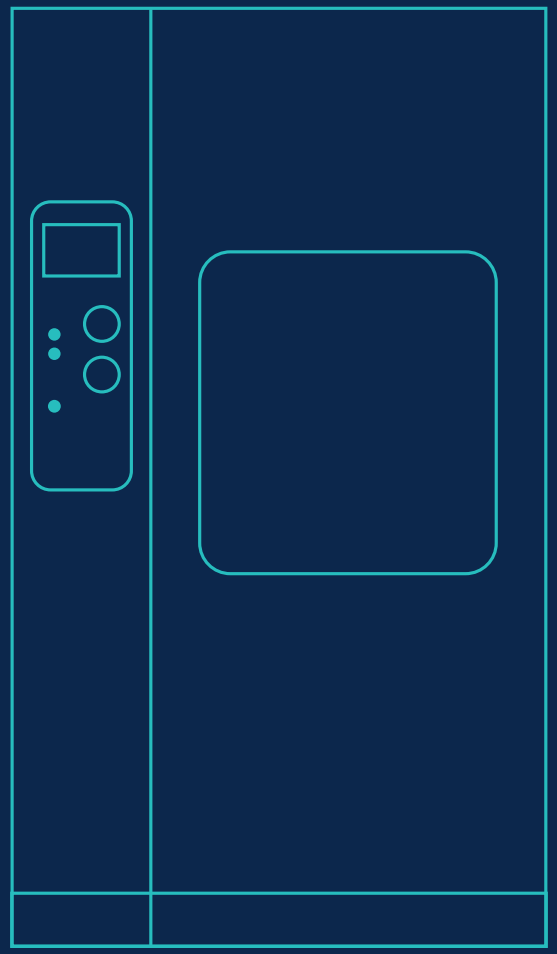


Product Environmental Profile

Getinge GSS67H Steam Sterilizer

GETINGE

Overview

Getinge sustainability ambitions

At Getinge we take steps to empower our customers to reach their sustainability goals. One way to do this is by looking at how we can make our products and solutions as resource efficient as possible. We are committed to reduce our carbon footprint by setting ambitious targets to become net-zero by 2050 in line with the Science Based Targets initiative (SBTi).

All manufacturing sites work with Environmental management systems in compliance with ISO 14001.

Read more about Getinge sustainability ambitions on our website.

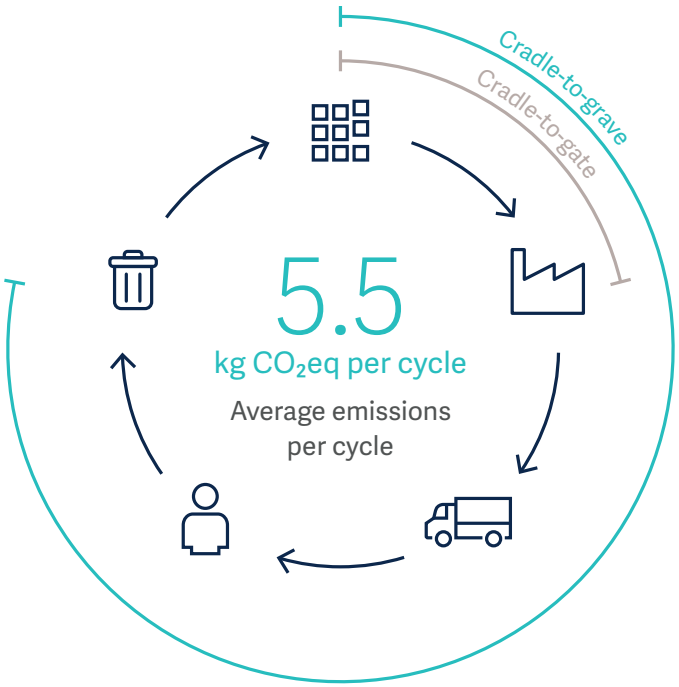
EcoDesign efforts

EcoDesign is standard practice at Getinge, focusing on using safer and fewer materials, incorporating circular solutions, and reducing media, energy, and water consumption.

Getinge GSS67H Steam Sterilizer was designed with a focus on minimizing both its mass and the number of components.

Product climate impact

GSS67H-10 model



The main cradle-to-grave results are representative for the EU market, please refer to page 5 for other regional scenarios.

Product description

Getinge GSS67H is a cost-effective and environmentally friendly sterilizer steam sterilizer. It has as a standard water saving system that recirculates most of the water used for cooling and lubricating the vacuum pump. Compared to conventional sterilizers, Getinge GSS67H can save up to:

- 20-30% energy consumption
- 95% water consumption

Main assumptions of the Life Cycle Assessment study (LCI parameters)

Lifetime = 10 years

Sterilizing 10,000 m^3 of medical devices

Product: GSS67H-10

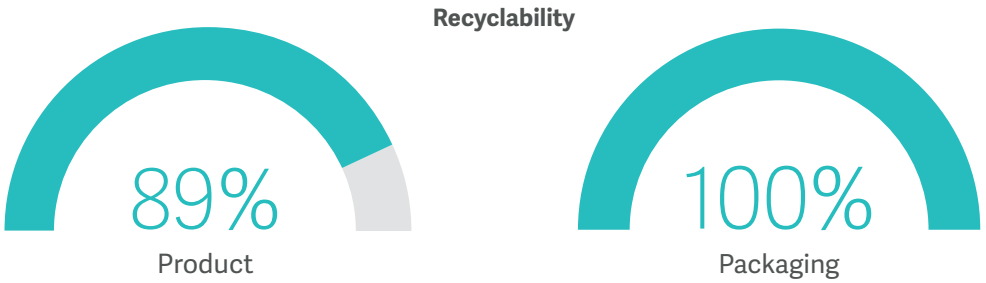
Total weight (net): 894 kg

[1] Electrical and Electronical Equipment

Packaging

Total weight (gross): 128 kg

Recyclability



The following materials are considered recyclable: Steel, Alu, Bronze, Brass, Copper (except cables), Cardboard, Paper, Thermoplastics (PMMA, PVC, ABS, PC, PS, PET, PE, PA, PP, POM). Thermosetting plastics, elastomers and other materials not listed are considered non recyclable. Recycled content evaluated in the study but requires documented trail in the value chain.

