



zeromission

Department Festival

**Declaration with regard to carbon
neutrality for the period June 2018 –
June 2019 in accordance with PAS 2060**

Introduction

Department is a 1-day electronic music festival that occur during the month of May or June at Förbindelsehallen in Slakthusområdet, Stockholm, Sweden. Both international and national artist perform at the festival. The festival area includes two stages: One stage that is located indoors inside Förbindelsehallen and another stage located directly outside. Food and drink are served at the festival area as well as other products such as merchandise.

Department Festival AB, as well as other involved partners has together with ZeroMission analysed Department's 2019: s carbon footprint with the aim to be carbon neutral according to PAS 2060, 2014. Furthermore, the festival aims to carbon offset an addition 25 % for the festival to be Climate Positive.

PAS 2060 introductory information	Information in respect of Department
Individual responsible	Karl Törnros, CEO Department Festival AB
Entity making the declaration	Department Festival AB
Subject of the declaration	Department Festival 2019 and activities relating the event that took place before (as preparation), during and after (clean-up).
Boundaries of the subject	All activities, except capital goods, that relates to the event are included, with both up-stream and down-stream emissions in all categories as defined by the Greenhouse Gas Protocol*
Description of subject	Department is a one-day electronic music festival that takes place in Förbindelsehallen in Slakthusområdet, Stockholm during May.
Rationale for selection of the subject	The scope of the greenhouse gas assessment underlying this commitment is emissions in Scopes 1, 2 and 3 based on the operational control principle defined in the GHG Protocol Corporate Standard*
Selected option for conformity assessment	Other party validation: ZeroMission AB Stockholm AB have validated Departments conformance to the requirements of PAS 2060
Baseline period	1 June 2018 - 1 June 2019

Assessment period	1 June 2018 – 1 June 2019
Standard for assessment of Greenhouse Gas Emission reductions	ISO/TS 14067 - Greenhouse gases – Carbon footprint of products and GHG Protocol - Corporate Accounting and Reporting Standard, Corporate Value Chain (Scope 3) Standard and Scope 2 Guidance
Confirmation	ZeroMission AB hereby confirm that the ISO 14067 product standard was applied in accordance with its provisions and the principles set out in PAS 2060.
Carbon footprint of Department	See below p.3-4
Signature of senior company representative	See below p.3

Comments from CEO

Department Festival AB, together with ZeroMission AB, has calculated Department Festival 2019's carbon footprint with the aim of becoming climate-positive. As the first music festival in the world to do this, we hope with this initiative to inspire other music festivals that it is possible to carry out a climate-neutral festival and also show how it can be done. The communicative purpose of this study is thus to live up to the requirements for climate-neutral events according to PAS 2060, 2014, in order to then compensate another 25% to become climate positive. Doing this, we aim to strengthen the concept and help to make it an established standard.

In the absence of a standardized method and specific rules regarding environmental goals for festivals and concert activities in the music industry, Department intends to contribute as the first music festival to provide a comprehensive climate analysis (including Scope 1, Scope 2 and Scope 3). This study may well be the basis for discussion and debate for the live music industry's climate impact, as it provides important information on the degree of climate impact of various areas regarding planning, establishment, implementation and decommissioning of a live music event.

Department is well aware of the different conditions for the different music arrangements climate impact as the number of visitor's journeys and size of events are the absolute single largest variables. But with the perspective of CO₂ equivalent per visitor, this analysis should be relevant for most kind of music events regardless of size.

Department hopes this study will help to guide debate and discussion against more mapping and comprehensive analysis of various festivals and concert events. Furthermore, Department hopes this study will help the music industry with methods to address our largest climate-affecting segments regarding our contracts, instead of indiscriminately attacking music arrangements generally via the most visible emission factors, which are usually the artists' global tours. Both Department and our local organizer colleagues see how large music target groups fly cheaply to other parts of the world as the local event offering does not match their wish. And thus constitutes a considerably much greater impact on the climate than artists' travels. Which is reflected in our report. In Department's segment - electronic dance music - we can observe that over 8.4 million flies to Ibiza annually and even more with more difficult to calculate number of trips are to Berlin, London, Barcelona, Amsterdam etc to visit similar events. With our data, the social benefits are thus shown on the strength of the local production of arrangements for a local audience, and reduce the emissions overall.

Karl Törnros, CEO Department Festival



Standard and methodology used to determine GHG emissions

ISO/TS 14067 - Greenhouse gases – Carbon footprint of products was selected as methodology to determine GHG emissions. GHG Protocol Corporate Accounting and Reporting Standard was selected to categorise the results.

