



Haldex AB Greenhouse Emissions Report 2021

Haldex AB (Haldex) actively works on reducing its environmental footprint in connection with production, transport, and deliveries. Haldex focuses on developing new braking solutions that consume less energy, weigh less, take up less space and reduce the level of noise emissions. Haldex aims to be CO₂ neutral for scope 1 and 2 by 2025.

The management of environmental risks within Haldex's production sites, distribution centers, remanufacturing sites and friction centers has a notable effect on Haldex environmental footprint. Transport, together with electricity consumption, are the parts of Haldex's process that have the greatest carbon footprint.

The CO₂ emissions are measured and followed up throughout the organization. Haldex's Environmental framework includes methods and initiatives to improve Haldex's environmental impact. This work was further strengthened during 2021 when a new target was set to be CO₂ neutral in greenhouse gas emissions for scope 1 and 2 by 2025. The plan for scope 3 is currently under development and will be according with the SBTi criteria that Haldex committed to in 2021.

Haldex has an environmental committee with representatives of all production sites and distribution centers who jointly follow up targets and discuss improvements. Coordination between different units and projects have resulted in a decreased carbon dioxide emissions over the latest years, primarily through more sustainable electricity consumption. Haldex's focus on seeking more environmentally friendly energy sources will lead to a continued decline in levels.

All production sites are controlled according to environmental management systems that are certified to the international standard ISO 14001. Systematic programs and environmental policies also contribute towards utilizing resources effectively.

The environmental impact of the Haldex sites is analyzed quarterly, resulting in a Green Performance Map (GPM) per facility. The GPM tool is a survey of the volumes of material, energy and other resources that are supplied to the site, and the volumes of CO₂ emissions and waste the site generates.

This material references GRI 305: Emissions 2016 and contains the following disclosures:

- Disclosure 305-1 Direct (Scope 1) GHG emissions.
- Disclosure 305-2 Energy indirect (Scope 2) and GHG emissions.
- Disclosure 305-3 Other indirect (Scope 3) GHG emissions.

Disclosure 305-1 Direct (Scope 1) GHG emissions

In 2021 Haldex reported 1521 metric tons of CO₂ equivalent of gross direct (Scope 1) GHG emissions. Table 1 shows the split of the total emissions by type of source for Haldex facilities groups for scope 1. CO₂ emissions were included in the calculation, not other GHG are part of the Haldex emissions.



Table 1

GHG emissions for scope 1 by type of source for Haldex facilities groups

Scope	Production sites (t CO₂e)	DC, R&D and offices (t CO₂e)	Reman and Friction Centers (t CO₂e)	Total (t CO₂e)
Scope 1	716	382	422	1521
Travel - car owned by Haldex	188	74	0	262
Handling	63	0	73	136
Gasoline	20	0	5	25
Diesel	0	0	3	3
LPG	43	0	65	108
Gas	465	308	350	1122
Oil	0	0	0	0

Note. DC is Distribution Centers. Emissions may be estimated on each site based on kilometers traveled by cars owned by Haldex or amount of fuel paid for handling.

Haldex does not have biogenic CO₂ emissions as part of its processes. 2021 is the base year, nevertheless this consideration does not have effect in the calculated values.

Source of the emission factors was GOV.UK, and those factors are reported in the GPM.

Operational control was the consolidation approach used for emissions. To calculate the scope 1 was used as a tool the GPM based on the criteria established by the Greenhouse Gas Protocol.

Disclosure 305-2 Energy indirect (Scope 2) GHG emissions

In 2021 Haldex reported 7593 metric tons of CO₂ equivalent of gross location-based energy indirect (Scope 2) GHG emissions and 6677 metric tons of CO₂ equivalent of gross market-based energy indirect (Scope 2) GHG emissions.

Table 2 and Table 3 show the split of the total emissions by type of source for Haldex facilities groups for scope 2 for location-based and market-based respectively. Table 4 and Table 5 show scope 2 emissions for location-based method and for market-based method respectively by Haldex facilities. CO₂ emissions were included in the calculation, not other GHG are part of the Haldex emissions.