Data input

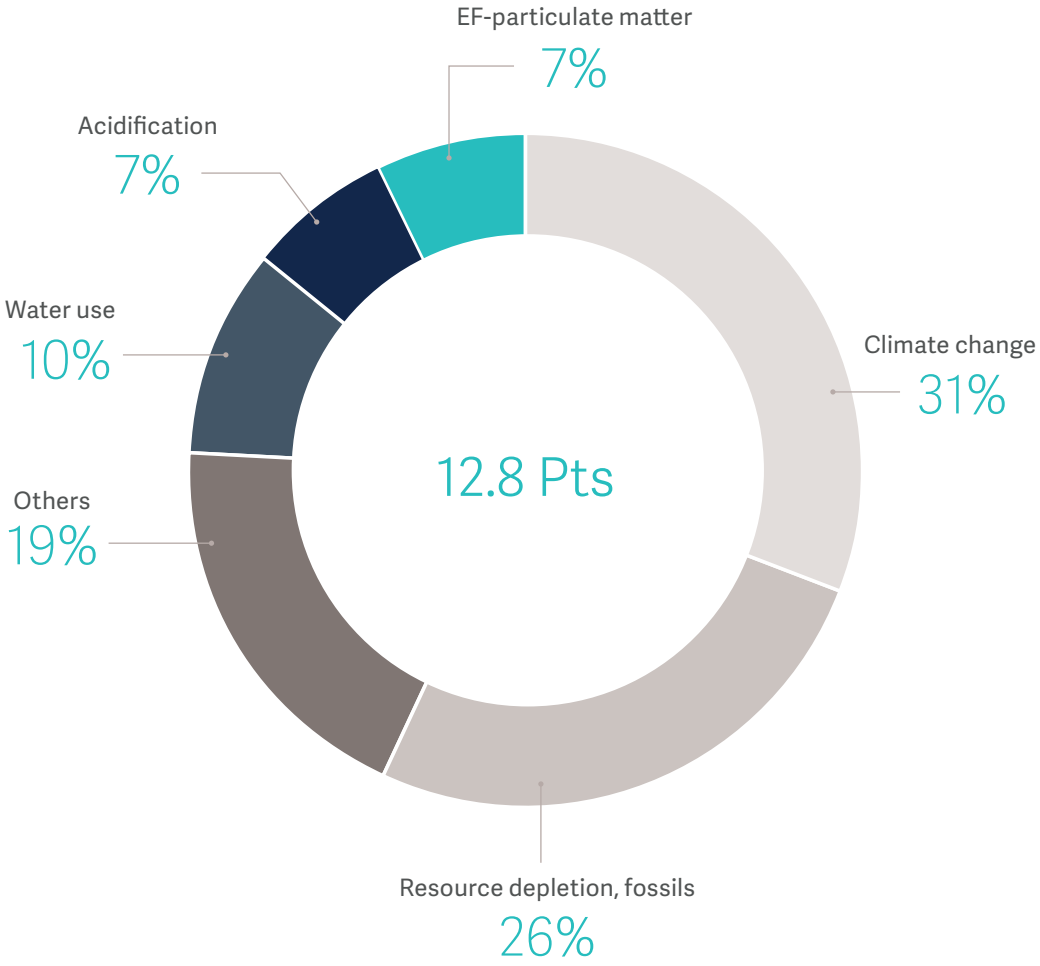
- **Electrical consumption during full process (average): 8.3 kWh / cycle**
- **Electricity during "ready for process" mode: 3.3 kW**
- **Electrical consumption during Standby mode: 300 W**
- **Water consumption during full process (average): 228 L / cycle**

Environmental impacts

GSS67H-10 model

for sterilizing 10,000 m³

One point corresponds to the environmental impact of one person for one year.
The result for this product is calculated over a period of 10 years.



Product environmental impact with focus on climate impact

GSS67H-10 model

The main cradle-to-grave results are representative for the EU market and for other markets, please refer to regional scenarios. This as the results are sensitive to key parameters that are within the customer and end-user control and dependent on their geographical location such as choice of transportation mode and distances and waste handling of product and packaging.

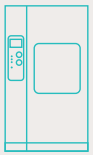
Recommendations to reduce the climate impact

Recommendations to customers and end-users to further reduce the climate impact of their use of the product:

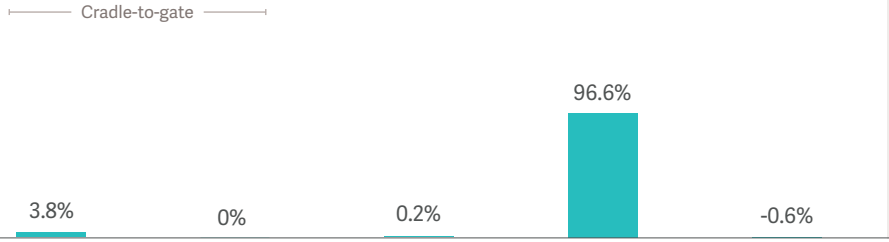
- Use the machines energy-saving program when possible
- Avoid running the machine half-full
- Use low-carbon electricity

Global Warming Potential

kg CO_2eq per cycle



Getinge GSS67H-10



Regional scenarios kg CO_2eq

Europe	3.8%	0%	0.2%	96.6%	-0.6%	**5.5 kg CO_2eq**
North America*	2.9%	0%	0.2%	97.4%	-0.5%	**7.2 kg CO_2eq**
South America**	7.7%	0%	0.5%	93%	-1.2%	**2.7 kg CO_2eq**
APAC***	2%	0%	0.1%	98.1%	-0.3%	**10.2 kg CO_2eq**
Middle East	1.7%	0%	0.1%	98.5%	-0.3%	**12.6 kg CO_2eq**
Japan	2.7%	0%	0.2%	97.5%	-0.3%	**7.7 kg CO_2eq**
Low carbon energy	32.6%	0%	2.6%	67.1%	-5.9%	**0.6 kg CO_2eq**

