Table of Product List

Webpage Publication Date	Product Name	Model Name	Country
2025.07	Galaxy Watch8 Classic 46mm	SM-L505U	US
2025.07	Galaxy Watch8 44mm	SM-L335U	US
2025.07	Galaxy Watch8 40mm	SM-L325U	US
2024.10	Galaxy Watch FE	SM-R861U	US
2024.10	Galaxy Watch Ultra	SM-L705U	US
2024.10	Galaxy Watch7 44mm	SM-L315U	US
2024.10	Galaxy Watch7 40mm	SM-L305U	US
2023.08	Galaxy Watch6 Classic 47mm	SM-R965U	US
2023.08	Galaxy Watch6 Classic 43mm	SM-R955U	US
2023.08	Galaxy Watch6 44mm	SM-R945U	US
2023.08	Galaxy Watch6 40mm	SM-R935U	US

Life Cycle Assessment for Galaxy Watch8 Classic 46mm

Background

Samsung has developed the technical expertise to analyze and evaluate the environmental impact of its products. Based on international standards such as ISO14040 and ISO14044, Samsung has implemented the SDP*. This evaluation considers the entire product lifecycle, including manufacturing, distribution, usage, and disposal. The SDP analyzes various data categories, including the materials and weight of product BOM**, inputs/outputs in manufacturing processes, distribution routes, energy consumption during product usage, and disposal scenarios to precisely measure environmental impacts.

The LCA results identified and quantified 11 environmental impact categories, including climate change, acidification, ecotoxicity, and ozone depletion. Each category was evaluated for every lifecycle stage. These results will be utilized to improve product environmental specifications and inform product development.

This verification includes implementation methods, related procedures, and requirements for LCA, but does not ensure the reliability of the data used for the product model or the resulting outcomes. Considering these uncertainties, this report will be continuously updated and improved.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.10
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML v4.8 (Climate Change:IPCC)
LCA software	SDP(Sustainability Data Platform)

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to US
Use	3 years use
Disposal	Waste treatment of parts and material

SDP* : Sustainability Data Platform

BOM** : Bill of Material

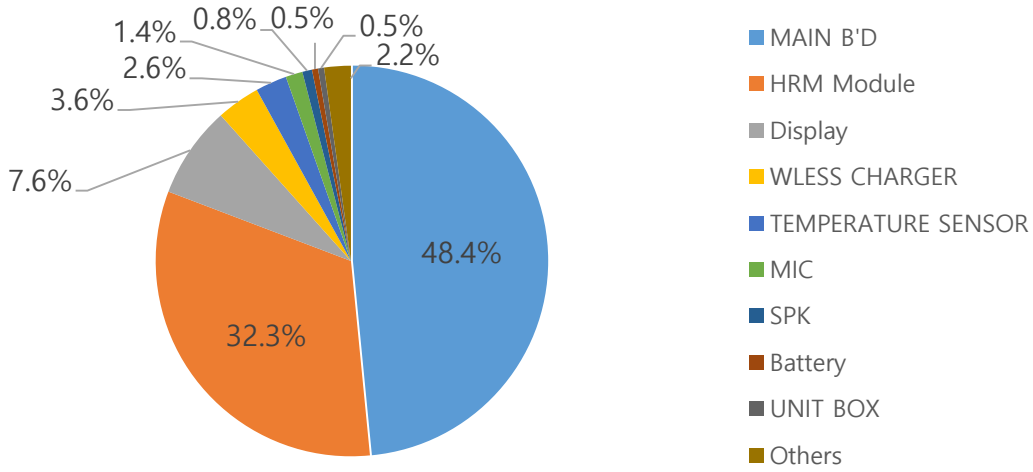
LCA Report Issuance Date : Jul. 10, 2025

Webpage Publication Date of Summary of LCA : Jul. 16, 2025

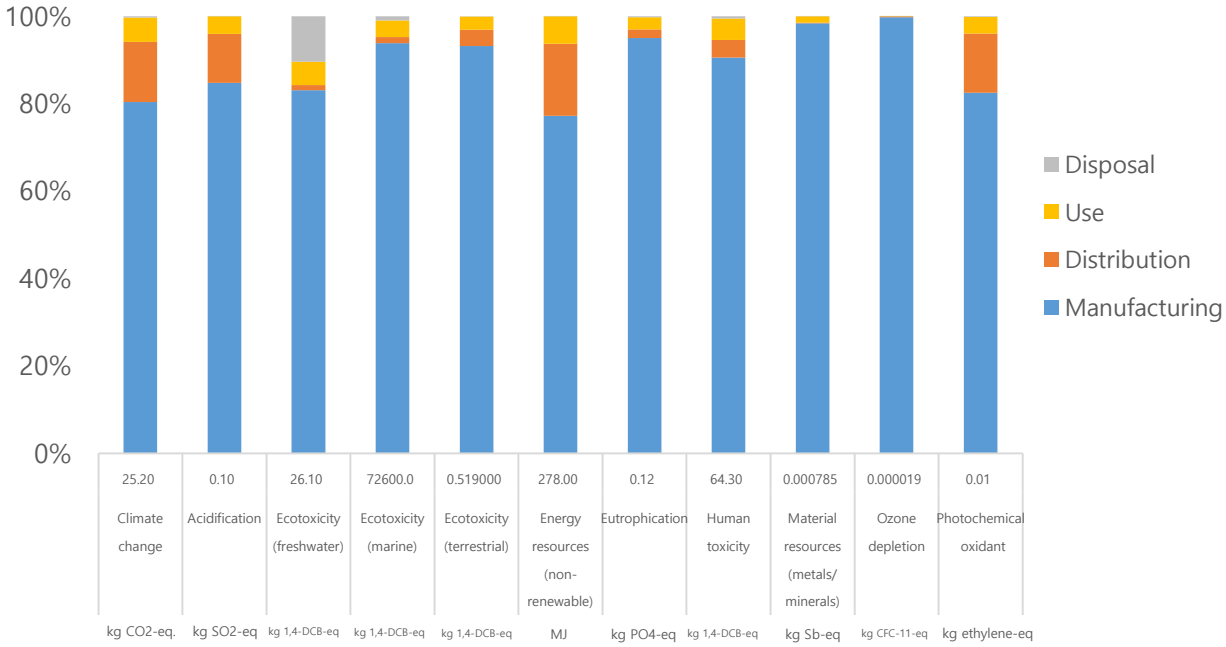
Product Features

Model name	SM-L505U(Galaxy Watch8 Classic)	
Dimension (mm)	46.0 x 46.4 x 10.6 mm	
Display (mm)	34.0	
Weight (g)	Product & Acc.	117.13
	Packages	174.45

Global Warming Impact Profile

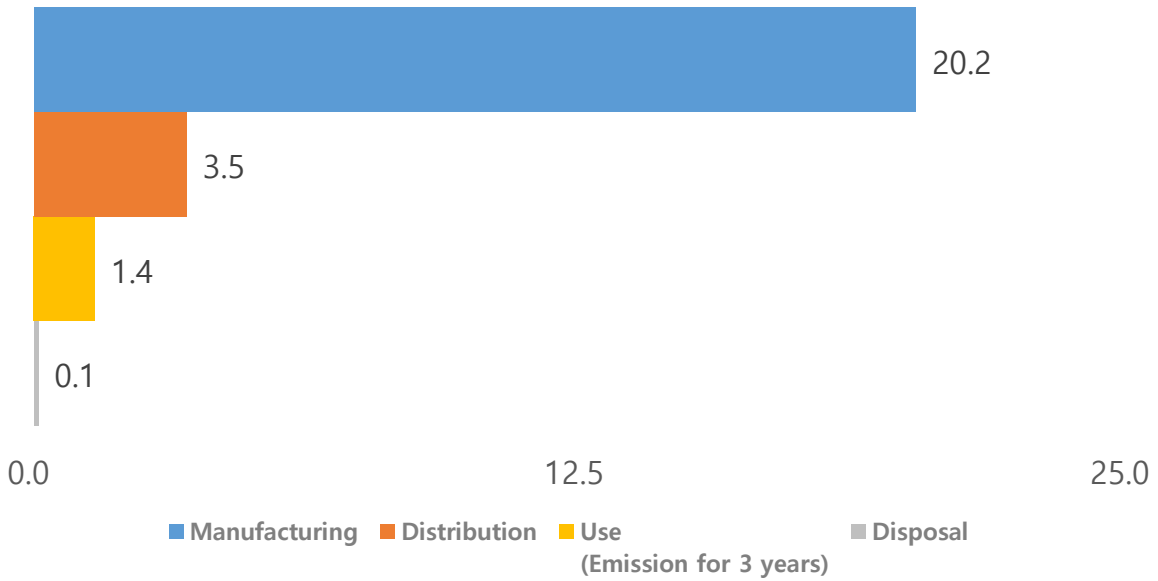


Characterized Environment Impact



Life Cycle Carbon Emissions

Unit : $kgCO_2$ eq.



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch8 44mm

Background

Samsung has developed the technical expertise to analyze and evaluate the environmental impact of its products. Based on international standards such as ISO14040 and ISO14044, Samsung has implemented the SDP*. This evaluation considers the entire product lifecycle, including manufacturing, distribution, usage, and disposal. The SDP analyzes various data categories, including the materials and weight of product BOM**, inputs/outputs in manufacturing processes, distribution routes, energy consumption during product usage, and disposal scenarios to precisely measure environmental impacts.

The LCA results identified and quantified 11 environmental impact categories, including climate change, acidification, ecotoxicity, and ozone depletion. Each category was evaluated for every lifecycle stage. These results will be utilized to improve product environmental specifications and inform product development.