Haldex does not have biogenic CO₂ emissions as part of its processes. 2021 is the base year, nevertheless this consideration does not have effect in the calculated values.

Sources of the emission factors were Carbon Footprint Ltd. and the United States Environmental Protection Agency, and those factors are reported in the GPM.



Table 2

GHG emissions (location-based) for scope 2 by type of source for Haldex facilities groups

Scope	Production sites (t CO₂e)	DC, R&D and offices (t CO₂e)	Reman and Friction Centers (t CO₂e)	Total (t CO₂e)
Scope 2	5792	1150	652	7593
Electricity	5763	1150	652	7564
Distant heating	29	0	0	29

Table 3

GHG emissions (market-based) for scope 2 by type of source for Haldex facilities groups

Scope	Production sites (t CO₂e)	DC, R&D and offices (t CO₂e)	Reman and Friction Centers (t CO₂e)	Total (t CO₂e)
Scope 2	5035	990	652	6677
Electricity	5007	990	652	6648
Distant heating	29	0	0	29

Operational control was the consolidation approach used for emissions. To calculate the scope 2 emissions was used as a tool the GPM based on the criteria established by the Greenhouse Gas Protocol.



Table 4

Scope 2 emissions for location-based method by Haldex facilities

Facility	Location-based method (t CO₂e)
Production sites	
Landskrona, Sweden	68
Monterrey, Mexico	1797
Nashik, India	1103
Sao Jose Dos Campos, Brazil	56
Suzhou, China	2053
Szentlőrincváta, Hungary	716
DC, R&D and offices	
Cambridge, Canada	2
KCDC, USA	101
Weyersheim, France	9
KCHQ, USA	787
Mira, UK	161
Pune, India	89
Reman and Friction Centers	
Marion, USA	389
Columbia, USA	39
Little Rock, USA	224

Table 5

Scope 2 emissions for market-based method by Haldex facilities

Facility	Market-based method (t CO₂e)
Production sites	
Landskrona, Sweden	29
Monterrey, Mexico	1795
Nashik, India	1103
Sao Jose Dos Campos, Brazil	56
Suzhou, China	2053
Szentlőrincváta, Hungary	0
DC, R&D and offices	
Cambridge, Canada	2
KCDC, USA	101
Weyersheim, France	10
KCHQ, USA	787
Mira, UK	0
Pune, India	89
Reman and Friction Centers	
Marion, USA	389
Columbia, USA	39
Little Rock, USA	224

Disclosure 305-3 Other indirect (Scope 3) GHG emissions

In 2021 Haldex reported 29894 metric tons of CO₂ equivalent gross other indirect (Scope 3) GHG emissions. Table 6 shows the split of the total emissions by type of source for Haldex facilities groups for scope 3. CO₂ emissions were included in the calculation, not other GHG are part of the Haldex emissions.

Haldex does not have associated biogenic CO₂ emissions as part of its processes. 2021 is the base year, nevertheless this consideration does not have effect in the calculated values.

Source of the emission factors was GOV.UK, and those factors are reported in the GPM.

Operational control was the consolidation approach used for emissions. To calculate the scope 3 emissions was used as a tool the GPM based on the criteria established by the Greenhouse Gas Protocol. According to the GHG Protocol Corporate Value Chain Standard, the categories included for scope 3 were upstream transportation and distribution, business travel and employees commuting.



Table 6

GHG emissions for scope 3 by type of source for Haldex facilities groups

Scope	Production sites (t CO₂e)	DC, R&D and offices (t CO₂e)	Reman and Friction Centers (t CO₂e)	Total (t CO₂e)
Scope 3	14452	9704	5738	29894
Transport (inbound)	11338	5943	4011	21292
Transport (outbound)	2424	3636	1727	7787
Travel - business travel	54	4	0	58
Employee commuting	636	121	0	757

Note. DC is Distribution Centers. Emissions from inbound/outbound transport and business travel may be estimated based on assumed distances traveled by type of transport and freight or passengers for transport and travel, respectively.