All emission of greenhouse gasses has been converted into carbon dioxide equivalent (CO₂e) according to the GWP-values from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) over a 100-year period. Emissions has been categorized according to the GHG Protocol Corporate Standard as Scope 1, 2 or 3, including up-stream and down-stream emissions. Energy purchased has been accounted for in accordance with the GHG Protocol Scope 2 Guidance (2014) using a market-based approach.

For more information regarding methodology, see *Department 2019 Climate Analysis Report*, page 6-10.

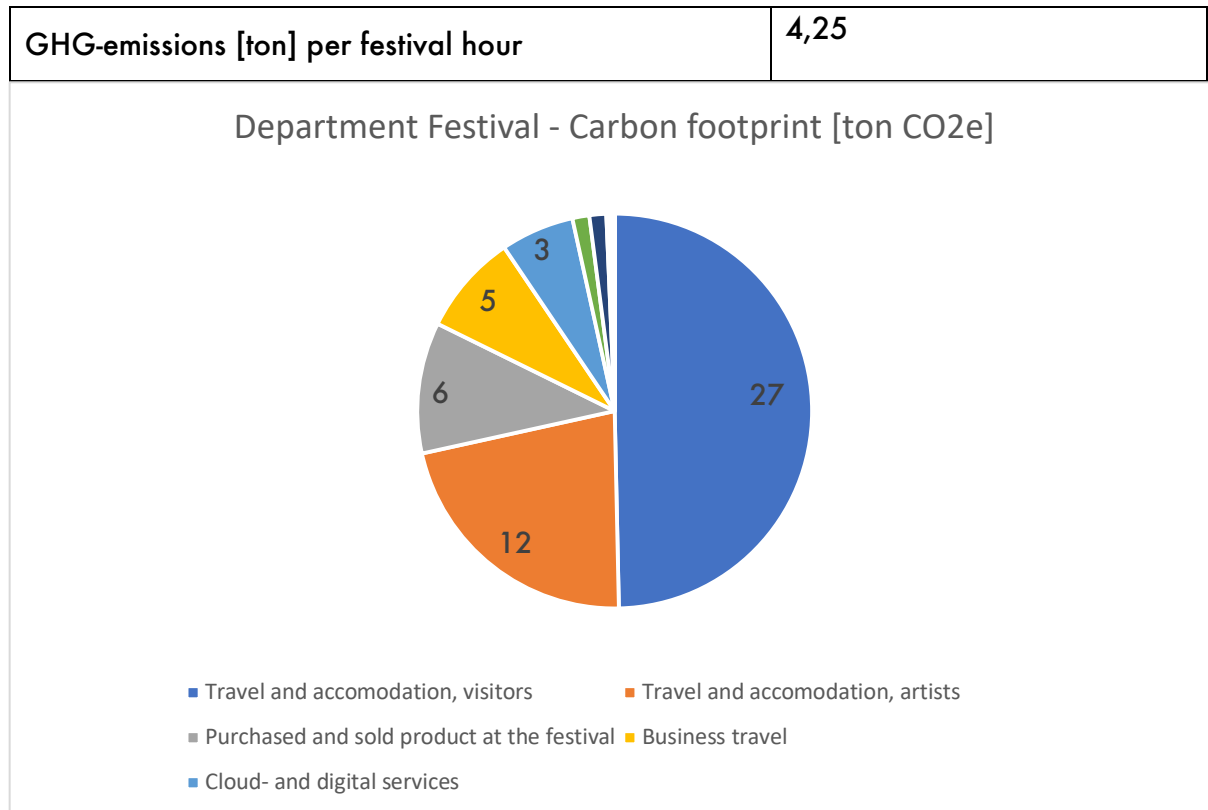
Greenhouse gas emissions

		<i>Total emissions</i>
	<i>Emissions scope</i>	<i>Total tCO₂e 2015</i>
1	Direct GHG emissions from vehicles/premises under control of the organizers	0
2	Indirect GHG emissions arising from the consumption of energy on premises owned or controlled by the organizers	0,13
3	Other indirect GHG emissions	55,07
	** Total	56

* Using market-based methodology for scope 2 emissions.