This verification includes implementation methods, related procedures, and requirements for LCA, but does not ensure the reliability of the data used for the product model or the resulting outcomes. Considering these uncertainties, this report will be continuously updated and improved.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.10
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML v4.8 (Climate Change:IPCC)
LCA software	SDP(Sustainability Data Platform)

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to US
Use	3 years use
Disposal	Waste treatment of parts and material

SDP* : Sustainability Data Platform

BOM** : Bill of Material

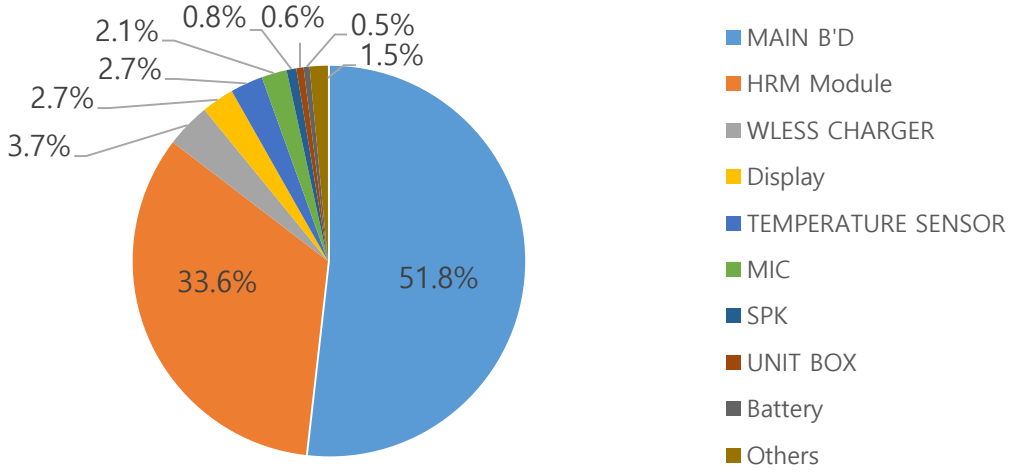
LCA Report Issuance Date : Jul. 10, 2025

Webpage Publication Date of Summary of LCA : Jul. 16, 2025

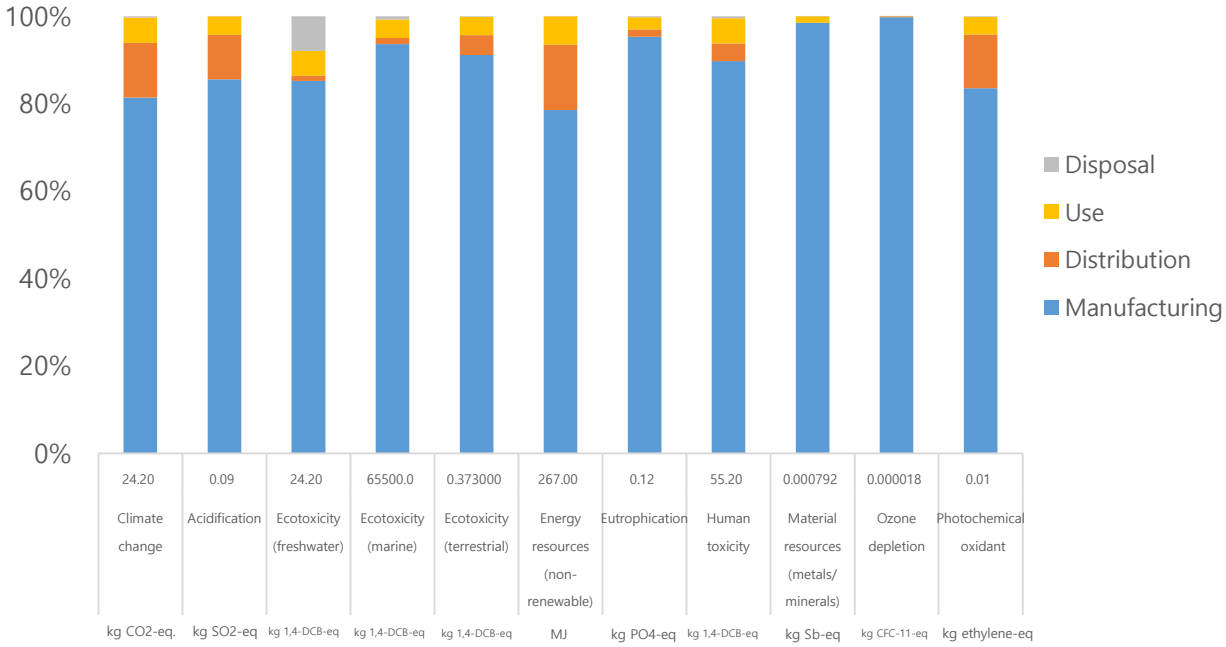
Product Features

Model name	SM-L335U(Galaxy Watch8 44mm)	
Dimension (mm)	46.0 x 43.7 x 8.6 mm	
Display (mm)	37.3	
Weight (g)	Product & Acc.	82.53
	Packages	172.04

Global Warming Impact Profile

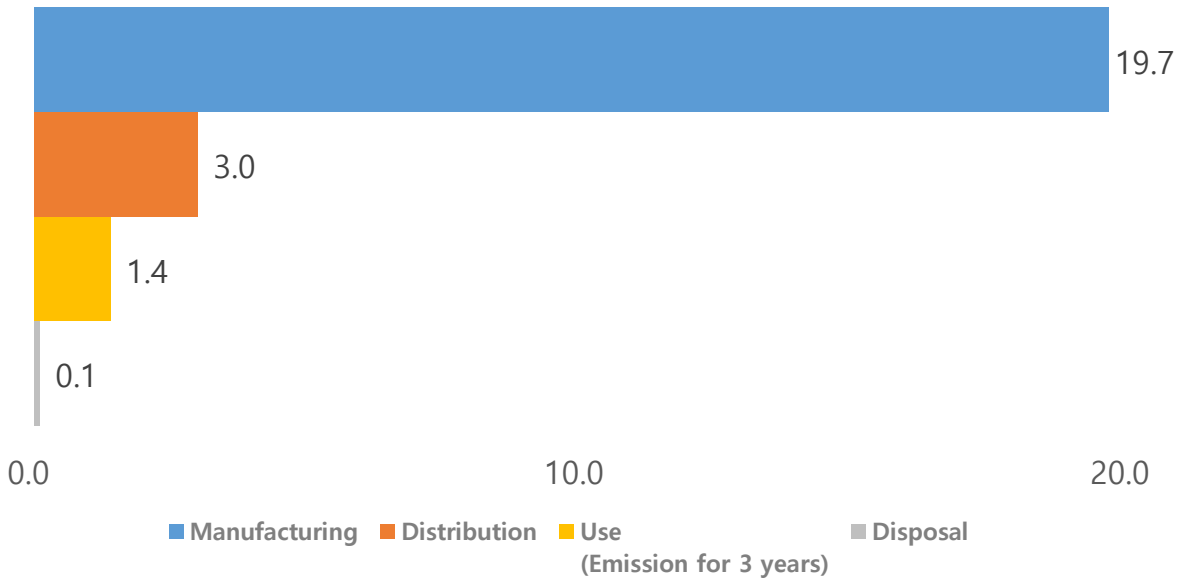


Characterized Environment Impact



Life Cycle Carbon Emissions

Unit : $kgCO_2$ eq.



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch8 40mm

Background

Samsung has developed the technical expertise to analyze and evaluate the environmental impact of its products. Based on international standards such as ISO14040 and ISO14044, Samsung has implemented the SDP*. This evaluation considers the entire product lifecycle, including manufacturing, distribution, usage, and disposal. The SDP analyzes various data categories, including the materials and weight of product BOM**, inputs/outputs in manufacturing processes, distribution routes, energy consumption during product usage, and disposal scenarios to precisely measure environmental impacts.

The LCA results identified and quantified 11 environmental impact categories, including climate change, acidification, ecotoxicity, and ozone depletion. Each category was evaluated for every lifecycle stage. These results will be utilized to improve product environmental specifications and inform product development.

This verification includes implementation methods, related procedures, and requirements for LCA, but does not ensure the reliability of the data used for the product model or the resulting outcomes. Considering these uncertainties, this report will be continuously updated and improved.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.10
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML v4.8 (Climate Change:IPCC)
LCA software	SDP(Sustainability Data Platform)

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to US
Use	3 years use
Disposal	Waste treatment of parts and material

SDP* : Sustainability Data Platform

BOM** : Bill of Material

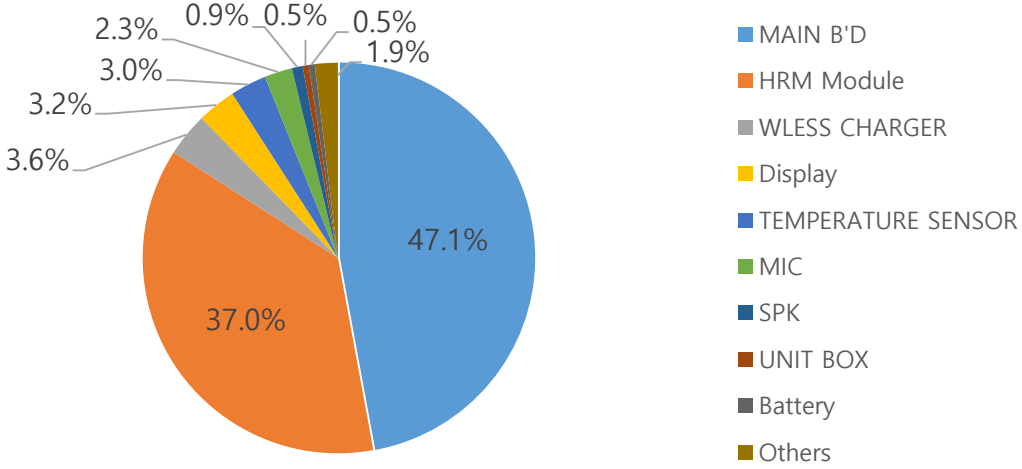
LCA Report Issuance Date : Jul. 10, 2025

Webpage Publication Date of Summary of LCA : Jul. 16, 2025

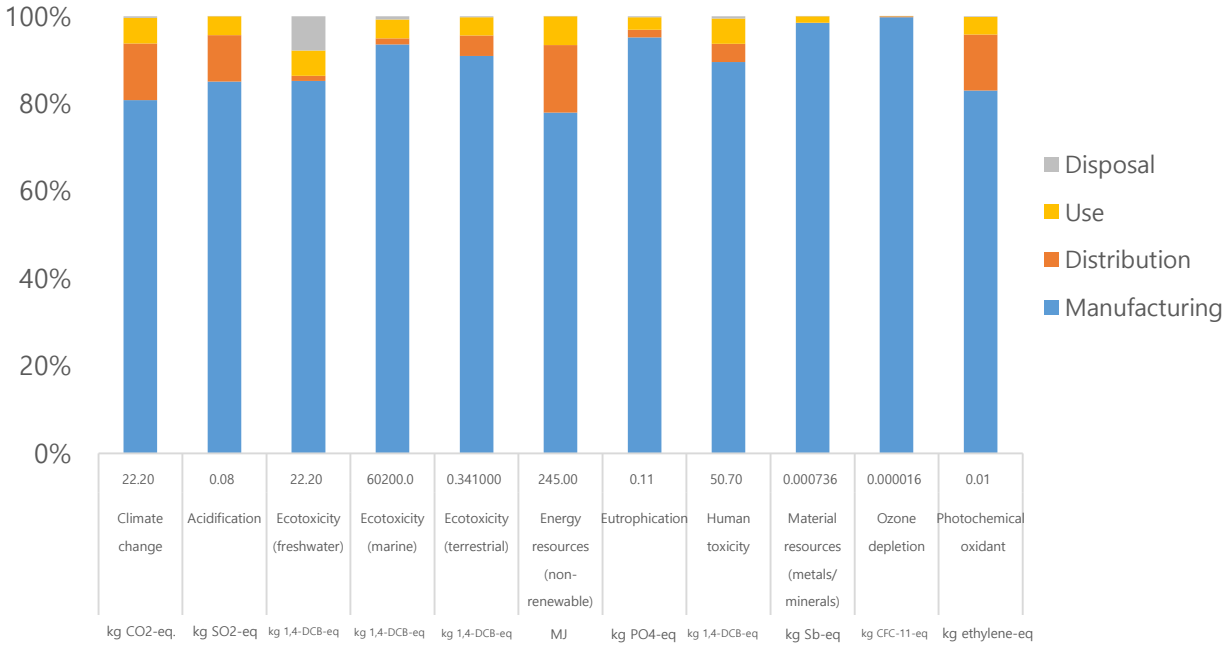
Product Features

Model name	SM-L325U(Galaxy Watch8 40mm)	
Dimension (mm)	42.7 x 40.4 x 8.6 mm	
Display (mm)	34.0	
Weight (g)	Product & Acc.	87.92
	Packages	153.57