Table 7 and 8 provide a breakdown of GHG emissions by facility for the total, scope 1, scope 2 and scope 3 emissions for the location-based method and for the market-based method respectively.

In 2021 the total emissions for Haldex using scope 2 emissions with location-based method were 39008 metric tons of CO₂ equivalent. The total emissions for Haldex with scope 2 emissions using market-based method were 38091 metric tons of CO₂ equivalent.

Table 7
Breakdown of GHG emissions by facility with the location-based method

Facility	Scope 1 emissions (t CO₂e)	Scope 2 emissions for location-based method (t CO₂e)	Scope 3 emissions (t CO₂e)	Total emissions (t CO₂e)
Production sites				
Landskrona, Sweden	353	68	1578	1999
Monterrey, Mexico	49	1797	6380	8225
Nashik, India	3	1103	226	1331
Sao Jose Dos Campos, Brazil	32	56	4963	5052
Suzhou, China	98	2053	1160	3311
Szentlőrincáta, Hungary	182	716	146	1043
DC, R&D and offices				
Cambridge, Canada	58	2	722	782
KCDC, USA	49	101	3426	3576
Weyersheim, France	171	9	5434	5614
KCHQ, USA	94	787	0	882
Mira, UK	10	161	121	292
Pune, India	0	89	0	89
Reman and Friction Centers				
Marion, USA	168	389	567	1124
Columbia, USA	48	39	1974	2061
Little Rock, USA	206	224	3196	3626
Total emissions (t CO₂e)	1521	7593	29894	39008

Note. DC is Distribution Centers. This report does not include sales offices in Korea, Italy, Poland and Shanghai which have not significant GHG emissions impact.

Table 8
Breakdown of GHG emissions by facility with the market-based method

Facility	Scope 1 emissions (t CO₂e)	Scope 2 emissions for market-based method (t CO₂e)	Scope 3 emissions (t CO₂e)	Total emissions (t CO₂e)
Production sites				
Landskrona, Sweden	353	29	1578	1960
Monterrey, Mexico	49	1795	6380	8223
Nashik, India	3	1103	226	1331
Sao Jose Dos Campos, Brazil	32	56	4963	5052
Suzhou, China	98	2053	1160	3311
Szentlőrincáta, Hungary	182	0	146	328
DC, R&D and offices				
Cambridge, Canada	58	2	722	782
KCDC, USA	49	101	3426	3576
Weyersheim, France	171	10	5434	5615
KCHQ, USA	94	787	0	882
Mira, UK	10	0	121	131
Pune, India	0	89	0	89
Reman and Friction Centers				
Marion, USA	168	389	567	1124
Columbia, USA	48	39	1974	2061
Little Rock, USA	206	224	3196	3626
Total emissions (t CO₂e)	1521	6677	29894	38091

Note. DC is Distribution Centers. This report does not include sales offices in Korea, Italy, Poland and Shanghai which have not significant GHG emissions impact.



Independent Limited Assurance Report to Haldex AB Board of Directors

To the Board of Directors of Haldex AB:

We were engaged by the Global Sustainability Management of Haldex AB (hereinafter “Haldex”) to report on Haldex’s Indicators (“the subject matter”) contained in the Haldex AB Greenhouse Gas Emissions 2021 for the period from January 1st to December 31, 2021 (the "Report"), that are detailed in Appendix A attached to this report (the “Contents”), in the form of an independent limited assurance conclusion that based on our work performed and evidence obtained, nothing has come to our attention that causes us to believe that the Indicators in the Haldex AB Greenhouse Gas Emissions 2021, prepared and presented by the Global Sustainability Management of Haldex AB are not prepared in all material aspects, based on the standards of the Global Reporting Initiative (GRI), as well as with the internal procedures of Haldex AB for the management of aspects in sustainability (collectively, the "Criteria").

Management responsibilities

The Global Sustainability Management of Haldex is responsible for the preparation and presentation of the information subject to our review and the information and statements contained within it.