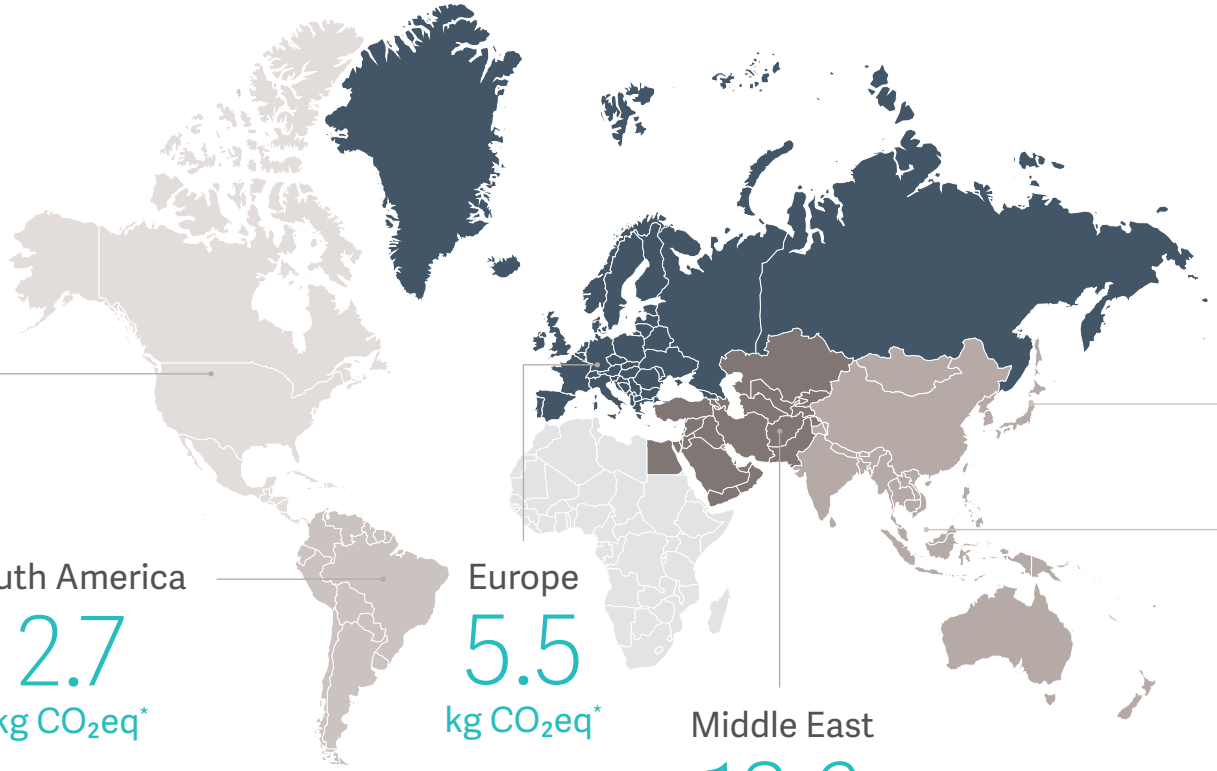
*Based on US data
**Based on Brazilian data
***Based on Chinese data

Complete life cycle per region

GSS67H-10 model

For reference, the emission of 1 kg of CO_2eq is comparable to:

- A car journey of 4,6 km (thermic car)
- A train journey of 423,729 km
- Using a laptop for 42 hours



North America
7.2
kg CO_2eq*

South America
2.7
kg CO_2eq*

Europe
5.5
kg CO_2eq*

Middle East
12.6
kg CO_2eq*

APAC
10.2
kg CO_2eq*

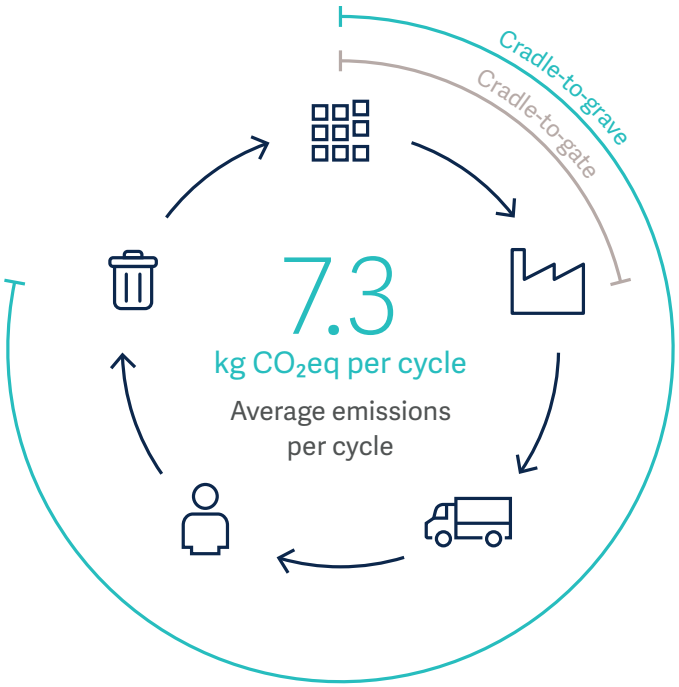
Japan
7.7
kg CO_2eq*

Volume of sterilized medical devices for 1 cycle = 468L

*Average CO_2 emissions per sterilization cycle

Product climate impact

GSS67H-13 model



The main cradle-to-grave results are representative for the EU market, please refer to page 5 for other regional scenarios.

Product description

The Getinge GSS67H is a cost-effective and environmentally friendly sterilizer steam sterilizer. It has as a standard water saving system that recirculates most of the water used for cooling and lubricating the vacuum pump. Compared to conventional sterilizers, Getinge GSS67H can save up to:

- 20-30% energy consumption
- 95% water consumption

Main assumptions of the Life Cycle Assessment study (LCI parameters)

Lifetime = 10 years

Sterilizing 10,000 m^3 of medical devices

Product: GSS67H-13

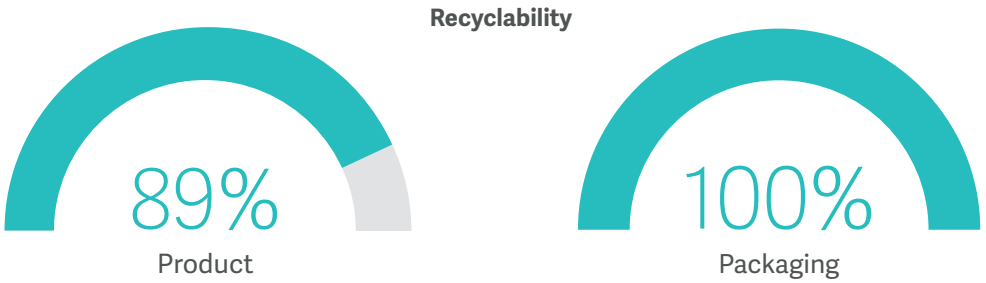
Total weight (net): 981 kg

[1] Electrical and Electronical Equipment

Packaging

Total weight (gross): 128 kg

Recyclability



The following materials are considered recyclable: Steel, Alu, Bronze, Brass, Copper (except cables), Cardboard, Paper, Thermoplastics (PMMA, PVC, ABS, PC, PS, PET, PE, PA, PP, POM). Thermosetting plastics, elastomers and other materials not listed are considered non recyclable. Recycled content evaluated in the study but requires documented trail in the value chain.