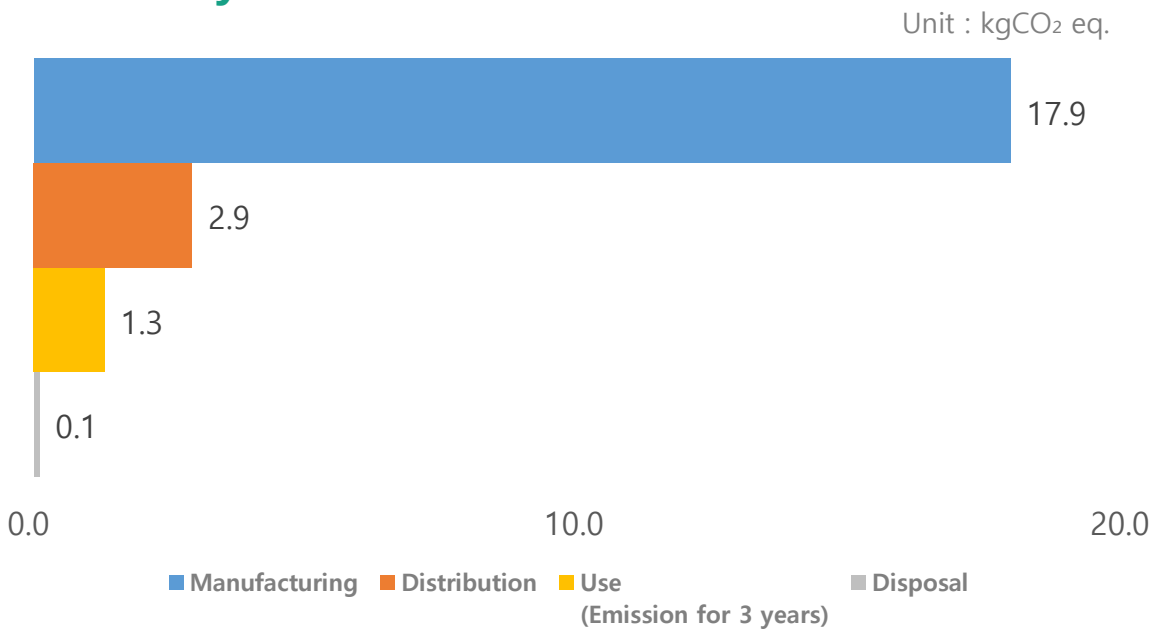
Global Warming Impact Profile



Characterized Environment Impact



Life Cycle Carbon Emissions



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch FE(US)

Background

Samsung has developed the technical expertise to analyze and evaluate the environmental impact of its products. Based on international standards such as ISO14040 and ISO14044, Samsung has implemented the SDP*. This evaluation considers the entire product lifecycle, including manufacturing, distribution, usage, and disposal. The SDP analyzes various data categories, including the materials and weight of product BOM**, inputs/outputs in manufacturing processes, distribution routes, energy consumption during product usage, and disposal scenarios to precisely measure environmental impacts.

The LCA results identified and quantified 11 environmental impact categories, including climate change, acidification, ecotoxicity, and ozone depletion. Each category was evaluated for every lifecycle stage. These results will be utilized to improve product environmental specifications and inform product development.

This verification includes implementation methods, related procedures, and requirements for LCA, but does not ensure the reliability of the data used for the product model or the resulting outcomes. Considering these uncertainties, this report will be continuously updated and improved.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.10
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML v4.8 (Climate Change:IPCC)
LCA software	SDP(Sustainability Data Platform)

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to US
Use	3 years use
Disposal	Waste treatment of parts and material

SDP* : Sustainability Data Platform

BOM** : Bill of Material

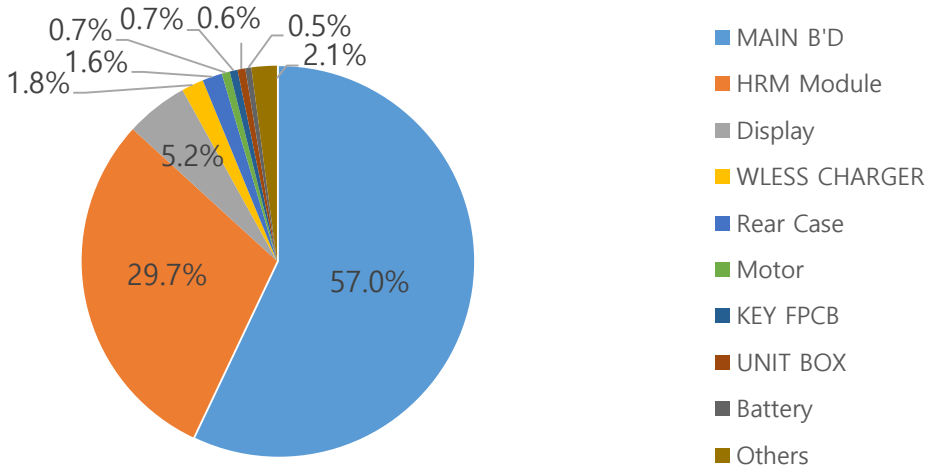
LCA Report Issuance Date : Oct. 02, 2024

Webpage Publication Date of Summary of LCA : Oct. 07, 2024

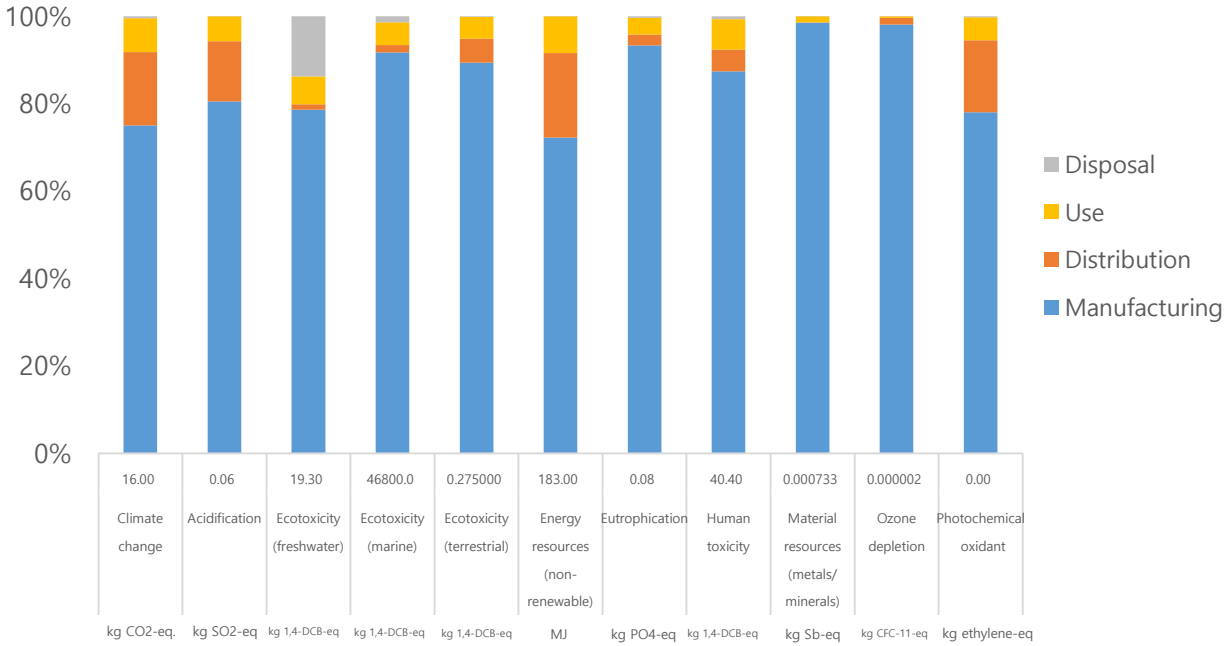
Product Features

Model name	SM-R861 (Galaxy Watch FE)	
Dimension (mm)	39.3 x 40.4 x 9.8	
Display (mm)	30.4	
Weight (g)	Product & Acc.	77.41
	Packages	148.46

Global Warming Impact Profile

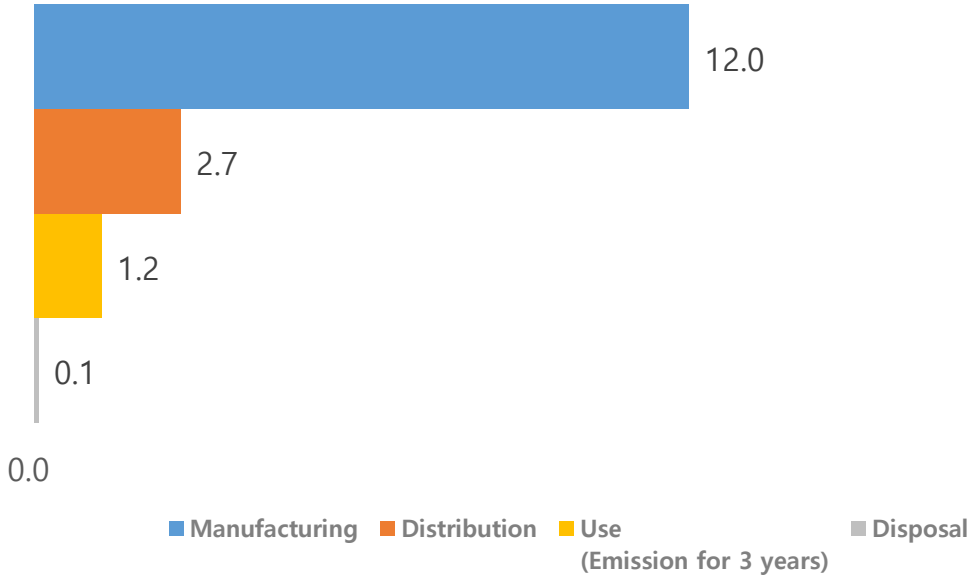


Characterized Environment Impact



Life Cycle Carbon Emissions

Unit : $kgCO_2$ eq.



