# Life Cycle Assessment for Galaxy Tab A11+ 5G(UK)

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\* : Bill of Material

## System boundary of LCA

Manufacturing	Parts and materials constituting the products and its transportation Product assembly by Samsung Electronics
Distribution	From Vietnam to UK
Use	4 years use
Disposal	Waste treatment of parts and material

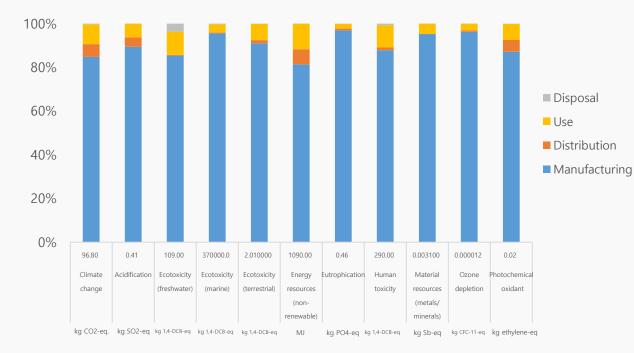
LCA Report Issuance Date : Nov. 04 , 2025

Webpage Publication Date of Summary of LCA: Nov. 05, 2025

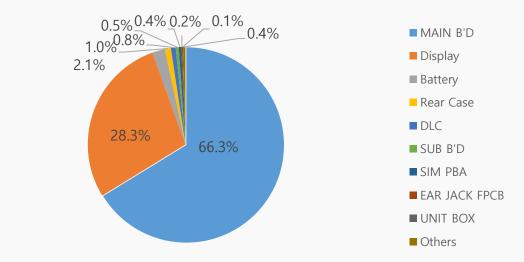


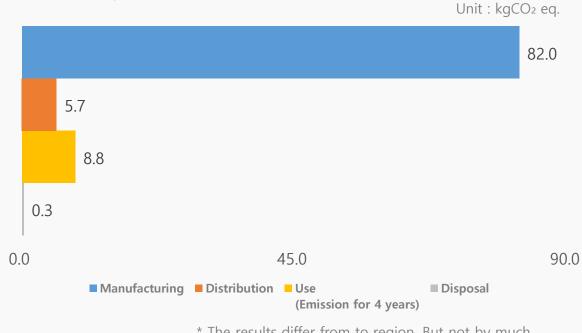
Model name	SM-X236B (Galaxy Tab A11+ 5G)	
Dimension (mm)	168.7 x 257.1 x 6.9	
Display (mm)	278.2	
Weight (g)	Product & Acc.	510.02
	Packages	205.13

#### Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab A11+(UK)

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\* : Bill of Material

## System boundary of LCA

Manufacturing	Parts and materials constituting the products and its transportation Product assembly by Samsung Electronics
Distribution	From Vietnam to UK
Use	4 years use
Disposal	Waste treatment of parts and material

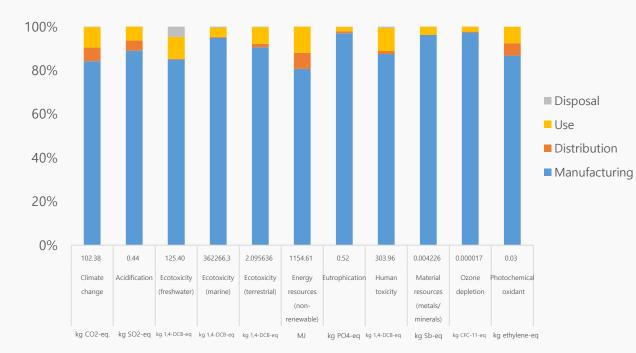
LCA Report Issuance Date : Nov. 04 , 2025

Webpage Publication Date of Summary of LCA: Nov. 05, 2025

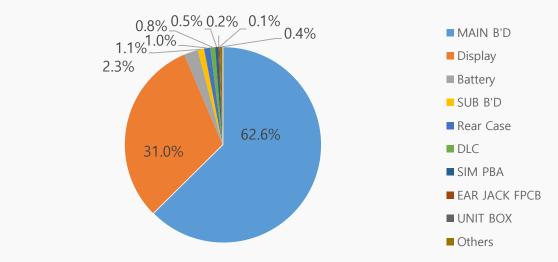


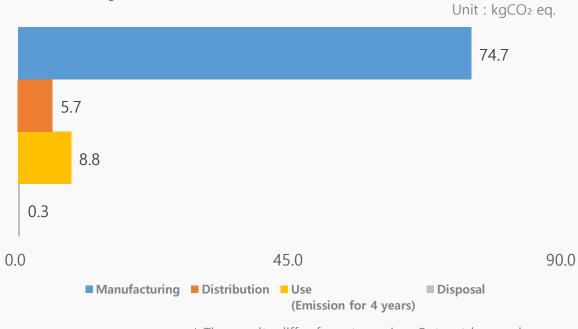
Model name	SM-X230N (Galaxy Tab A11+ WIFI)	
Dimension (mm)	168.7 x 257.1 x 6.9	
Display (mm)	278.2	
Weight (g)	Product & Acc.	500.93
	Packages	214.38

#### Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S11 (UK)

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\* : Bill of Material

### System boundary of LCA

Manufacturing	Parts and materials constituting the products and its transportation Product assembly by Samsung Electronics
Distribution	From Vietnam to UK
Use	4 years use
Disposal	Waste treatment of parts and material

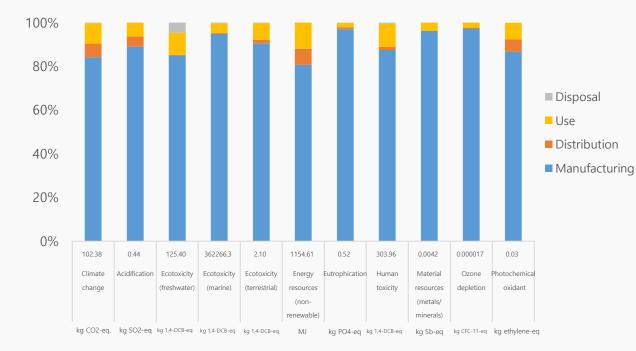
LCA Report Issuance Date : Sep. 05 , 2025

Webpage Publication Date of Summary of LCA: Sep. 30, 2025

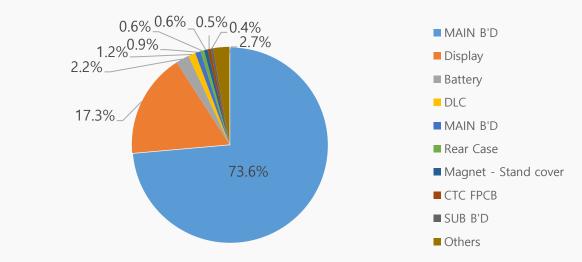


Model name	SM-X736B (Galaxy Tab S11)	
Dimension (mm)	165.3 x 253.8 x 5.5	
Display (mm)	278.1	
Memory	128GB	
Weight	Product & Acc.	524.95
(g)	Packages	277.78

#### Characterized Environment Impact

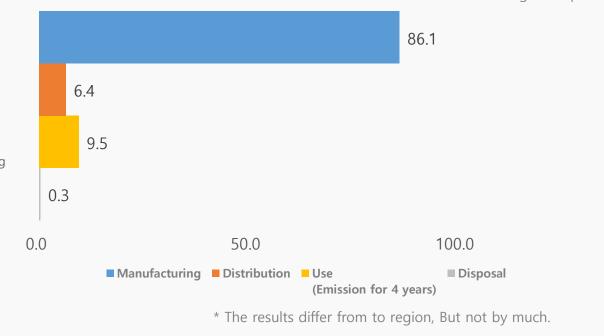


#### Global Warming Impact Profile



### Life Cycle Carbon Emissions

Unit: kgCO2 eq.



# Life Cycle Assessment for Galaxy Tab S11 Ultra 5G (UK)

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\* : Bill of Material

## System boundary of LCA

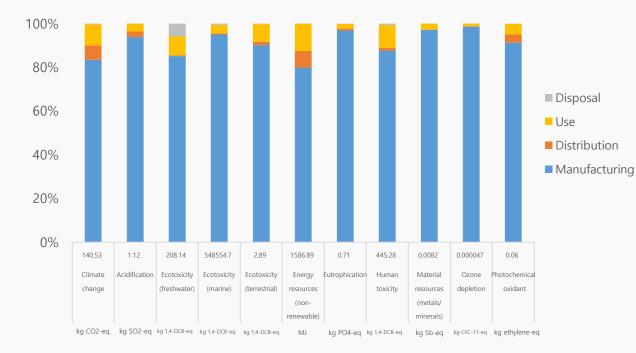
Manufacturing	Parts and materials constituting the products and its transportation Product assembly by Samsung Electronics
Distribution	From Vietnam to UK
Use	4 years use
Disposal	Waste treatment of parts and material

LCA Report Issuance Date : Sep. 05 , 2025

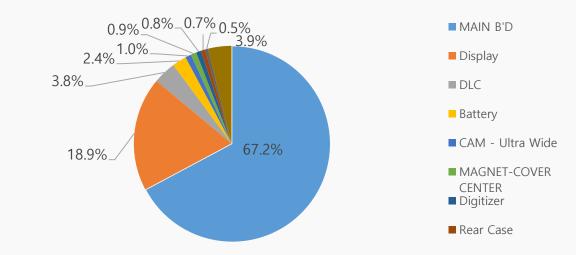


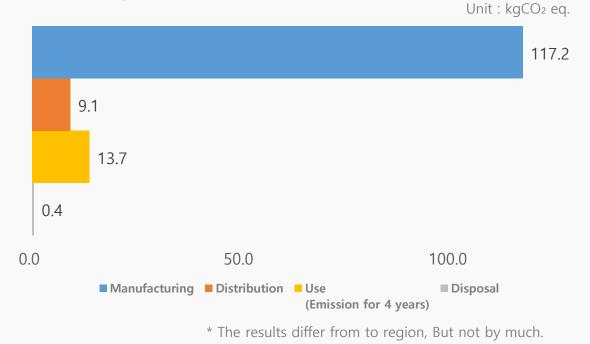
Model name	SM-X936B (Galaxy Tab S11 Ultra 5G)	
Dimension (mm)	208.5 x 326.3 x 5.1	
Display (mm)	369.9	
Memory	256GB	
Weight	Product & Acc.	747.86
(g)	Packages	395.52