Data input

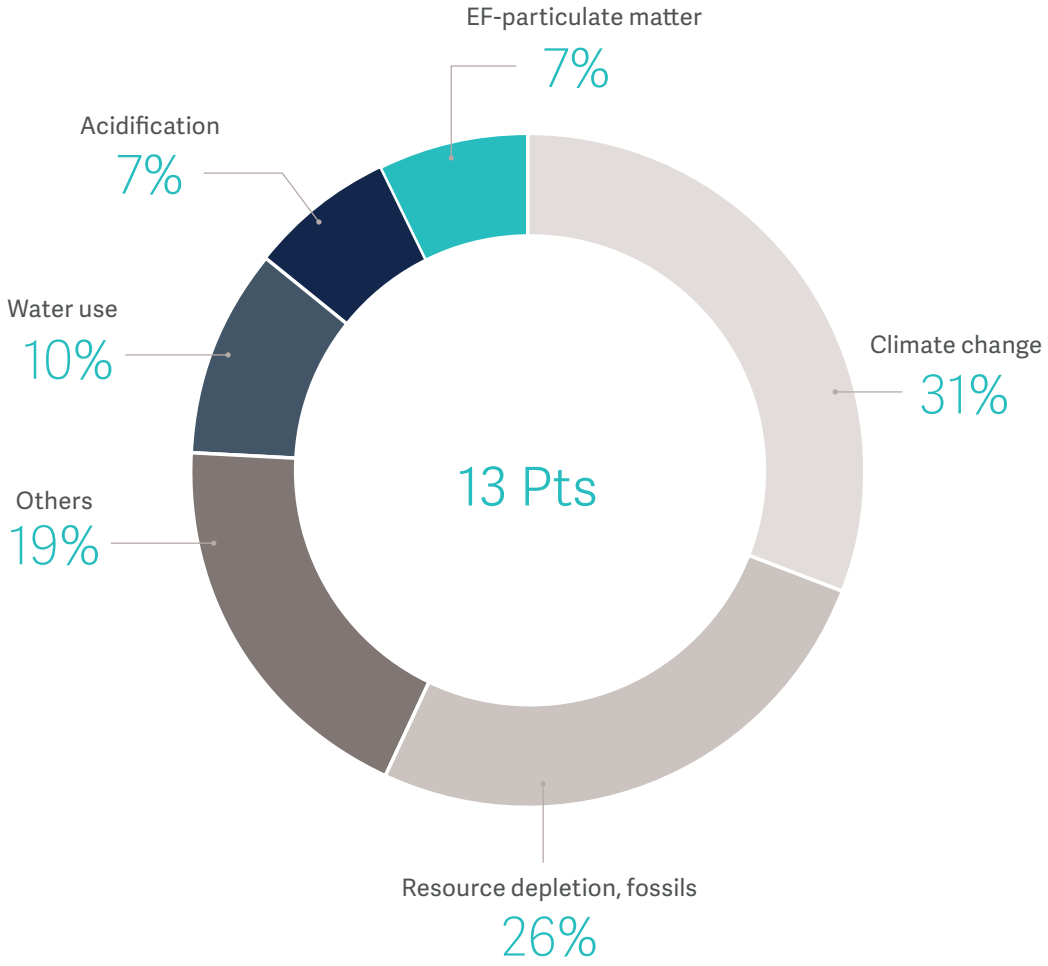
- **Electrical consumption during full process (average): 10.9 kWh / cycle**
- **Electricity during "ready for process" mode: 3.6 kW**
- **Electrical consumption during Standby mode: 300 W**
- **Water consumption during full process (average): 228 L / cycle**

Environmental impacts

GSS67H-13 model

for sterilizing 10,000 m³

One point corresponds to the environmental impact of one person for one year.
The result for this product is calculated over a period of 10 years.



Product environmental impact with focus on climate impact

GSS67H-13 model

The main cradle-to-grave results are representative for the EU market and for other markets, please refer to regional scenarios. This as the results are sensitive to key parameters that are within the customer and end-user control and dependent on their geographical location such as choice of transportation mode and distances and waste handling of product and packaging.

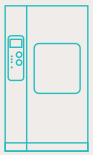
Recommendations to reduce the climate impact

Recommendations to customers and end-users to further reduce the climate impact of their use of the product:

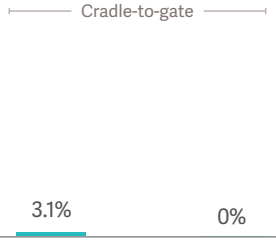
- Use the machines energy-saving program when possible
- Avoid running the machine half-full
- Use low-carbon electricity

Global Warming Potential

kg CO_2eq per cycle



Getinge GSS67H-13



7.3 kg CO_2eq

Raw material & suppliers production	→	Getinge Factory & final packaging	→	Transport	→	Use	→	Disposal	→	**Complete Life Cycle** (Cradle-to-grave)

Regional scenarios kg CO_2eq

Europe	3.1%	0%	0.2%	97.2%	-0.6%	**7.3 kg CO_2eq**
North America*	2.4%	0%	0.2%	97.8%	-0.5%	**9.7 kg CO_2eq**
South America**	1.7%	0%	0.6%	94.1%	-1.2%	**3.6 kg CO_2eq**
APAC***	1.3%	0%	0.2%	98.5%	-0.3%	**13.7 kg CO_2eq**
Middle East	1.3%	0%	0.1%	98.8%	-0.3%	**17 kg CO_2eq**
Japan	2.2%	0%	0.2%	98%	-0.3%	**10.4 kg CO_2eq**
Low carbon energy	32.4%	0%	2.9%	70%	-5.9%	**0.7 kg CO_2eq**

*Based on US data
**Based on Brazilian data
***Based on Chinese data

Complete life cycle per region

GSS67H-13 model

For reference, the emission of 1 kg of CO_2eq is comparable to:

- A car journey of 4,6 km (thermic car)
- A train journey of 423,729 km
- Using a laptop for 42 hours