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch Ultra

Background

Samsung has developed strong technical experience in assessing the life cycle environmental impacts of its products. The assessment considers potential environmental impacts across the whole life cycle including; pre-manufacturing; product manufacturing; distribution; product use; and disposal phase. To ensure technical quality; the analysis methodology has been completed according to international standard ISO 14040 series. Samsung has used SimaPro 9.6.0.1 software and a dedicated LCA S/W database to measure environmental impacts using a wide range of data categories including; Product bill of material(BOM), parts and components logistics, energy consumption in product use and end-of-life scenario data in order to attain the highest level of accuracy. The outcome of the LCA confirmed and quantified 10 potential environment impact categories including; global warming; abiotic depletion; ocean acidification; eutrophication; and ozone layer depletion; where each impact category has been assessed for each life cycle stage. These LCA results will continue to be considered during product development phase as we aspire to improve the environmental specifications of our products.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.10
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML-IA baseline V3.09 / the Netherlands, 1997 as provided in the SimaPro 9.6.0.1 LCA tool
LCA software	SimaPro 9.6.0.1

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to US
Use	3 years use
Disposal	Waste treatment of parts and material

Critical review for LCA study was done by internal expert in Circular Economy Lab of Samsung Electronics. (ecodesign@samsung.com)

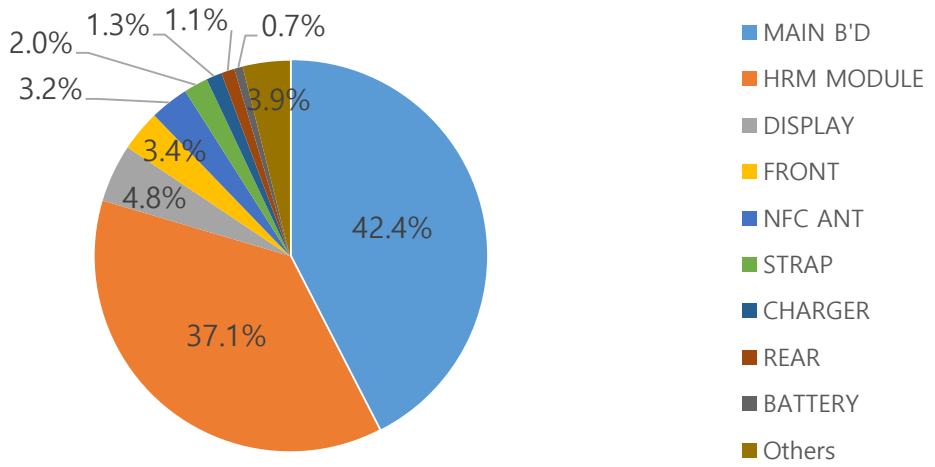
LCA Report Issuance Date : Oct. 18, 2024

Webpage Publication Date of Summary of LCA : Oct. 21, 2024

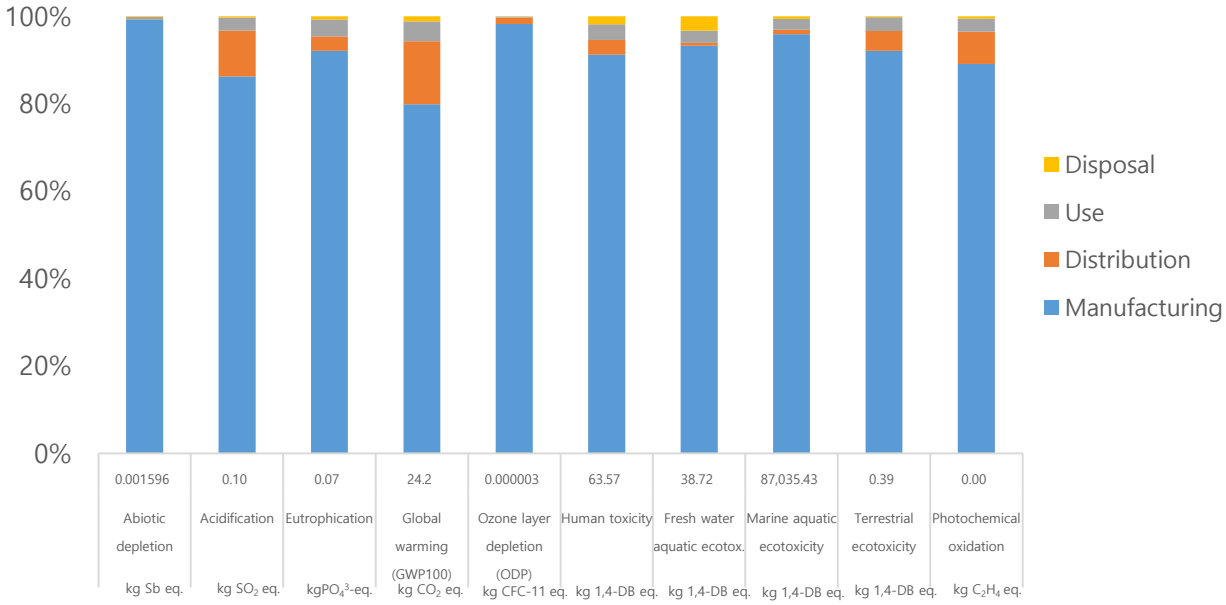
Product Features

Model name	SM-L705U(Galaxy Watch Ultra)
Dimension	47.4 x 47.1 x 12.1 mm
Display	OLED 1.5"
Weight	Product & Acc. : 118.10g Packages : 203.66g

Global Warming Impact Profile

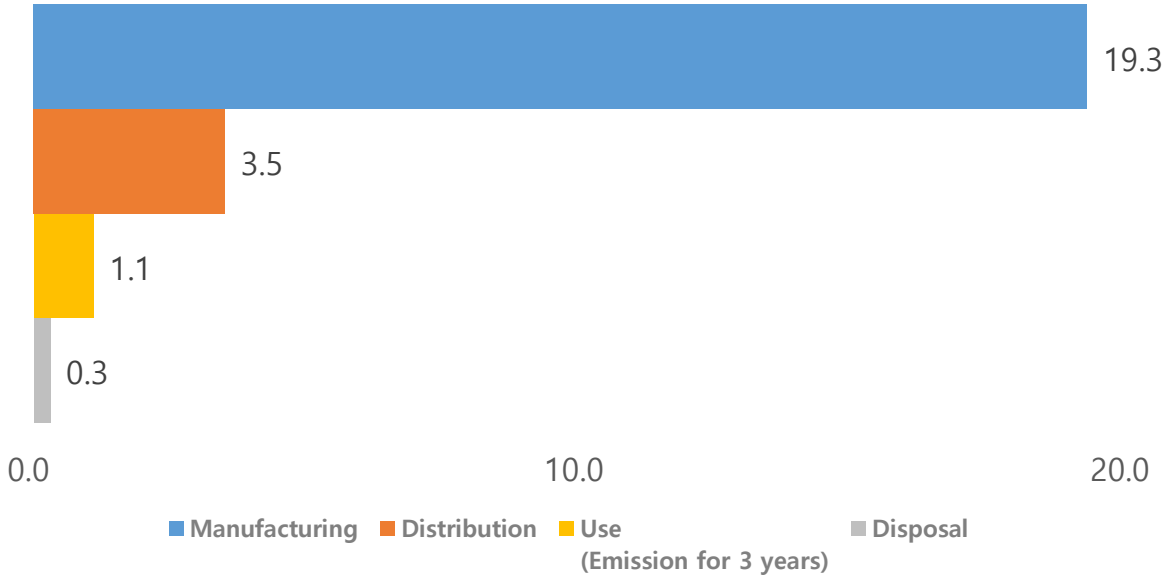


Characterized Environment Impact



Life Cycle Carbon Emissions

Unit : $kgCO_2$ eq.



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch7 44mm

Background

Samsung has developed strong technical experience in assessing the life cycle environmental impacts of its products. The assessment considers potential environmental impacts across the whole life cycle including; pre-manufacturing; product manufacturing; distribution; product use; and disposal phase. To ensure technical quality; the analysis methodology has been completed according to international standard ISO 14040 series. Samsung has used SimaPro 9.5.0.0 software and a dedicated LCA S/W database to measure environmental impacts using a wide range of data categories including; Product bill of material(BOM), parts and components logistics, energy consumption in product use and end-of-life scenario data in order to attain the highest level of accuracy. The outcome of the LCA confirmed and quantified 10 potential environment impact categories including; global warming; abiotic depletion; ocean acidification; eutrophication; and ozone layer depletion; where each impact category has been assessed for each life cycle stage. These LCA results will continue to be considered during product development phase as we aspire to improve the environmental specifications of our products.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.9.1
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML-IA baseline V3.09 / the Netherlands, 1997 as provided in the SimaPro 9.5.0.0 LCA tool
LCA software	SimaPro 9.5.0.0

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to US
Use	3 years use
Disposal	Waste treatment of parts and material

Critical review for LCA study was done by internal expert in Global CS Center of Samsung Electronics. (ecodesign@samsung.com)

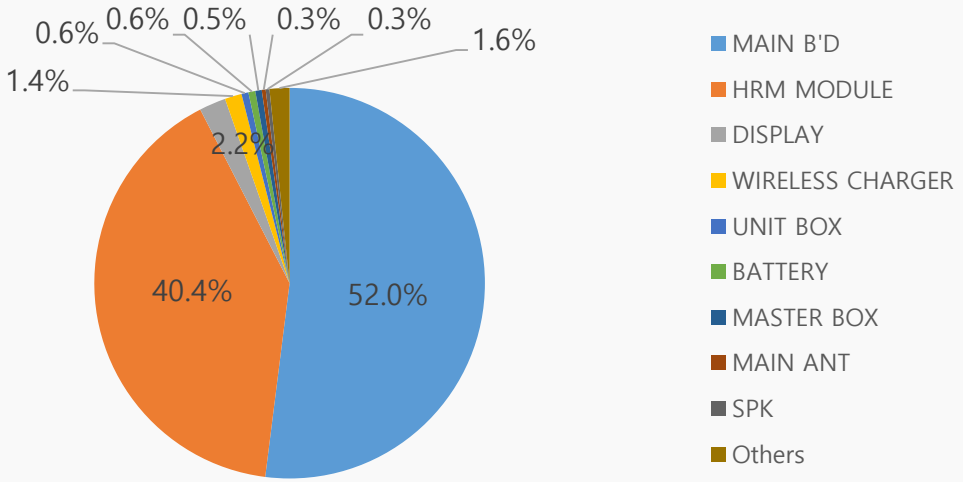
LCA Report Issuance Date : Oct. 18, 2024