#### Characterized Environment Impact



#### Global Warming Impact Profile





# Life Cycle Assessment for Galaxy Tab S10 Lite 5G(UK)

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\* : Bill of Material

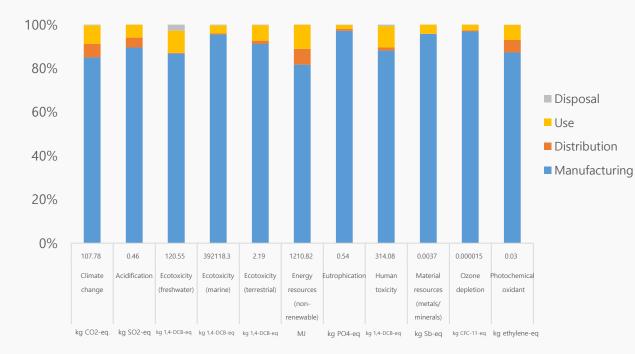
## System boundary of LCA

Manufacturing	Parts and materials constituting the products and its transportation Product assembly by Samsung Electronics
Distribution	From Vietnam to UK
Use	4 years use
Disposal	Waste treatment of parts and material

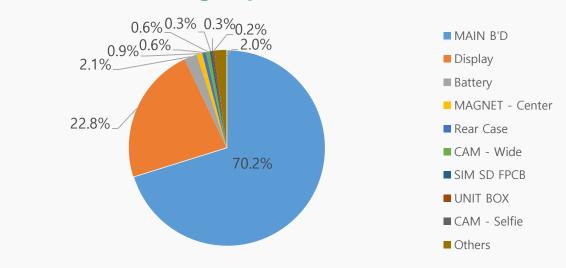


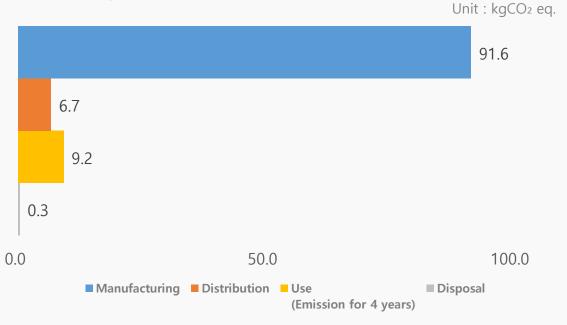
Model name	SM-X406B (Galaxy Tab S10 Lite 5G)	
Dimension (mm)	165.8 x 254.3 x 6.6	
Display (mm)	277.0	
Memory	128GB	
Weight	Product & Acc.	552.80
(g)	Packages	281.85

#### Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab Active 5 Pro 5G(EU)

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\* : Bill of Material

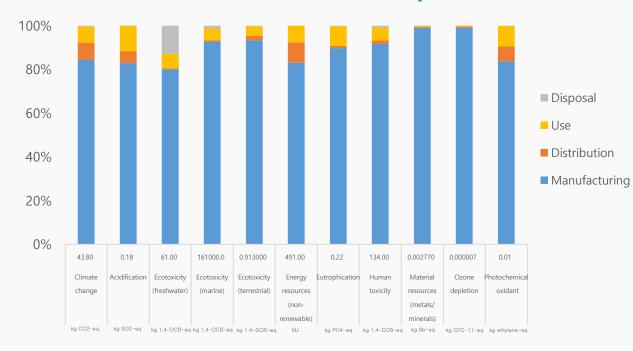
## System boundary of LCA

Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to EU
Use	4 years use
Disposal	Waste treatment of parts and material

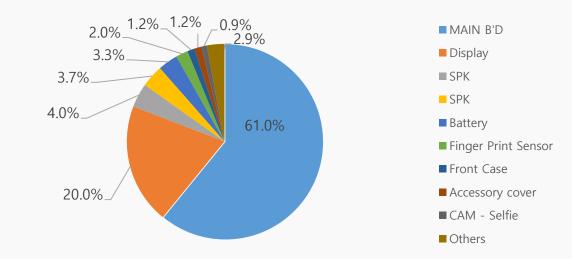


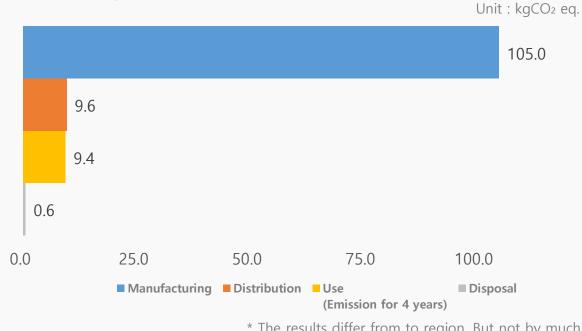
Model name	SM-X356B (Galaxy Tab Active5 Pro 5G)	
Dimension (mm)	170.2 x 242.9 x 10.2	
Display (mm)	255.4	
Weight	Product & Acc.	701.37
(g)	Packages	614.09

#### Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S10 FE+ 5G(UK)

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\* : Bill of Material

## 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 UK
Use	4 years use
Disposal	Waste treatment of parts and material

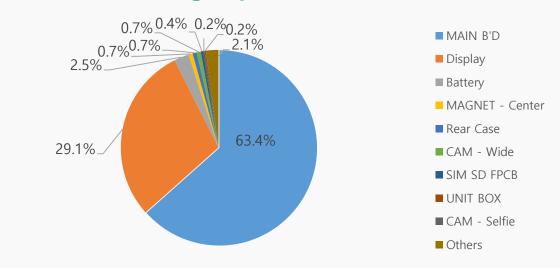


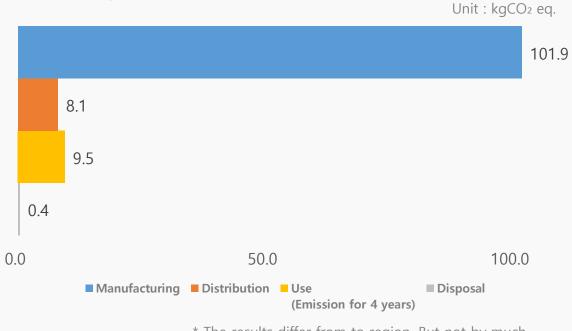
Model name	SM-X626B (Galaxy Tab S10 FE+ 5G)	
Dimension (mm)	194.7 x 300.6 x 6.0	
Display (mm)	332.8	
Memory	128GB	
Weight	Product & Acc.	696.92
(g)	Packages	320.64

#### Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S10 FE 5G(UK)

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\* : Bill of Material

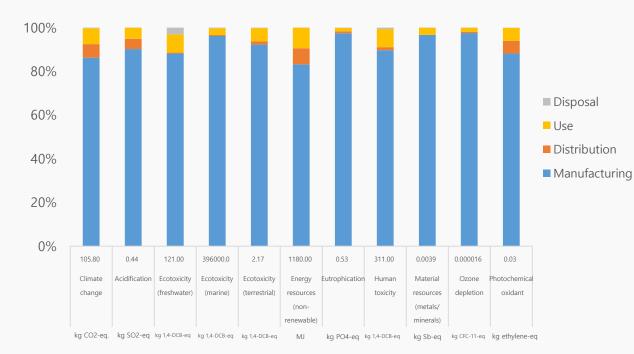
## System boundary of LCA

Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to UK
Use	4 years use
Disposal	Waste treatment of parts and material

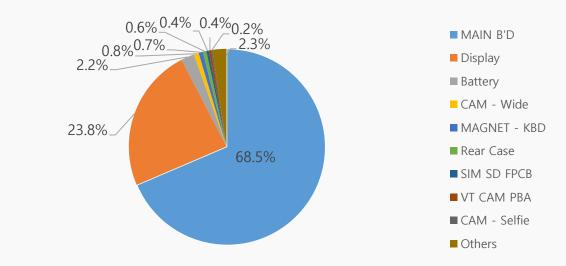


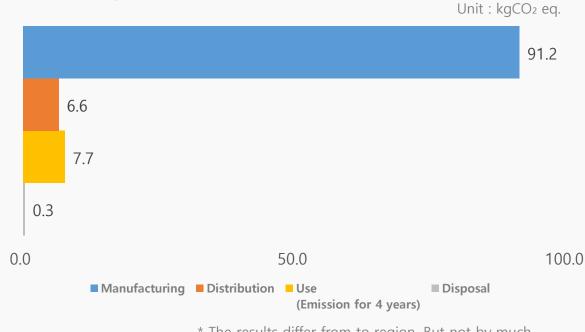
Model name	SM-X526B (Galaxy Tab S10 FE 5G)	
Dimension (mm)	165.8 x 254.3 x 6.0	
Display (mm)	277.0	
Memory	128GB	
Weight	Product & Acc.	552.22
(g)	Packages	269.58

#### Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S10 Ultra 5G(EU)

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\* : Bill of Material

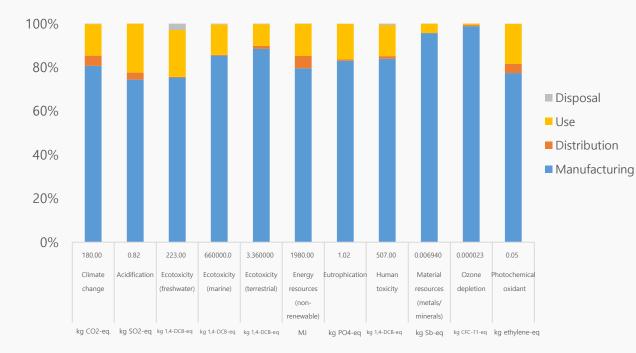
## System boundary of LCA

Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to EU
Use	4 years use
Disposal	Waste treatment of parts and material

