.48E+05			
	Note						
[Note]							

# 4. Use stage (per unit): use condition (mode, term) including active mode, standby mode and maintenance.

4.1 Product and accessories subject to this analysis

	Classification	Energy	Energy	Energy	Material	Material	Material		
	Distribution	Electricity(kWh)	Kerosene(kg)	Furnace urban gas(m <sup>3</sup> )	Industrial water(kg)	Clean water(kg)	Groundwater(kg)		
	Quantity	1.84E+03	0.00E+00	7.01E+00	4.40E+02	2.32E+00	6.99E+02		
	Note								
	Classification	Material	Material	Material	Material				
	Distribution	Ordinary steel(kg)	Stainless steel(kg)	Aluminium(kg)	Other metal(kg)				
ц.	Quantity	1.43E+02	5.80E-01	8.00E+00	4.77E-01				
roduct	Note								
Proc	Classification	Material	Material	Material	Material	Material	Material	Material	
ш.	Distribution	Glass(kg)	Thermoplastic resin(kg)	Thermosetting resin(kg)	Wood(kg)	Paper(kg)	Rubber(kg)	PCB(kg)	
	Quantity	1.38E-02	1.18E+02	0.00E+00	3.65E+00	3.32E+01	8.20E-03	6.79E-01	
	Note								
	Classification	Process	Process	Process	Assembly	Distribution	Distribution	Distribution	Distribution
	Distribution	Press molding:lron(kg)	Press molding:Nonferrous metal(kg)	Injection molding(kg)	Parts assembly(kg)	Diesel truck:4ton(kg·km)	Diesel truck:10ton(kg · km)	Diesel truck:15ton(kg · km)	Freight by ship(kg·km)
	Quantity	8.85E+01	8.14E+00	6.88E+01	1.60E+02	1.15E+04	1.92E+04	3.21E+04	2.92E+05
	Note								
[Note]									

#### 4.2 Disposition/Recycle information on consumables and replacement parts

	Classification	Treatment	Treatment	Treatment	Treatment	Treatment	Treatment	Energy	Distribution
sumables	Distribution	Shredding(kg)	Incineration to landfill (as ash)(kg)	Incineration: Industrial waste (kg)	Biomass incineration(kg)	Landfill:general waste(kg)	Landfill:Industrial waste(kg)	Electricity (kWh)	Diesel truck:4ton(kg · km)
	Quantity	2.33E+01	1.98E+01	8.78E+00	1.97E+01	1.63E+00	1.23E+00	4.43E+00	3.49E+03
	Note								
	Classification	Distribution							
Co	Distribution	Diesel truck:10ton(kg · km)							
	Quantity	1.81E+04							
	Note								
[Note]									

#### 5. Disposition/Recycle stage information (per product): process method and scenarios

	Classification	Treatment	Treatment	Treatment	Treatment	Treatment	Treatment		
.0	Distribution	Shredding(kg)	Incineration to landfill (as ash)(kg)	Incineration: Industrial waste (kg)	Landfill:general waste(kg)	Biomass incineration(kg)	Landfill:Industrial waste(kg)		
	Quantity	1.92E+02	3.78E+01	6.59E-01	1.24E+02	3.16E+01	3.10E+00		
Jari	Note								
cer	Classification					Energy	Distribution	Distribution	
٥	Distribution					Electricity (kWh)	Diesel truck:4ton(kg·km)	Diesel truck:10ton(kg · km)	
	Quantity					3.13E+00	1.58E+04	2.68E+04	
	Note								
[Note]									

## 6. Others:

This declaration was produced using Product Category Rule intended for a product model sold in the Japanese market and using the qualitative and quantitative data collected in Japan.