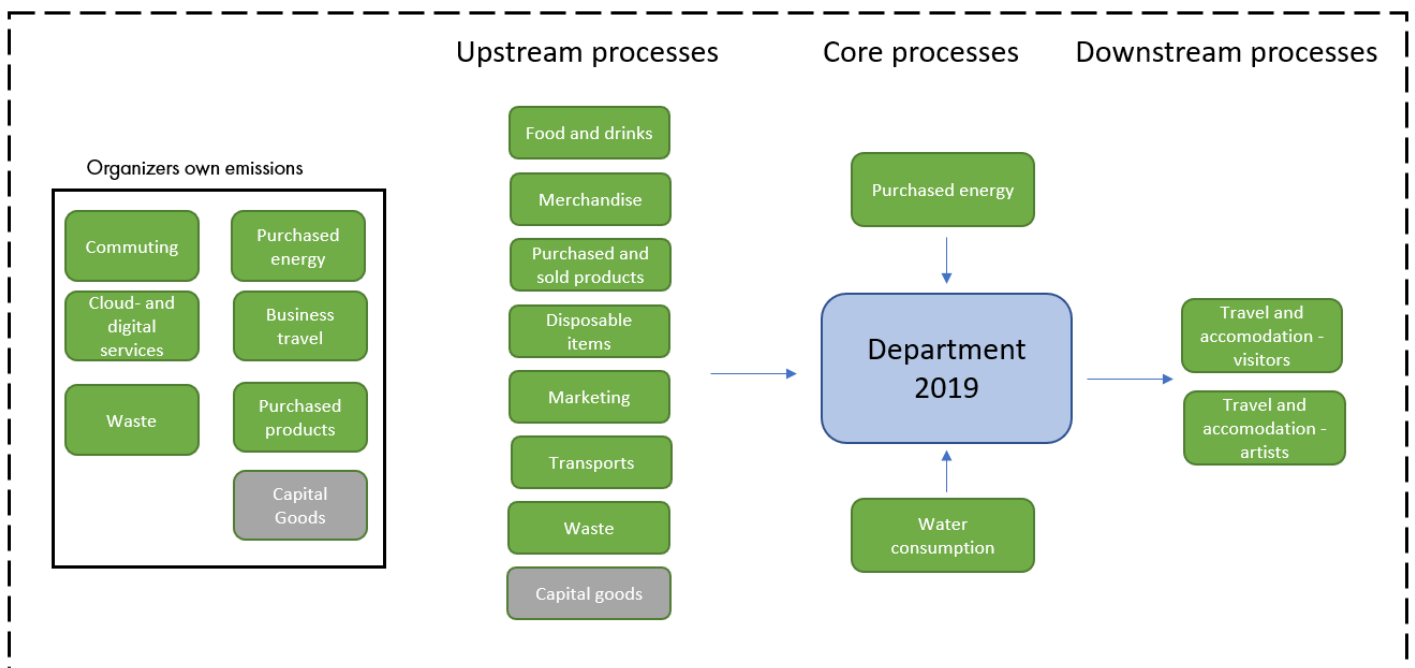
** Rounded up to nearest integer

Key performance indicators	Value
GHG-emissions [kg] per visitor	22,3



Note: above figure only illustrates values for emissions larger than 1 % of Departments total carbon footprint.

Boundaries for emissions assessment 2019



Scope	Definition	Included emission sources/activities
Scope 1	Direct GHG emissions from vehicles/premises	No relevant activities
Scope 2	Indirect emissions from purchased heating and electricity from premises	Generation of purchased energy from organisers own operations
Scope 3 - upstream	1. Purchased goods and services	Purchased goods and services such as the visitor’s consumption of food and drink, merchandize, water consumption, disposable items, packaging and printed and digital marketing
	3. Other fuel- and energy-related activities	Upstream emissions from the generation and distribution of purchased energy.
	4. Upstream transportation and distribution	Transports of purchased goods and transports of external personnel
	5. Waste generated in operations	Collection and transportation of waste from the organizer’s own operations and waste from the festival premises and its Foodtrucks.
	6. Business travel	The organisers business travel by air, car, taxi, train and bus and hotel nights.
	7. Employee commuting	The organisers commuting by bus, car and train.
	8. Upstream leased assets	Generation of purchased electricity to the festival area.
	Scope 3 - Downstream	9. Downstream transportation and distribution

Excluded emission categories	Motivation
2. Capital goods	Data not available, capital goods is not an obligatory category according to ISO 14067.
10. Processing of sold products	Included in category 1
11. Use of sold products	Included in category 1
12. End-of-life treatment of sold products	Included in category 1
13. Downstream leased assets	Not relevant
14. Franchises	Not relevant
15. Investments	Not relevant

Data quality

The quality of collected data has overall been very good. Digital questionnaires and data collection templates have been sent to all participating partners where specific activity data has been collected. Data regarding transportation and accommodation from the visitors was gathered at the entrance of the festival by filling out a questionnaire. In total, 1453 answers were collected through questionnaires and templates filled out by partners, the organisation and visitors. 57 % of all visitors responded to the questionnaire.

The organisers have responded and collected data of all internal purchases throughout the year, energy consumption, business travel and commuting and well as the travel and accommodation of the artists. The majority of the data was collected from invoices and other financial records. Assumptions and estimations were made when the collection of specific data was not possible, for example regarding accumulated waste at the organizer's office over the year and the organisers commuting.