Webpage Publication Date of Summary of LCA : Oct. 21, 2024

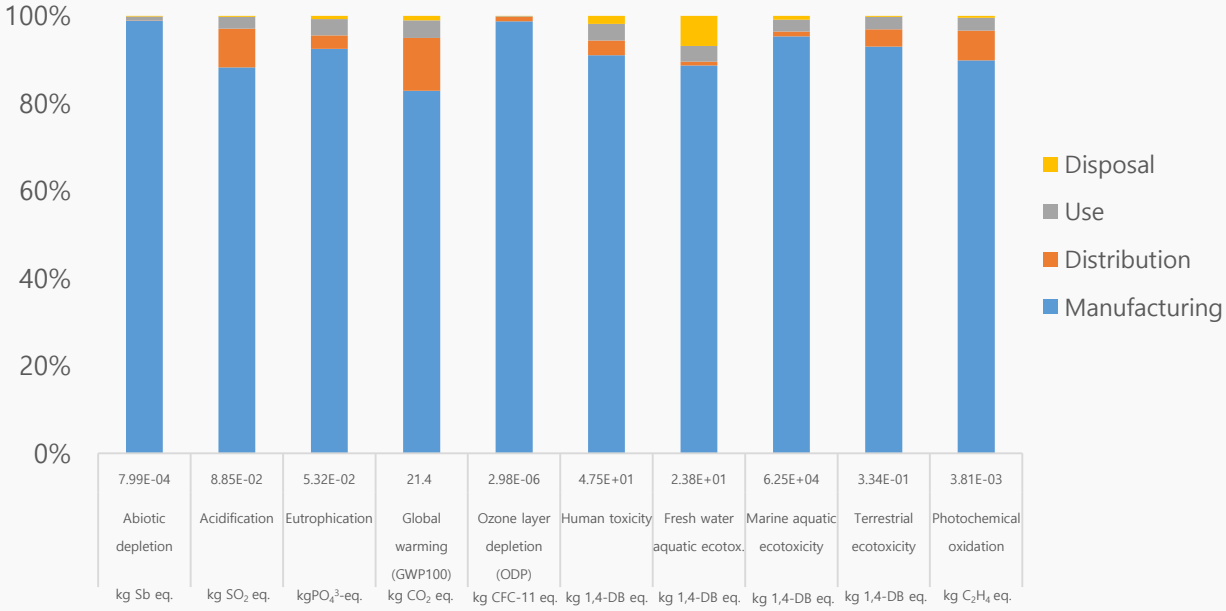
Product Features

Model name	SM-L315U(Galaxy Watch7 44mm)
Dimension	44.4 x 44.4 x 9.7 mm
Display	OLED 1.47"
Weight	Product&Acc. : 84.48 g Packages : 154.45 g

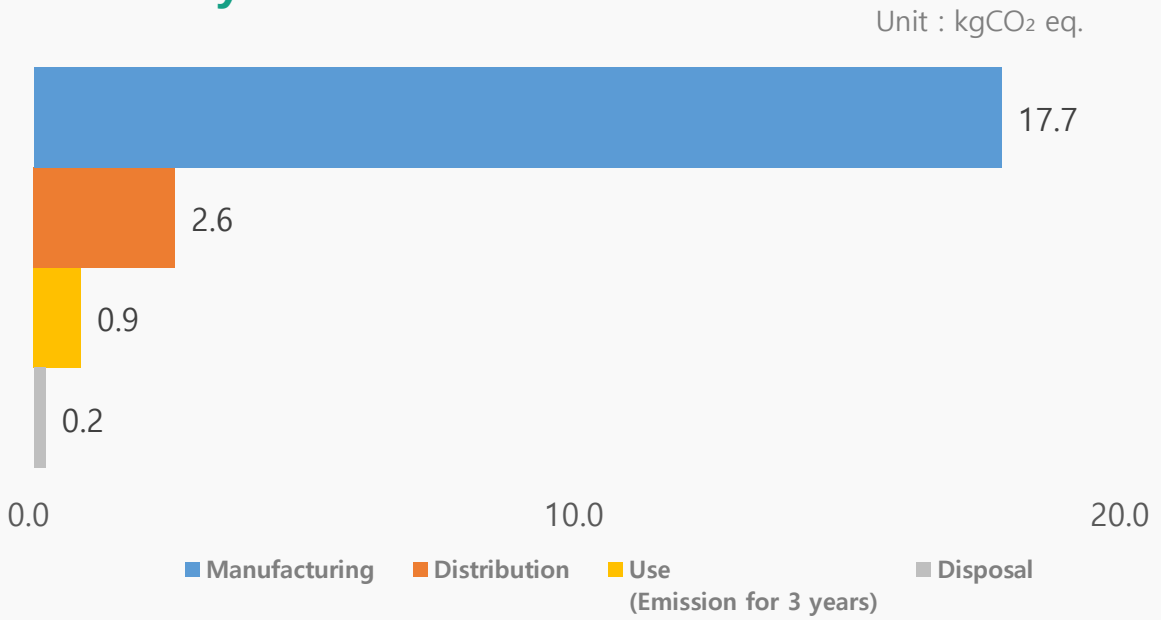
Global Warming Impact Profile



Characterized Environment Impact



Life Cycle Carbon Emissions



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch7 40mm

Background

Samsung has developed strong technical experience in assessing the life cycle environmental impacts of its products. The assessment considers potential environmental impacts across the whole life cycle including; pre-manufacturing; product manufacturing; distribution; product use; and disposal phase. To ensure technical quality; the analysis methodology has been completed according to international standard ISO 14040 series. Samsung has used SimaPro 9.5.0.0 software and a dedicated LCA S/W database to measure environmental impacts using a wide range of data categories including; Product bill of material(BOM), parts and components logistics, energy consumption in product use and end-of-life scenario data in order to attain the highest level of accuracy. The outcome of the LCA confirmed and quantified 10 potential environment impact categories including; global warming; abiotic depletion; ocean acidification; eutrophication; and ozone layer depletion; where each impact category has been assessed for each life cycle stage. These LCA results will continue to be considered during product development phase as we aspire to improve the environmental specifications of our products.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.9.1
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML-IA baseline V3.09 / the Netherlands, 1997 as provided in the SimaPro 9.5.0.0 LCA tool
LCA software	SimaPro 9.5.0.0

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to US
Use	3 years use
Disposal	Waste treatment of parts and material

Critical review for LCA study was done by internal expert in Global CS Center of Samsung Electronics. (ecodesign@samsung.com)

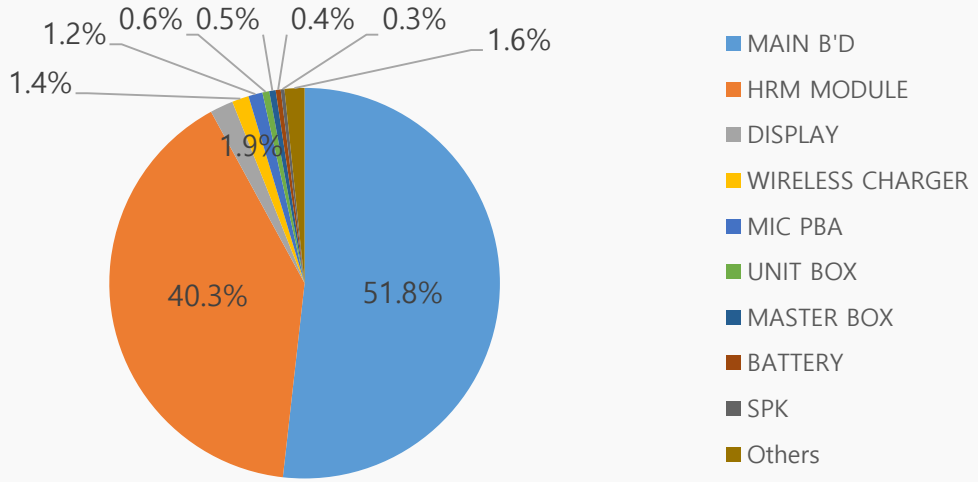
LCA Report Issuance Date : Oct. 18, 2024

Webpage Publication Date of Summary of LCA : Oct. 21, 2024

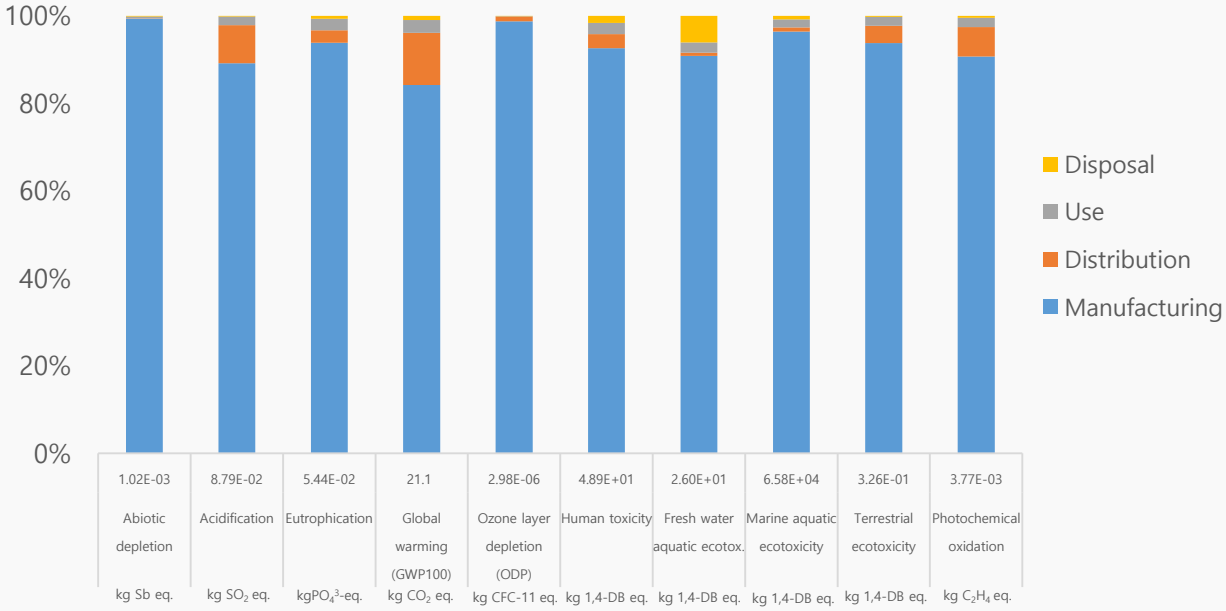
Product Features

Model name	SM-L305U(Galaxy Watch7 40mm)
Dimension	40.4 x 40.4 x 9.7 mm
Display	OLED 1.31"
Weight	Product&Acc. : 78.87 g Packages : 155.48 g