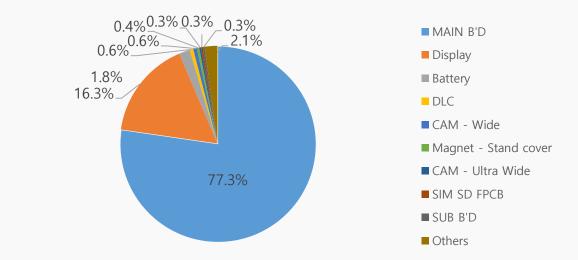


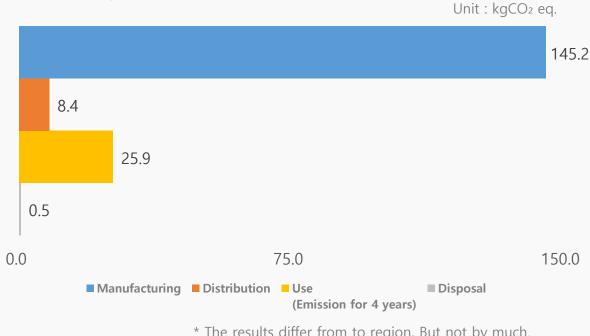
Model name	SM-X926B (Galaxy Tab S10 U	ltra 5G)
Dimension (mm)	208.6 x 326.4 x 5.4	
Display (mm)	369.9	
Weight (g)	Product & Acc.	785.63
	Packages	336.64

#### Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S10+

#### 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)

SDP\*: Sustainability Data Platform

BOM\*\*: Bill of Material

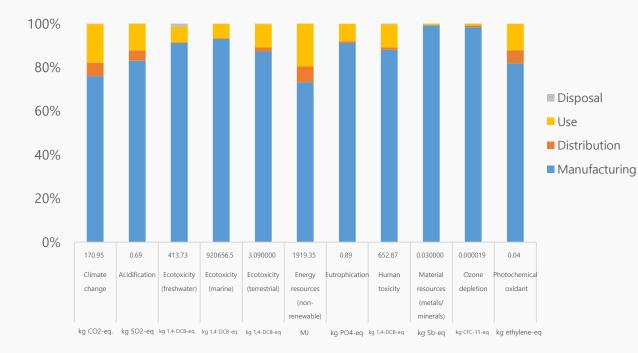
## System boundary of LCA

Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to US
Use	4 years use
Disposal	Waste treatment of parts and material

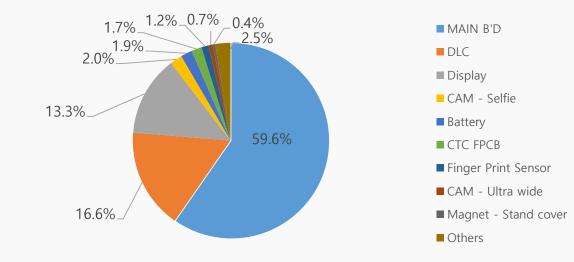


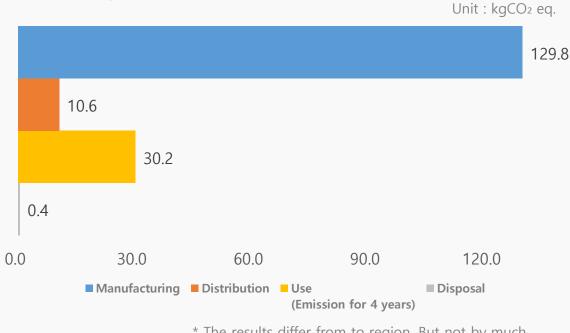
Model name	SM-X828U (Galaxy	Tab S10+)
Dimension (mm)	185.4 x 285.4 x 5.6	
Display (mm)	315.0	
Weight (g)	Product & Acc.	628.41
	Packages	286.78

#### Characterized Environment Impact



### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S6 Lite

#### 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

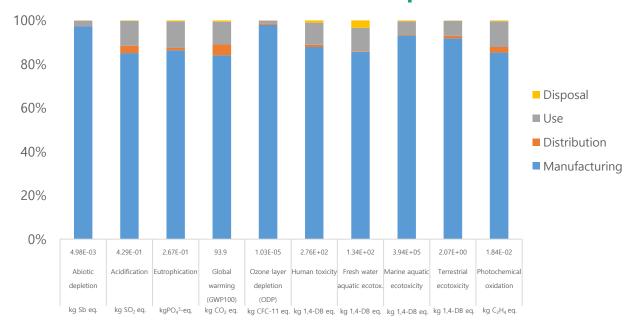
Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam and EU
Use	3 years use
Disposal	Waste treatment of parts and material

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

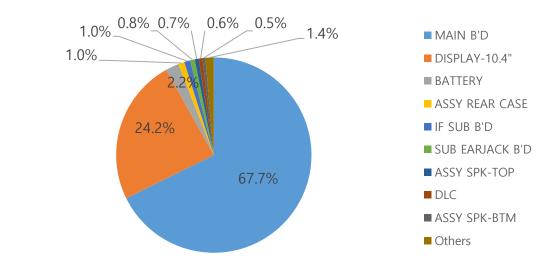


Model name	Galaxy Tab S6 Lite
Dimension	244.5 x 154.3 x 7.0mm
Display	10.4"
Weight	Product&Acc.: 492.11 g Packages : 232.87 g