North America
9.7
kg CO_2eq*

South America
3.6
kg CO_2eq*

Europe
7.3
kg CO_2eq*

Middle East
17
kg CO_2eq*

Japan
10.4
kg CO_2eq*

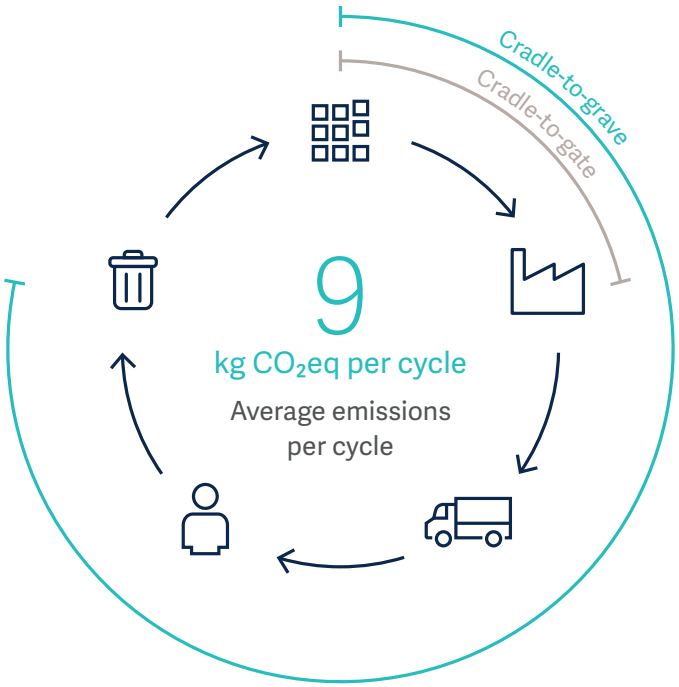
APAC
13.7
kg CO_2eq*

Volume of sterilized medical devices for 1 cycle = 609L

*Average CO_2 emissions per sterilization cycle

Product climate impact

GSS67H-17 model



The main cradle-to-grave results are representative for the EU market, please refer to page 5 for other regional scenarios.

Product description

The Getinge GSS67H is a cost-effective and environmentally friendly sterilizer steam sterilizer. It has as a standard water saving system that recirculates most of the water used for cooling and lubricating the vacuum pump. Compared to conventional sterilizers, Getinge GSS67H can save up to:

- 20-30% energy consumption
- 95% water consumption

Main assumptions of the Life Cycle Assessment study (LCI parameters)

Lifetime = 10 years

Sterilizing 10,000 m^3 of medical devices

Product: GSS67H-17

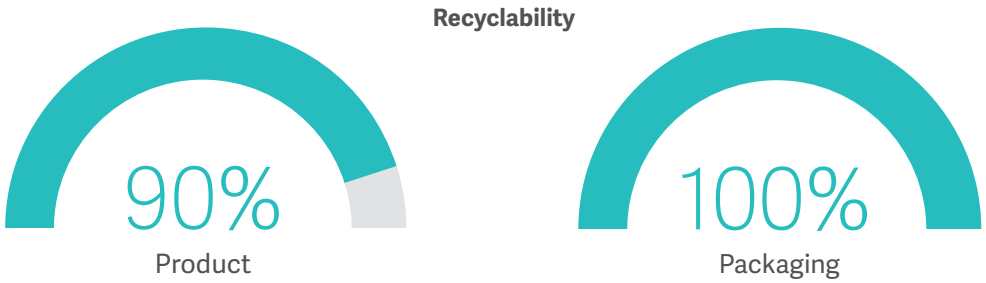
Total weight (net): 1,119 kg

[1] Electrical and Electronical Equipment

Packaging

Total weight (gross): 128 kg

Recyclability



The following materials are considered recyclable: Steel, Alu, Bronze, Brass, Copper (except cables), Cardboard, Paper, Thermoplastics (PMMA, PVC, ABS, PC, PS, PET, PE, PA, PP, POM). Thermosetting plastics, elastomers and other materials not listed are considered non recyclable. Recycled content evaluated in the study but requires documented trail in the value chain.

Data input

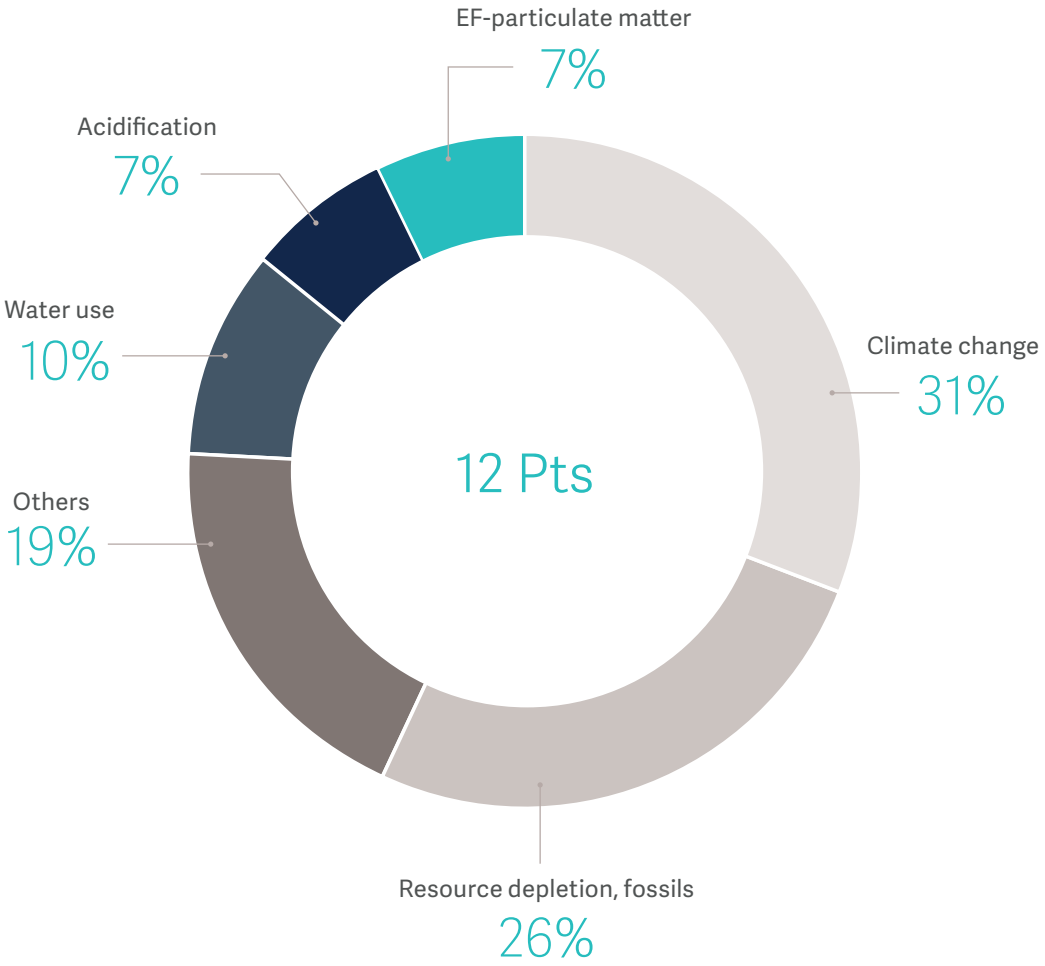
- **Electrical consumption during full process (average): 12.3 kWh / cycle**
- **Electricity during "ready for process" mode: 3.7 kW**
- **Electrical consumption during Standby mode: 300 W**
- **Water consumption during full process (average): 262 L / cycle**

Environmental impacts

GSS67H-17 model

for sterilizing 10,000 m³

One point corresponds to the environmental impact of one person for one year.
The result for this product is calculated over a period of 10 years.