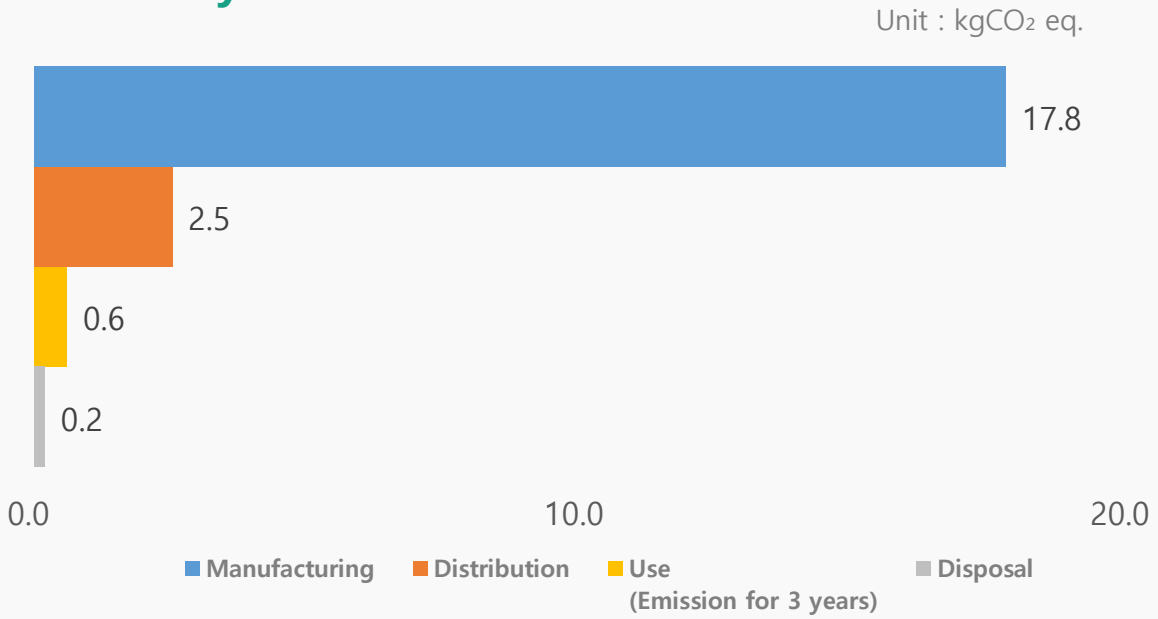
Global Warming Impact Profile



Characterized Environment Impact



Life Cycle Carbon Emissions



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch6 Classic 47mm

Background

Samsung has developed strong technical experience in assessing the life cycle environmental impacts of its products. The assessment considers potential environmental impacts across the whole life cycle including; product manufacturing; distribution; product use; and disposal phase. To ensure technical quality; the analysis methodology has been completed according to international standard ISO 14040 series. Samsung has used SimaPro 9.5.0.0 software and a dedicated LCA S/W database to measure environmental impacts using a wide range of data categories including; Product bill of material(BOM), parts and components logistics, energy consumption in product use and end-of-life scenario data in order to attain the highest level of accuracy. The outcome of the LCA confirmed and quantified 10 potential environment impact categories including; global warming; abiotic depletion; ocean acidification; eutrophication; and ozone layer depletion; where each impact category has been assessed for each life cycle stage. These LCA results will continue to be considered during product development phase as we aspire to improve the environmental specifications of our products.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.9
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML 2 baseline 2000 V3.09 / the Netherlands, 1997 as provided in the SimaPro 9.5.0.0 LCA tool
LCA software	SimaPro 9.5.0.0

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics Vietnam
Distribution	From Vietnam to United States
Use	3 years use
Disposal	Waste treatment of parts and material

Critical review for LCA study was done by internal expert in Global CS Center of Samsung Electronics. (ecodesign@samsung.com)

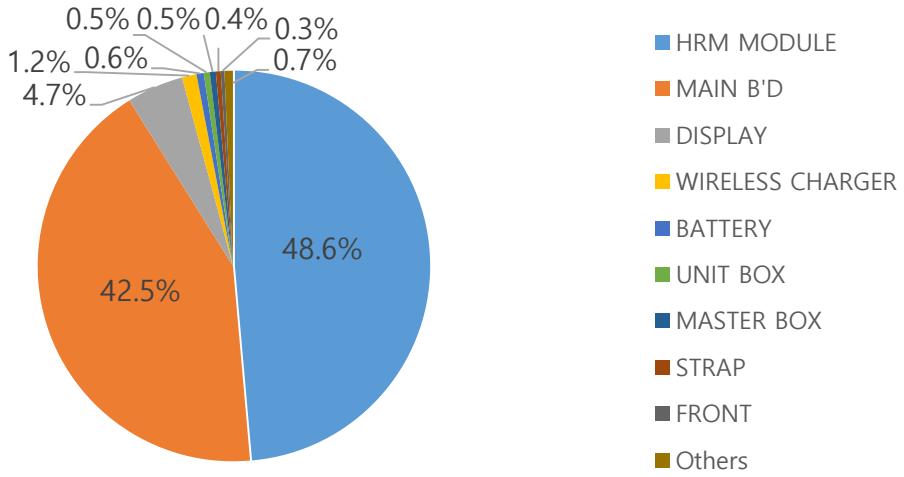
LCA Report Issuance Date : Jun. 13, 2023

Webpage Publication Date of Summary of LCA : Aug. 01, 2023

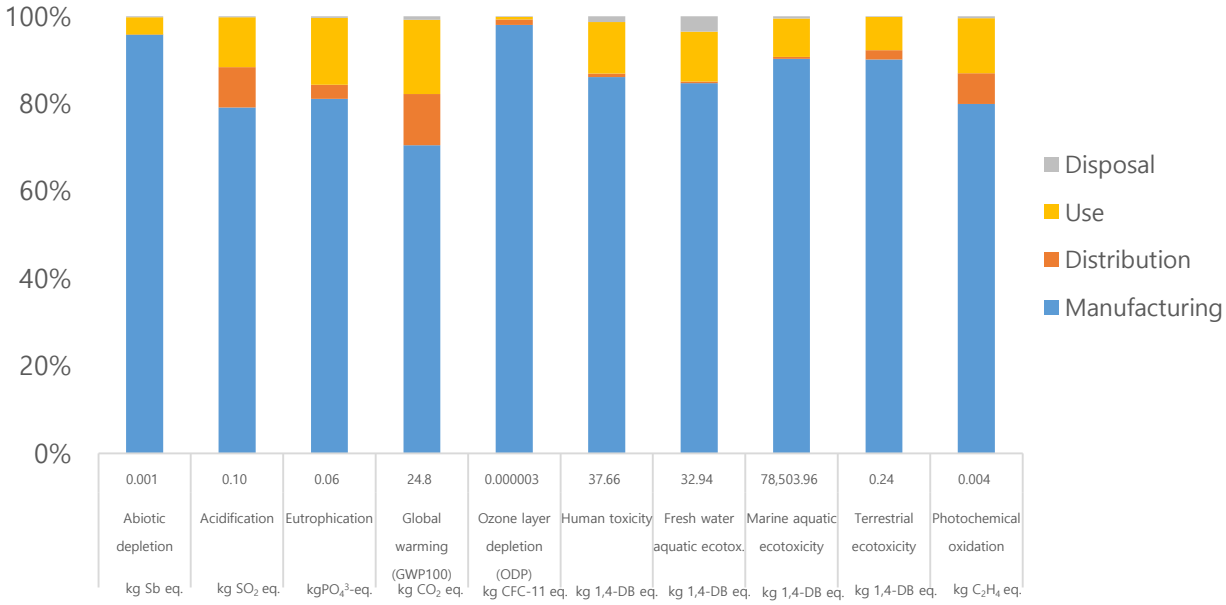
Product Features

Model name	SM-R965U
Dimension	46.5 x 46.5 x 10.8t
Display	1.47"(480x480), 327PPI
Weight	Product & Acc. : 110.43g Packages : 161.66g
Energy consumption	2.93 kWh / year

Global Warming Impact Profile

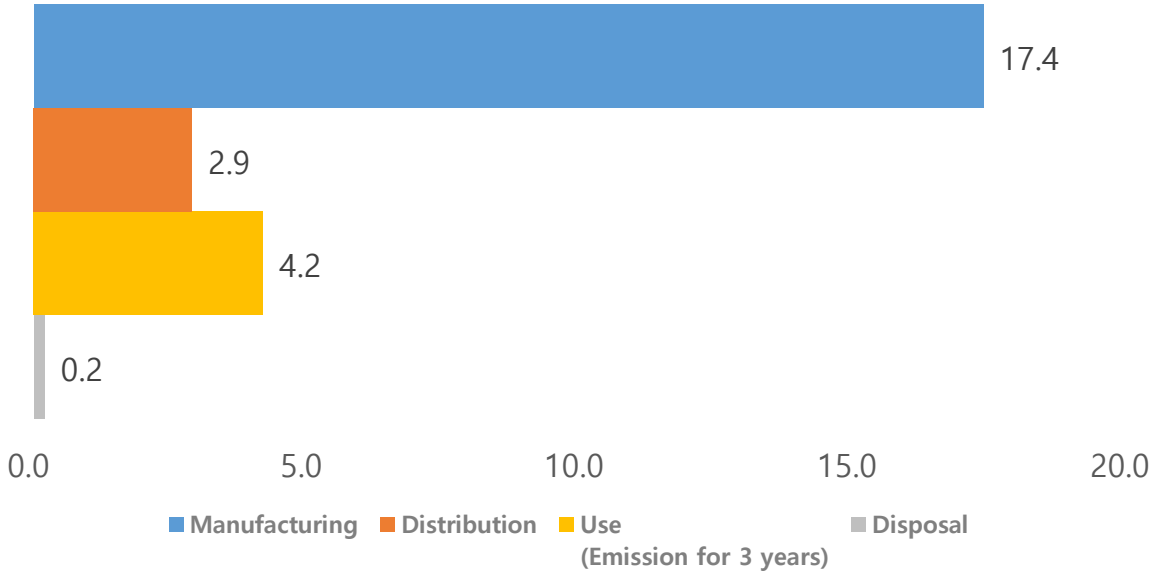


Characterized Environment Impact



Life Cycle Carbon Emissions

Unit : $kgCO_2$ eq.



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch6 Classic 43mm

Background

Samsung has developed strong technical experience in assessing the life cycle environmental impacts of its products. The assessment considers potential environmental impacts across the whole life cycle including; product manufacturing; distribution; product use; and disposal phase. To ensure technical quality; the analysis methodology has been completed according to international standard ISO 14040 series. Samsung has used SimaPro 9.5.0.0 software and a dedicated LCA S/W database to measure environmental impacts using a wide range of data categories including; Product bill of material(BOM), parts and components logistics, energy consumption in product use and end-of-life scenario data in order to attain the highest level of accuracy. The outcome of the LCA confirmed and quantified 10 potential environment impact categories including; global warming; abiotic depletion; ocean acidification; eutrophication; and ozone layer depletion; where each impact category has been assessed for each life cycle stage. These LCA results will continue to be considered during product development phase as we aspire to improve the environmental specifications of our products.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.9
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML 2 baseline 2000 V3.09 / the Netherlands, 1997 as provided in the SimaPro 9.5.0.0 LCA tool
LCA software	SimaPro 9.5.0.0

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics Vietnam
Distribution	From Vietnam to United States
Use	3 years use
Disposal	Waste treatment of parts and material

Critical review for LCA study was done by internal expert in Global CS Center of Samsung Electronics. (ecodesign@samsung.com)