Haldex Global Sustainability Management is responsible for preventing and detecting fraud and for identifying and ensuring that Haldex complies with laws and regulations applicable to its activities.

Haldex Global Sustainability Management is also responsible for ensuring that staff involved with the preparation and presentation of the Contents are properly trained, information systems are properly updated and that any changes in reporting encompass all significant business units.

Our Responsibilities

Our responsibility is to carry out a limited assurance engagement and to express a conclusion based on the work performed. We conducted our engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board. That Standard requires that we plan and perform the engagement to obtain limited assurance about whether, based on our work and the evidence obtained, nothing has come to our attention that causes us to believe that the Contents included in the Report for the period from January 1 to December 31, 2021, are not prepared in all material respects, in accordance with the criteria established in the standards of the Global Reporting Initiative (GRI), as well as with the internal procedures of Haldex AB for the management of aspects in sustainability.

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KPMG Cárdenas Dosal, S.C. (“The firm”) applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior.

The procedures selected depend on our understanding and experience of the Contents presented in the Report and other engagement circumstances, and our consideration of areas where material misstatements are likely to arise.

In obtaining an understanding of the Contents included in the Report, and other engagement circumstances, we have considered the process used to prepare the Contents, in order to design assurance procedures that are appropriate in the circumstances, but not for the purposes of expressing a conclusion as to the effectiveness of Haldex’s process or internal control over the preparation and presentation of the Contents included in the Report.

Our engagement also included: assessing the appropriateness of the main subject, the suitability of the criteria used by Haldex in preparing the Contents in the circumstances of the engagement, evaluating the appropriateness of the methods, policies and procedures, and models.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement, and consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained has a reasonable assurance engagement been performed.

Criteria

The criteria on which the preparation of the Contents has been evaluated refer to the established requirements and in accordance with the criteria established in the standards of the Global Reporting Initiative (GRI), as well as with the internal procedures of Haldex AB for the management of aspects in sustainability.

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Inherent limitations

Due to the inherent limitations of any internal control structure, it is possible that errors or irregularities in the information presented in the Report may occur and not be detected. Our engagement is not designed to detect all weaknesses in the internal controls over the preparation and presentation of the Report, as the engagement has not been performed continuously throughout the period and the procedures performed were undertaken on a test basis.

Qualified conclusion

Our conclusion has been formed on the basis of, and is subject to, the matters outlined in this report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Based on the procedures performed and the evidence obtained, as described above, except for the effect of the matter described in the Basis for Qualified Conclusion section of our report, nothing has come to our attention that causes us to believe that the Contents detailed in Appendix A attached to this assurance report, prepared by the Global Sustainability Management of Haldex and included in the Report for the period from January 1 to December 31, 2021, are not prepared, in all material respects, in accordance with the criteria established in the standards of the Global Reporting Initiative (GRI), as well as with the internal procedures of Haldex AB for the management of aspects in sustainability.

Restriction of use of our report

Our report should not be regarded as suitable to be used or relied on by any party wishing to acquire rights against us other than the Global Sustainability Management of Haldex, for any purpose or in any other context. Any party other than the Global Sustainability Management of Haldex who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

To the fullest extent permitted by law, we accept or assume no responsibility and deny any liability to any party other than Haldex for our work, for this independent limited assurance report, or for the conclusions we have reached.

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Our report is released to Haldex on the basis that it shall not be copied, referred to or disclosed, in whole or in part, without our prior written consent.

KPMG, Cardenas Dosal, S.C.

A handwritten signature in blue ink, appearing to read 'JC Resendiz Muñiz'.

Juan Carlos Resendiz Muñiz
Partner
Mexico City, 25 July, 2022

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Appendix A

Description of the Contents object of the limited assurance engagement.

GRI Standards	Theme
305-1	▪ Direct GHG emissions (Scope 1)
305-2	▪ Indirect GHG emissions caused by energy generation (Scope 2)
305-3	▪ Indirect GHG emissions (Scope 3)