Product environmental impact with focus on climate impact

GSS67H-17 model

The main cradle-to-grave results are representative for the EU market and for other markets, please refer to regional scenarios. This as the results are sensitive to key parameters that are within the customer and end-user control and dependent on their geographical location such as choice of transportation mode and distances and waste handling of product and packaging.

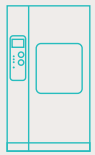
Recommendations to reduce the climate impact

Recommendations to customers and end-users to further reduce the climate impact of their use of the product:

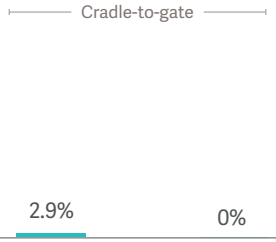
- Use the machines energy-saving program when possible
- Avoid running the machine half-full
- Use low-carbon electricity

Global Warming Potential

kg CO_2eq per cycle



Getinge GSS67H-17



9 kg CO_2eq

Raw material & suppliers production → Getinge Factory & final packaging → Transport → Use → Disposal → **Complete Life Cycle** (Cradle-to-grave)

Regional scenarios kg CO_2eq

Europe	2.9%	0%	0.3%	97.3%	-0.5%	**9 kg CO_2eq**
North America*	2.2%	0%	0.3%	97.9%	-0.4%	**11.9 kg CO_2eq**
South America**	6%	0%	0.7%	94.3%	-1%	**4.4 kg CO_2eq**
APAC***	1.6%	0%	0.2%	98.5%	-0.3%	**16.8 kg CO_2eq**
Middle East	1.3%	0%	0.1%	98.8%	-0.2%	**20.8 kg CO_2eq**
Japan	2.1%	0%	0.2%	98%	-0.3%	**12.7 kg CO_2eq**
Low carbon energy	31.4%	0%	3.7%	70.2%	-5.3%	**0.8 kg CO_2eq**

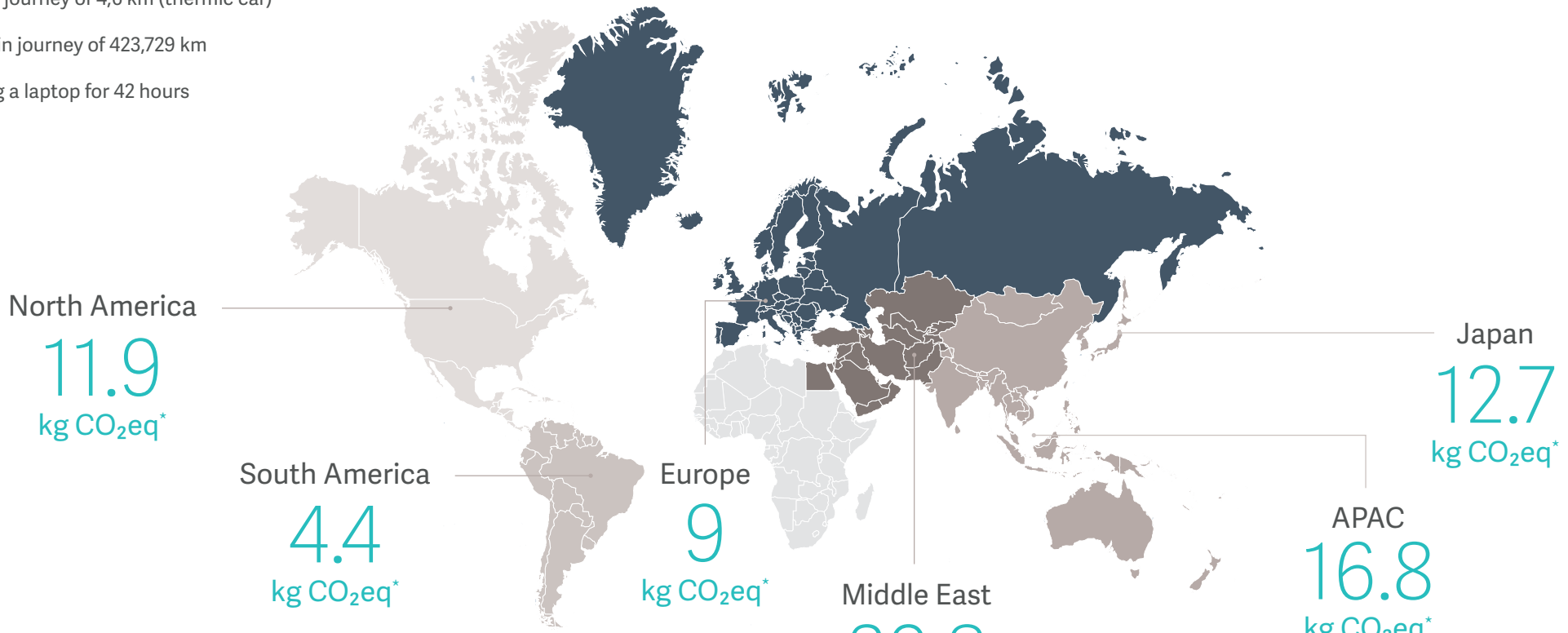
*Based on US data
**Based on Brazilian data
***Based on Chinese data

Complete life cycle per region

GSS67H-17 model

For reference, the emission of 1 kg of CO_2eq is comparable to:

- A car journey of 4,6 km (thermic car)
- A train journey of 423,729 km
- Using a laptop for 42 hours

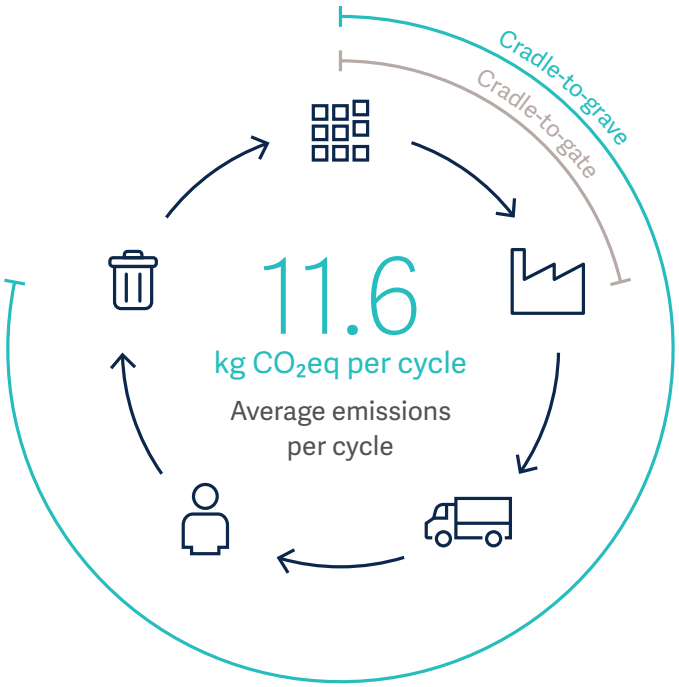


Volume of sterilized medical devices for 1 cycle = 796L

*Average CO_2 emissions per sterilization cycle

Product climate impact

GSS67H-20 model



The main cradle-to-grave results are representative for the EU market, please refer to page 5 for other regional scenarios.