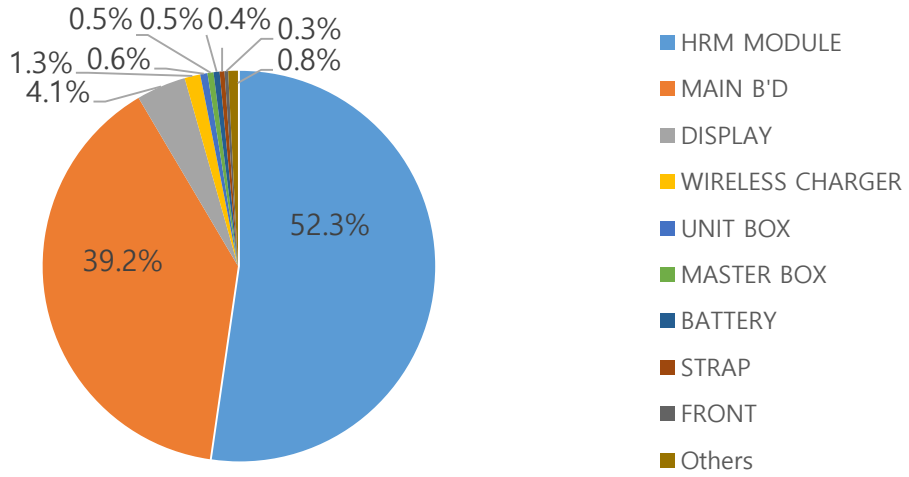
LCA Report Issuance Date : Jun. 13, 2023

Webpage Publication Date of Summary of LCA : Aug. 01, 2023

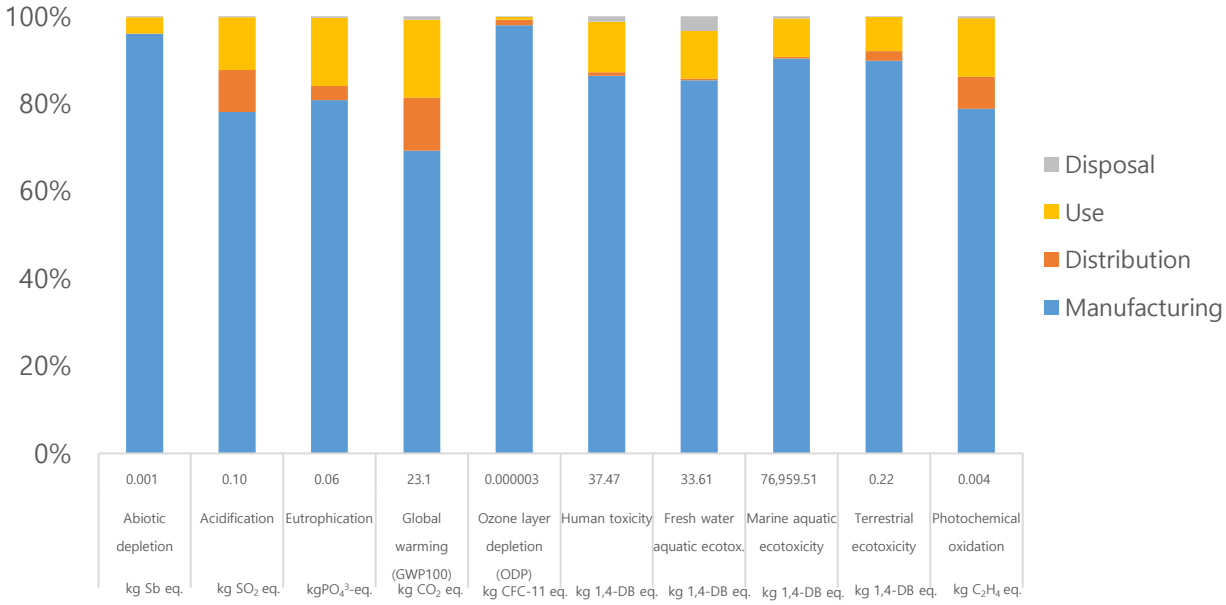
Product Features

Model name	SM-R955U
Dimension	42.5 x 42.5 x 10.8t
Display	1.31"(432x432), 330PPI
Weight	Product & Acc. : 103.80g Packages : 157.56g
Energy consumption	2.85 kWh / year

Global Warming Impact Profile

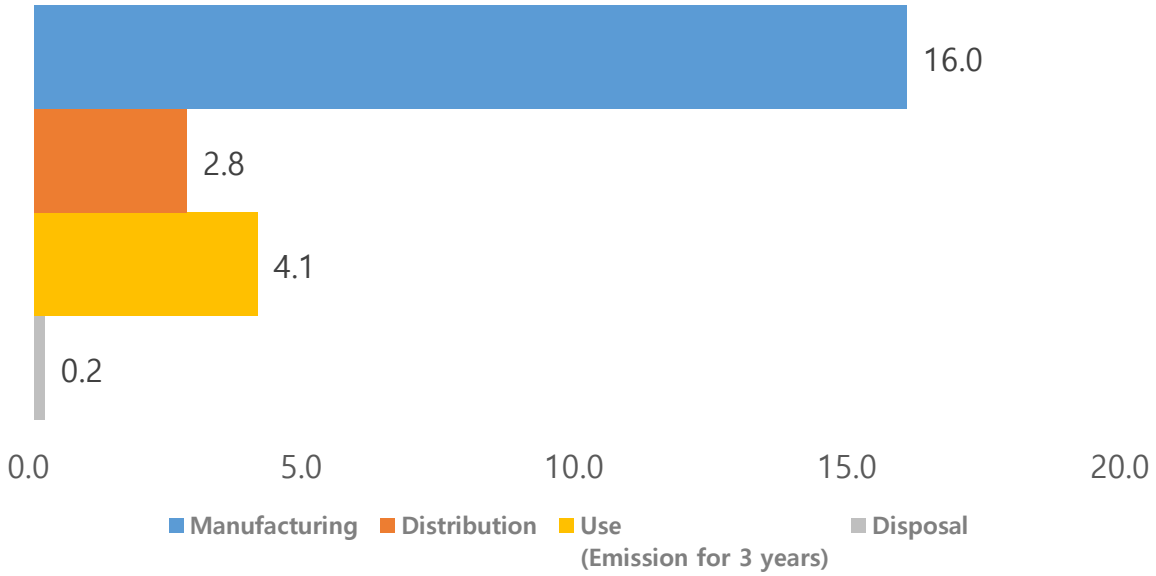


Characterized Environment Impact



Life Cycle Carbon Emissions

Unit : $kgCO_2$ eq.



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch6 44mm

Background

Samsung has developed strong technical experience in assessing the life cycle environmental impacts of its products. The assessment considers potential environmental impacts across the whole life cycle including; product manufacturing; distribution; product use; and disposal phase. To ensure technical quality; the analysis methodology has been completed according to international standard ISO 14040 series. Samsung has used SimaPro 9.5.0.0 software and a dedicated LCA S/W database to measure environmental impacts using a wide range of data categories including; Product bill of material(BOM), parts and components logistics, energy consumption in product use and end-of-life scenario data in order to attain the highest level of accuracy. The outcome of the LCA confirmed and quantified 10 potential environment impact categories including; global warming; abiotic depletion; ocean acidification; eutrophication; and ozone layer depletion; where each impact category has been assessed for each life cycle stage. These LCA results will continue to be considered during product development phase as we aspire to improve the environmental specifications of our products.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.9
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML 2 baseline 2000 V3.09 / the Netherlands, 1997 as provided in the SimaPro 9.5.0.0 LCA tool
LCA software	SimaPro 9.5.0.0

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics Vietnam
Distribution	From Vietnam to United States
Use	3 years use
Disposal	Waste treatment of parts and material

Critical review for LCA study was done by internal expert in Global CS Center of Samsung Electronics. (ecodesign@samsung.com)

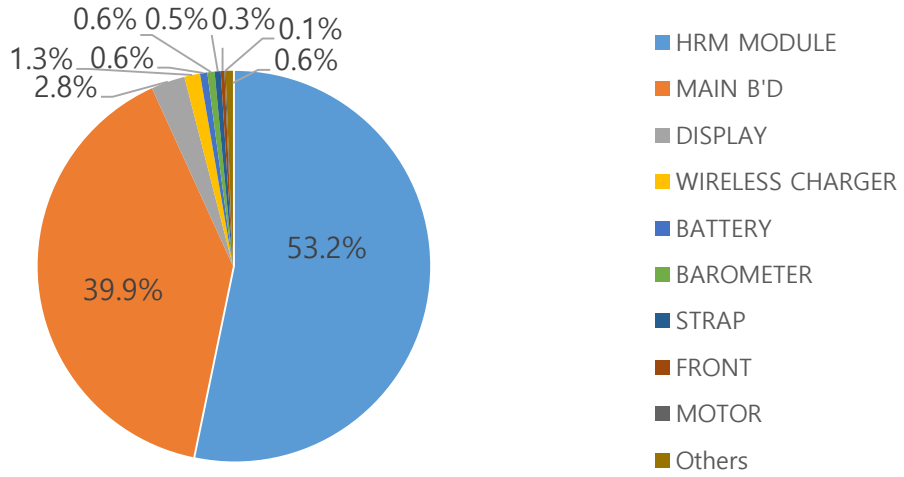
LCA Report Issuance Date : Jun. 13, 2023

Webpage Publication Date of Summary of LCA : Aug. 01, 2023

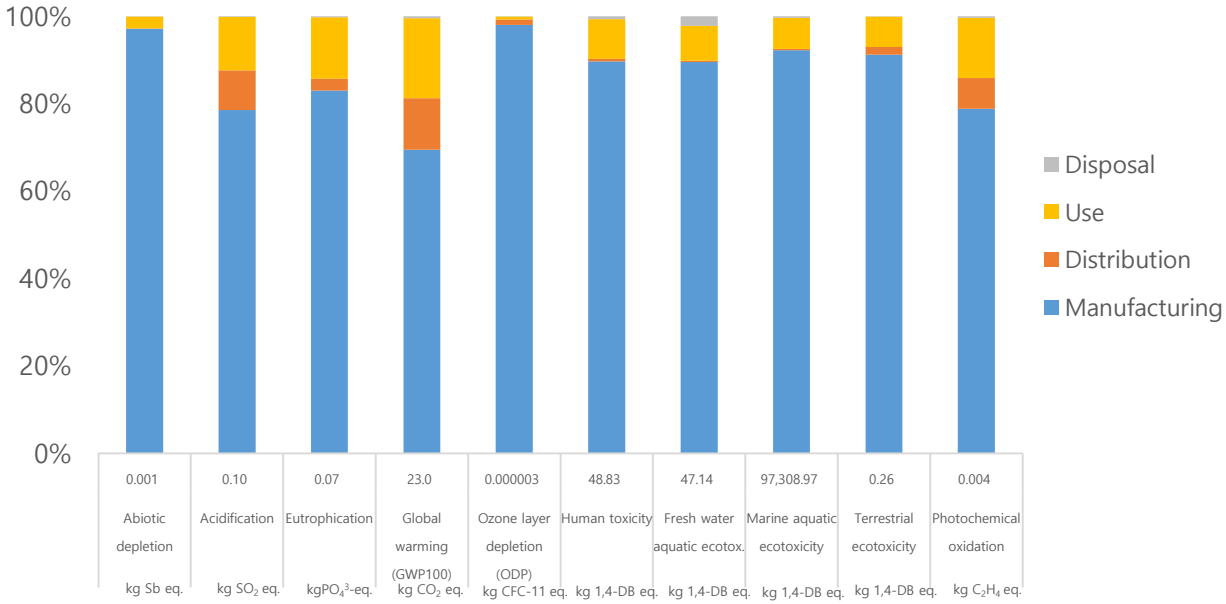
Product Features

Model name	SM-R945U
Dimension	44.4 x 42.8 x 9.0t
Display	1.47"(480x480), 327PPI
Weight	Product & Acc. : 85.55g Packages : 163.61g
Energy consumption	2.92 kWh / year