#### Characterized Environment Impact

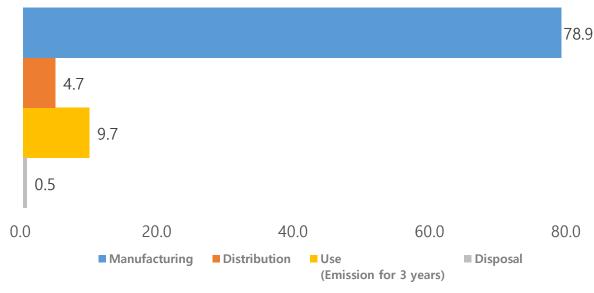


#### Global Warming Impact Profile



### Life Cycle Carbon Emissions

Unit: kgCO2 eq.



<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab Active 5

### 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

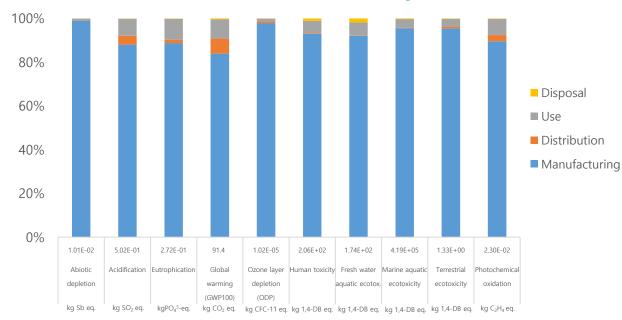
Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to EU
Use	3 years use
Disposal	Waste treatment of parts and material

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

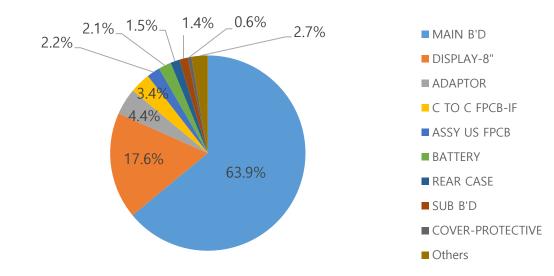


Model name	SM-X306B(Galaxy Active5)
Dimension	126.8 x 213.8 x 10.1 mm
Display	LCD 8"
Weight	Product&Acc.: 589.03 g Packages : 350.71 g

#### Characterized Environment Impact



## Global Warming Impact Profile



### Life Cycle Carbon Emissions

6.3

0.4

0.0

8.0

20.0

■ Manufacturing ■ Distribution ■ Use



Disposal

Unit: kgCO2 eq.

(Emission for 3 years)

40.0

<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S9 FE+

#### 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

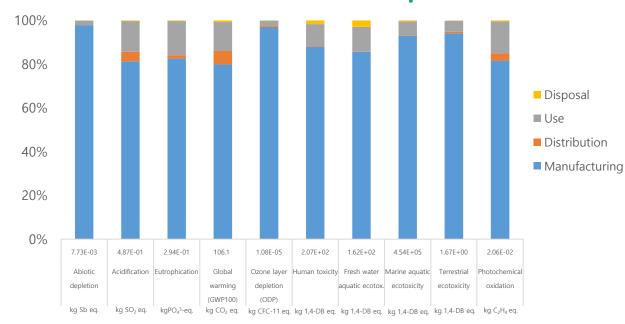
Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to EU
Use	3 years use
Disposal	Waste treatment of parts and material

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

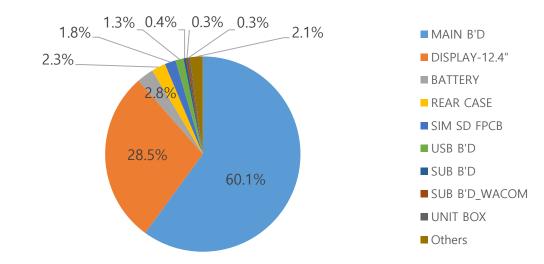


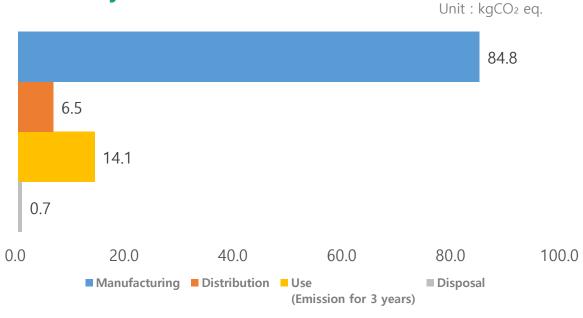
Model name	SM-X616B(Galaxy Tab S9 FE+)
Dimension	185.4 x 285.4 x 6.5 mm
Display	LCD 12.4"
Weight	Product&Acc.: 658.28 g Packages : 306.72 g

#### Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S9 FE

#### 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

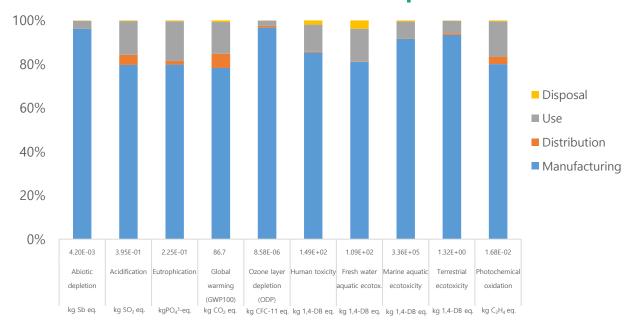
Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to EU
Use	3 years use
Disposal	Waste treatment of parts and material

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

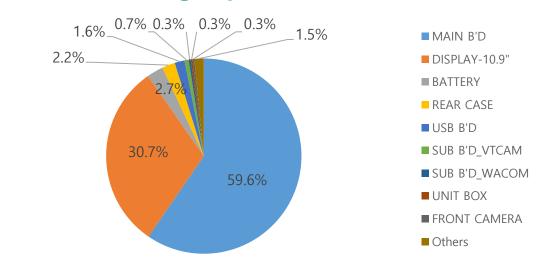


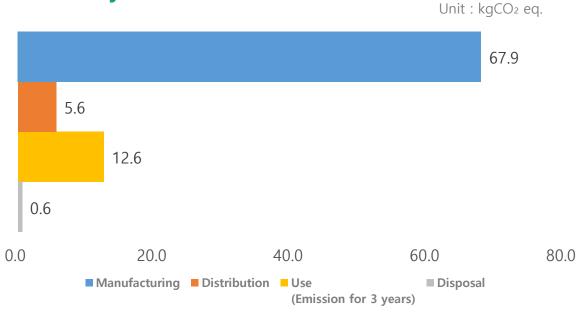
Model name	SM-X516B(Galaxy Tab S9 FE)
Dimension	165.8 x 254.3 x 6.5 mm
Display	LCD 10.9"
Weight	Product&Acc.: 554.28 g Packages : 282.16 g

#### Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S9 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 9.5.0.0 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

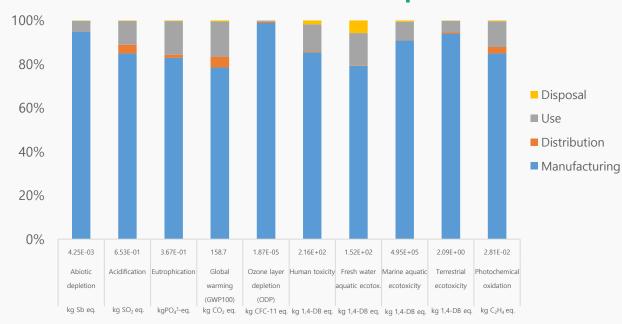
Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to EU
Use	3 years use
Disposal	Waste treatment of parts and material

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

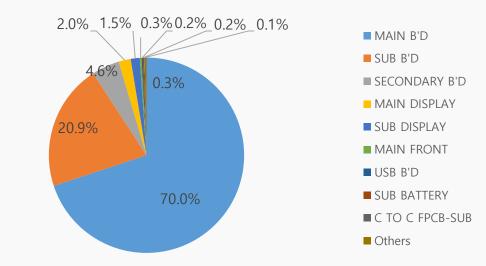


Мо	del name	SM-X916B(Galaxy Tab S9 Ultra)
Di	mension	208.6 x 326.4 x 5.5 mm
	Display	OLED 14.6"
,	Weight	Product&Acc.: 788.16 g Packages : 388.56 g

## Characterized Environment Impact

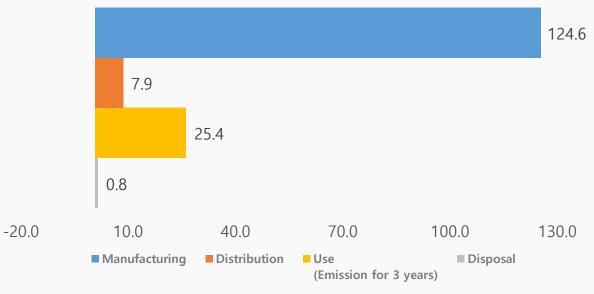


## Global Warming Impact Profile



### Life Cycle Carbon Emissions

Unit : kgCO2 eq.



<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S9+

#### 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	Lifecycle impact assessment classification and characterization factors according to CML-IA baseline V3.09 / the Netherlands, 1997 as provided in the SimaPro9.5.0.0LCAtool
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 EU
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)