Product description

The Getinge GSS67H is a cost-effective and environmentally friendly sterilizer steam sterilizer. It has as a standard water saving system that recirculates most of the water used for cooling and lubricating the vacuum pump. Compared to conventional sterilizers, Getinge GSS67H can save up to:

- 20-30% energy consumption
- 95% water consumption

Main assumptions of the Life Cycle Assessment study (LCI parameters)

Lifetime = 10 years

Sterilizing 10,000 m^3 of medical devices

Product: GSS67H-20

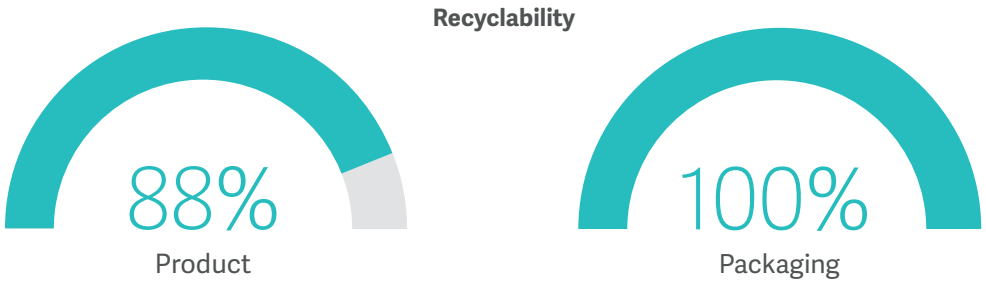
Total weight (net): 1,216 kg

[1] Electrical and Electronical Equipment

Packaging

Total weight (gross): 128 kg

Recyclability



The following materials are considered recyclable: Steel, Alu, Bronze, Brass, Copper (except cables), Cardboard, Paper, Thermoplastics (PMMA, PVC, ABS, PC, PS, PET, PE, PA, PP, POM). Thermosetting plastics, elastomers and other materials not listed are considered non recyclable. Recycled content evaluated in the study but requires documented trail in the value chain.

Data input

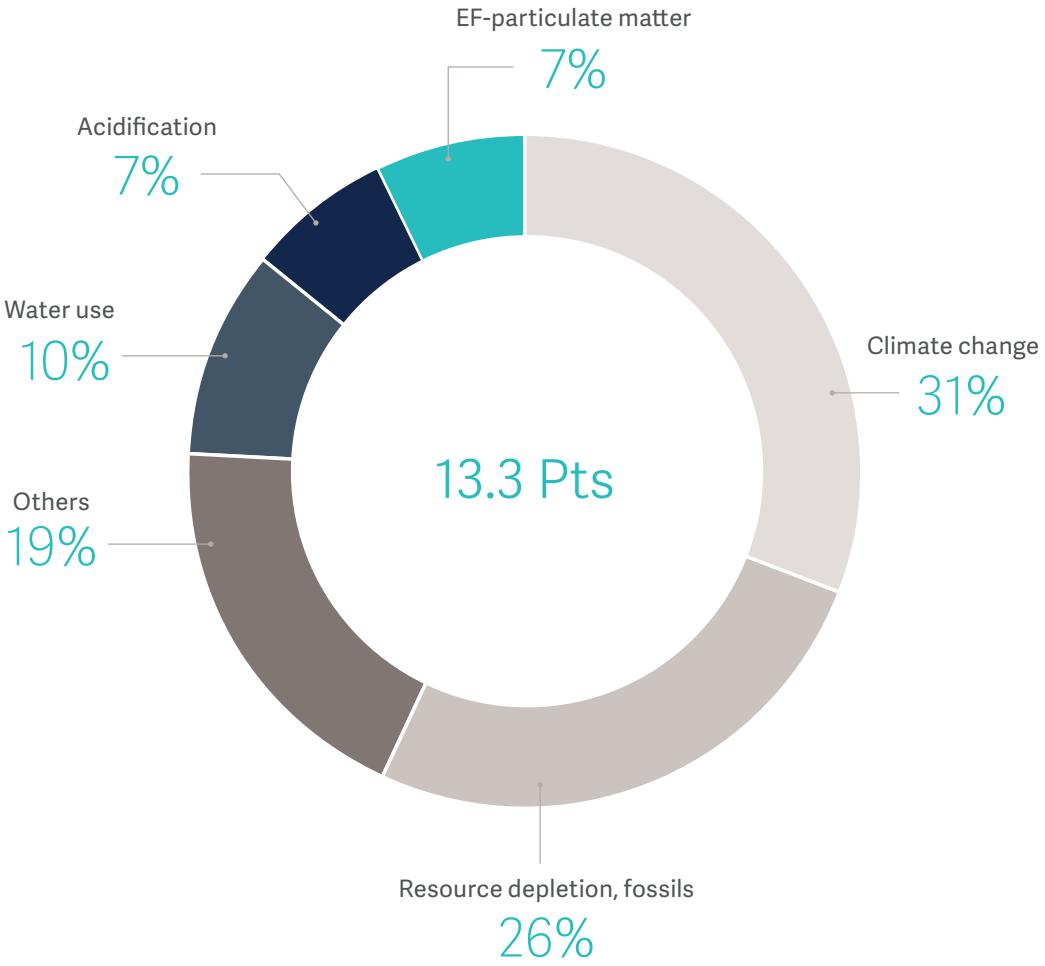
- **Electrical consumption during full process (average): 16 kWh / cycle**
- **Electricity during "ready for process" mode: 4.1 kW**
- **Electrical consumption during Standby mode: 300 W**
- **Water consumption during full process (average): 386 L / cycle**

Environmental impacts

GSS67H-20 model

for sterilizing 10,000 m³

One point corresponds to the environmental impact of one person for one year.
The result for this product is calculated over a period of 10 years.



Product environmental impact with focus on climate impact

GSS67H-20 model

The main cradle-to-grave results are representative for the EU market and for other markets, please refer to regional scenarios. This as the results are sensitive to key parameters that are within the customer and end-user control and dependent on their geographical location such as choice of transportation mode and distances and waste handling of product and packaging.