Global Warming Impact Profile

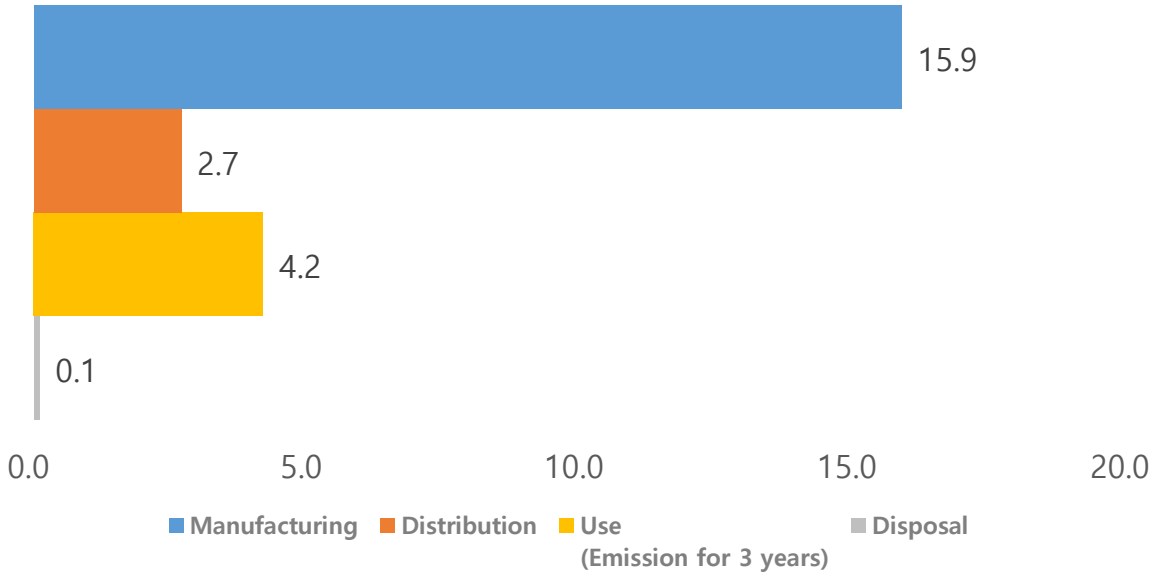


Characterized Environment Impact



Life Cycle Carbon Emissions

Unit : $kgCO_2$ eq.



* The results differ from to region, But not by much.

Life Cycle Assessment for Galaxy Watch6 40mm

Background

Samsung has developed strong technical experience in assessing the life cycle environmental impacts of its products. The assessment considers potential environmental impacts across the whole life cycle including; product manufacturing; distribution; product use; and disposal phase. To ensure technical quality; the analysis methodology has been completed according to international standard ISO 14040 series. Samsung has used SimaPro 9.5.0.0 software and a dedicated LCA S/W database to measure environmental impacts using a wide range of data categories including; Product bill of material(BOM), parts and components logistics, energy consumption in product use and end-of-life scenario data in order to attain the highest level of accuracy. The outcome of the LCA confirmed and quantified 10 potential environment impact categories including; global warming; abiotic depletion; ocean acidification; eutrophication; and ozone layer depletion; where each impact category has been assessed for each life cycle stage. These LCA results will continue to be considered during product development phase as we aspire to improve the environmental specifications of our products.

Calculation basis

Standard	ISO 14040:2006 and 14044:2006
Database	Ecoinvent 3.9
Method for impact assessment	Life cycle impact assessment classification and characterization factors according to CML 2 baseline 2000 V3.09 / the Netherlands, 1997 as provided in the SimaPro 9.5.0.0 LCA tool
LCA software	SimaPro 9.5.0.0

System boundary of LCA

Pre-manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics Vietnam
Distribution	From Vietnam to United States
Use	3 years use
Disposal	Waste treatment of parts and material

Critical review for LCA study was done by internal expert in Global CS Center of Samsung Electronics. (ecodesign@samsung.com)

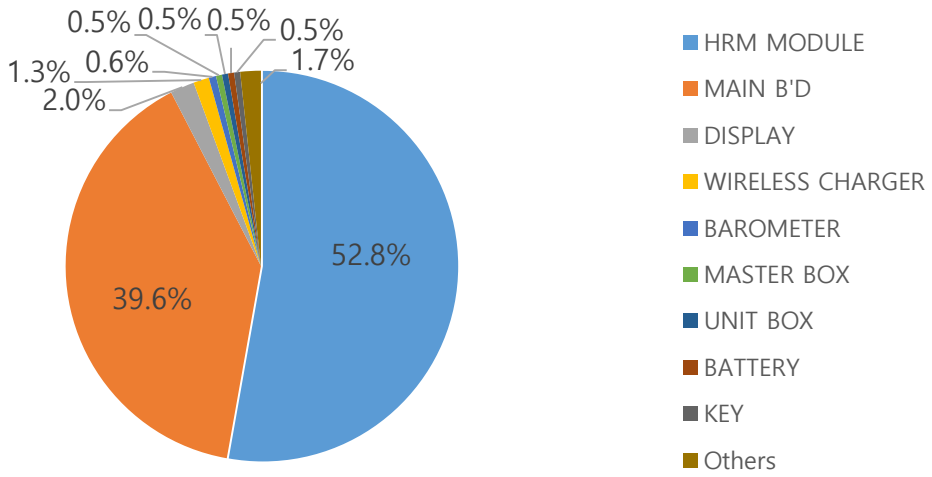
LCA Report Issuance Date : Jun. 13, 2023

Webpage Publication Date of Summary of LCA : Aug. 01, 2023

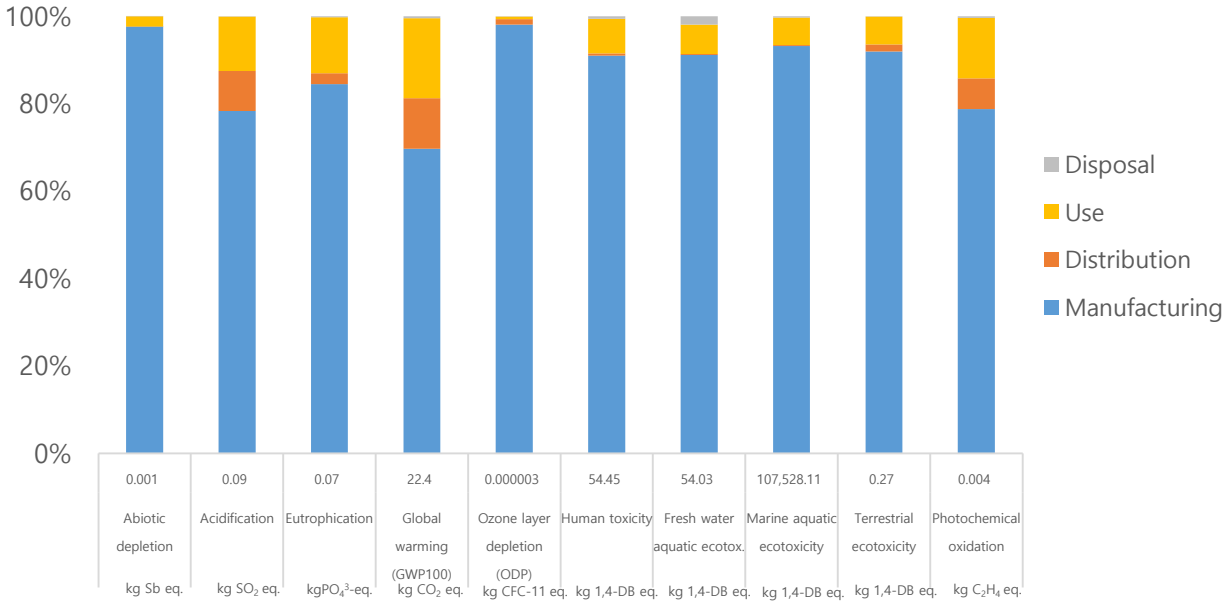
Product Features

Model name	SM-R935U
Dimension	40.4 x 38.8 x 9.0t
Display	1.31"(432x432), 330PPI
Weight	Product & Acc. : 79.73g Packages : 162.21g
Energy consumption	2.85 kWh / year

Global Warming Impact Profile

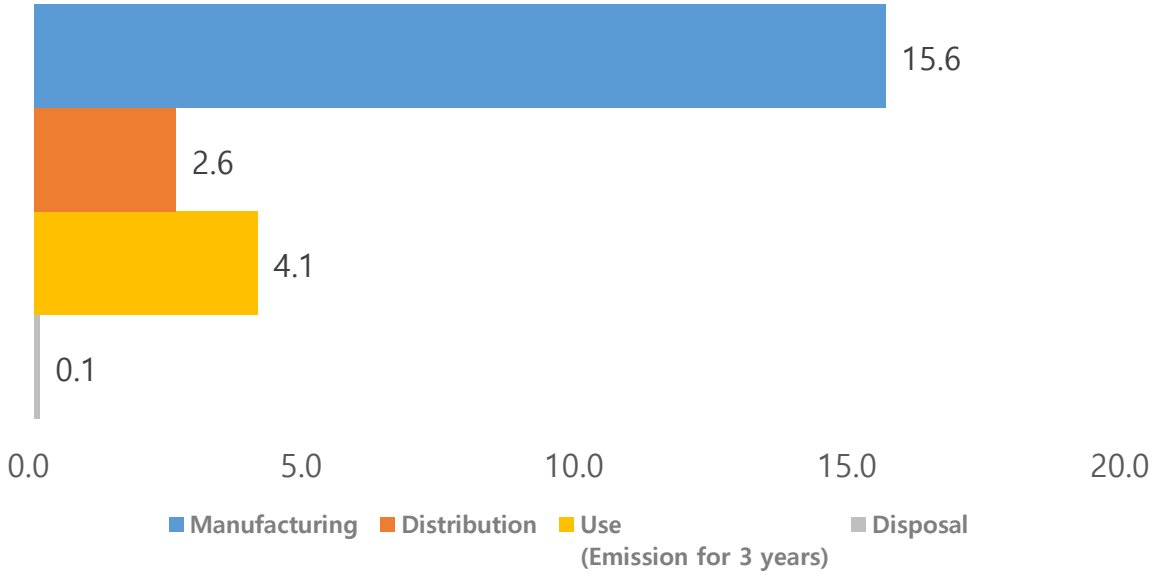


Characterized Environment Impact



Life Cycle Carbon Emissions

Unit : $kgCO_2$ eq.



* The results differ from to region, But not by much.