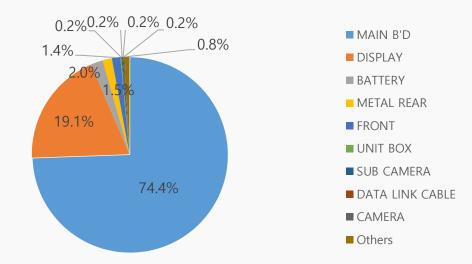


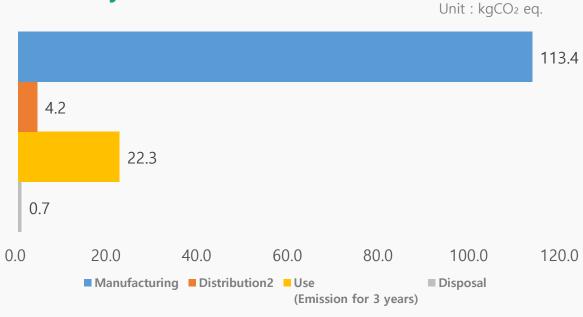
Model name	SM-X816B(Galaxy Tab S9+)
Dimension	185.4 * 285.4 * 5.7 mm
Display	OLED 12.4"
Weight	Product&Acc.: 637.15 g Packages : 317.97 g

## Characterized Environment Impact



## Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S9+

#### 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	Lifecycle impact assessment classification and characterization factors according to CML-IA baseline V3.09 / the Netherlands, 1997 as provided in the SimaPro9.5.0.0LCAtool
LCA software	SimaPro 9.5.0.0

## System boundary of LCA

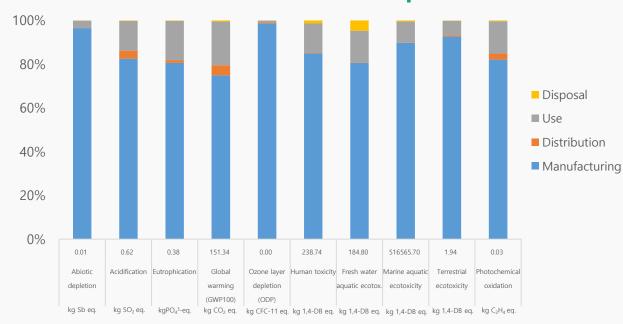
Pre- manufacturing	Parts and materials constituting the products and its transportation
Manufacturing	Product assembly by Samsung Electronics
Distribution	From Vietnam to US
Use	3 years use
Disposal	Waste treatment of parts and material

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

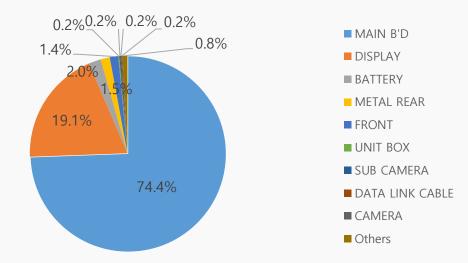


Model name	SM-X816U(Galaxy Tab S9+)
Dimension	185.4 * 285.4 * 5.7 mm
Display	OLED 12.4"
Weight	Product&Acc.: 637.15 g Packages : 317.97 g

## Characterized Environment Impact

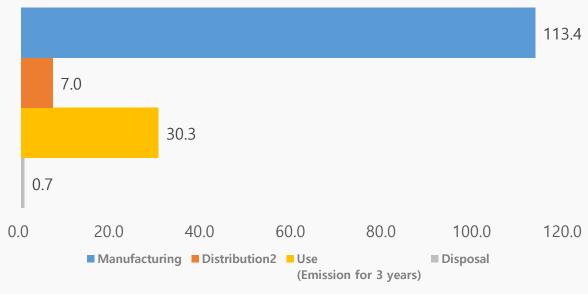


## Global Warming Impact Profile



### Life Cycle Carbon Emissions

Unit: kgCO2 eq.



<sup>\*</sup> The results differ from to region, But not by much.

# Life Cycle Assessment for Galaxy Tab S9

#### 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	Lifecycle impact assessment classification and characterization factors according to CML-IA baseline V3.09 / the Netherlands, 1997 as provided in the SimaPro9.5.0.0LCAtool
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 EU
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)

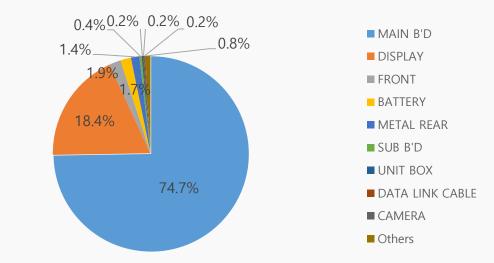


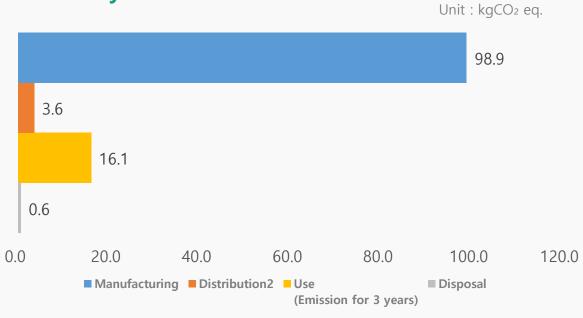
Model name	SM-X716B(Galaxy Tab S9)
Dimension	165.8 * 254.3 * 5.9 mm
Display	11.0" AMOLED 2X
Weight	Product&Acc.: 551.16 g Packages : 252.7 g

## Characterized Environment Impact



#### Global Warming Impact Profile





<sup>\*</sup> The results differ from to region, But not by much.