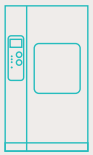
Recommendations to reduce the climate impact

Recommendations to customers and end-users to further reduce the climate impact of their use of the product:

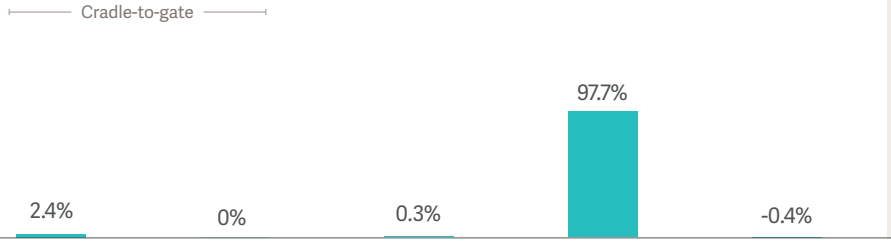
- Use the machines energy-saving program when possible
- Avoid running the machine half-full
- Use low-carbon electricity

Global Warming Potential

kg CO_2eq per cycle



Getinge GSS67H-20



Regional scenarios kg CO_2eq

Europe	2.4%	0%	0.3%	97.7%	-0.4%	**11.6 kg CO_2eq**
North America*	1.8%	0%	0.3%	98.2%	-0.3%	**15.4 kg CO_2eq**
South America**	5%	0%	0.7%	95.1%	-0.8%	**5.6 kg CO_2eq**
APAC***	1.3%	0%	0.2%	98.7%	-0.2%	**21.9 kg CO_2eq**
Middle East	1.3%	0%	0.1%	99%	-0.2%	**27.1 kg CO_2eq**
Japan	1.7%	0%	0.2%	98.3%	-0.3%	**16.5 kg CO_2eq**
Low carbon energy	27.9%	0%	3.8%	72.9%	-4.7%	**1 kg CO_2eq**

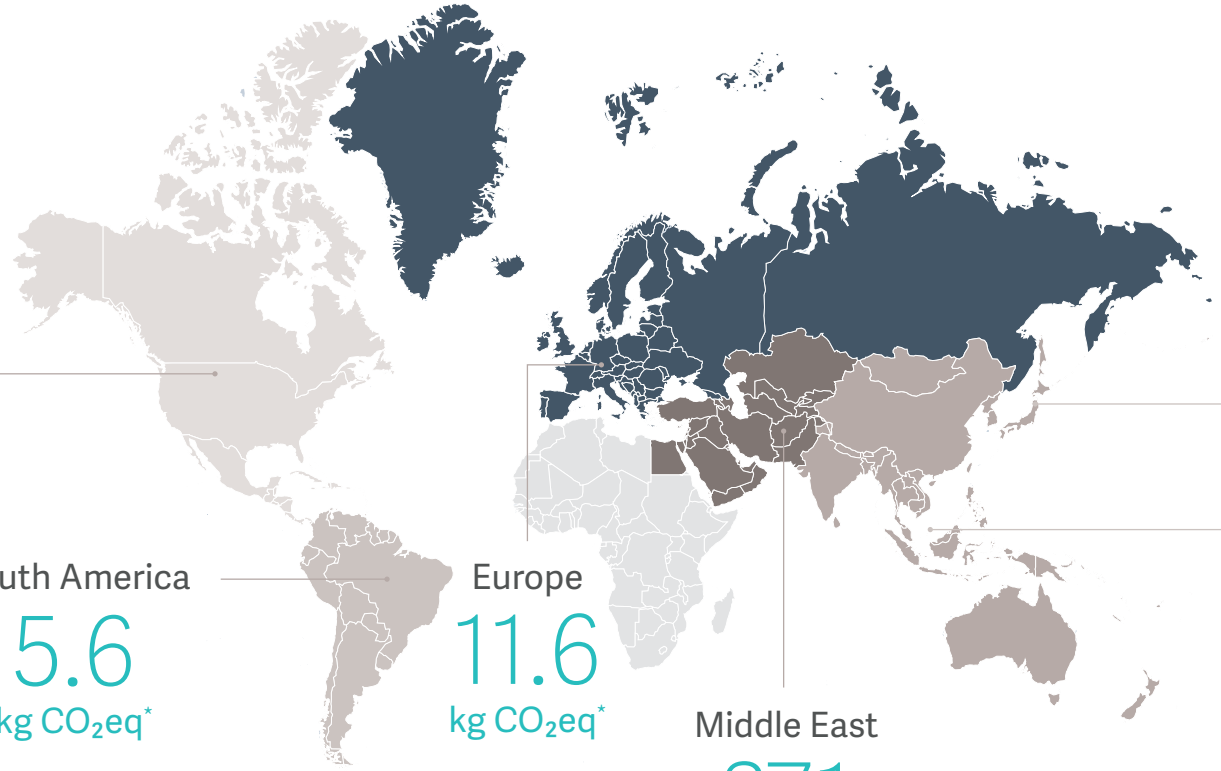
*Based on US data
**Based on Brazilian data
***Based on Chinese data

Complete life cycle per region

GSS67H-20 model

For reference, the emission of 1 kg of CO_2eq is comparable to:

- A car journey of 4,6 km (thermic car)
- A train journey of 423,729 km
- Using a laptop for 42 hours



North America
15.4
kg CO_2eq*

South America
5.6
kg CO_2eq*

Europe
11.6
kg CO_2eq*

Middle East
27.1
kg CO_2eq*

APAC
21.9
kg CO_2eq*

Japan
16.5
kg CO_2eq*

Volume of sterilized medical devices for 1 cycle = 937L

*Average CO_2 emissions per sterilization cycle

The LCA and EcoDesign methods

Product Environmental Profile (PEP) communicates the results of a Life Cycle Assessment (LCA). This is a methodology for assessing environmental impacts associated with all the stages of the life cycle of a product, process, or service. I.e. for a product environmental impacts are assessed for the raw material extraction (cradle) followed by the whole value-chain further processing, through the product's manufacturing (gate), distribution and use, to the recycling or final disposal of the materials it is composed of.

The EIME (Environmental Impact and Management Explorer) software, version 6.1.1, and its database (version CODDE-2023-02) were used for the Life Cycle Assessment (LCA). Indicators from the PEP Ecopassport PCR3 – 2015 were applied. All LCA studies include holistic analysis of all relevant environmental impacts used for EcoDesign input. Further details can be available upon request, contact responsible PLM/R&D team.

GETINGE

Manufacturer: Maquet GmbH · Kehler Str. 31 · 76437 Rastatt · Germany · +49 7222 932-0 · info@getinge.com