Emission factors, specific or comparable to the studied object were used for the quantification of GHG emissions from sold and purchased products. Emission factors were gathered from relevant scientific articles and reports, environmental product declarations (EPD), and national databases. The limiting factor for quality of the emission factors is the current scientific knowledge that continually produces new results.

More information about data quality and the uncertainty analysis can be viewed in the *Department 2019 Climate Analysis Report*, page 7, 13.

Carbon offset strategy

For 2019, Department has offset all emission, including 25 % extra to achieve carbon positive. The offsetting has been conducted through the purchase of carbon credits from the Plan Vivo certified project *Durian Rambun*, Indonesia. The project is a REDD+ generating Ex Post credits.

The standard under which the project is validated require demonstration that the offsets generated are genuine and additional. The validations also ensure that the project meet the criteria of permanence, leakage and double counting. The project generates emission reductions that are geographically far away from Departments operations and outside the company's boundaries.

Project	Standard	No. tons	Vintage	Date Purchased from ZeroMission
Durian Rambun	Plan Vivo	70	2014	July 2019

Serial number for the Plan Vivo certificate

PV-PVC-ID-104000000013993-01012014-31122014-4329607-4329676-MER-0-P

Carbon footprint management plan

Based on the result of this initial carbon footprint assessment, a carbon footprint management plan will be developed during 2019 and the beginning of 2020 to be implemented for Department Festival 2020.

Statement of validation by ZeroMission AB Stockholm AB

Department Festival appointed a second party, ZeroMission Stockholm AB, to act as an external validator against the PAS 2060:2014 standard.

The validation included 3 stages:

1. Inventory of organization and emission sources
2. Validation that emissions calculations conform with ISO/TS 14067, 2018, and with PAS 2060:2014 requirements for calculations, targets, offsets etc.
3. Validation that the declaration of carbon neutrality conforms with PAS 2060:2014 requirements

In conclusion:

Department has offset for all the emissions associated with arrangement of Department 2019 and achieved carbon neutrality in accordance with PAS 2060 for the period 1 June -2018 to 1 June 2019.

Declared by ZeroMission Stockholm AB, Sweden.

References

- Affairs/Department for Energy and Climate Change, London.
- Angervall, T., Flysjö, A., & Mattsson, B. (2004). *Jämförelse av dricksvatten - Översiktlig livscykelanalys (LCA)*. The Swedish Institute for Food and Biotechnology (SIK).
- Apple. (2017). *iPhone 8 - Environmental Report*.
- Bruckner T., I.A. Bashmakov, Y. Mulugetta, H. Chum, A. de la Vega Navarro, J. Edmonds, A. Faaij, B. Functammasan, A. Garg, E. Hertwich, D. Honnery, D. Infield, M. Kainuma, S. Khennas, S. Kim, H.B. Nimir, K. Riahi, N. Strachan, R. Wisser, and X. Zhang, 2014: Energy Systems. In: *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
- Change. Cambridge University Press, Cambridge.
- CIBSE (2012). *Energy Efficiency in Buildings, Guide F*. The Chartered Institution of Building Services Engineers.
- Client-supplied market-based instrument emission factor
- Costernaro, D., & Duer, A. (2012). *The Megawatts behind Your Megabytes: Going from Data-Center to Desktop*. ACEEE.
- [Department for Business, Energy & Industrial Strategy](#) (BEIS), 2018. Government emission conversion factors for greenhouse gas company reporting
- Department for Business, Energy and Industrial Strategy (2018). 2018 Government GHG Conversion Factors for Company Reporting.
- Destination Gotland. (2017). *Hållbarhetsredovisning Destination Gotland*.
- Ecometrica 2010. Internal Paper Profiles Database.
- Energiföretagen (2018). Lokala miljövärden 2018
- Energimarknadsinspektionen. (2018, July 4). Ursprungsmärkning av el. Hämtat från: <https://www.ei.se/sv/for-energiforetag/el/ursprungsmarkning-av-el/#anchor5>
- Energimyndigheten. (2017, October 20). Diskmaskiner. Hämtat från: <http://www.energimyndigheten.se/tester/tester-a-o/diskmaskiner/>
- Facebook. (2019, May 15). Sustainability in numbers. Hämtat från: <http://sustainability.fb.com/sustainability-in-numbers/#section-GreenhouseGasEmissions>
- Gallego-Schmid, A., Mendoza, J. M., Jeswani, H. K., & Azapagic, A. (2016). Life cycle environmental impacts of vacuum cleaners and the effects of European regulation. *Science of The Total Environment*, 559, 192-203. doi:10.1016/j.scitotenv.2016.03.149
- GHG Protocol – corporate accounting and reporting standard; 2015
- Hallström, E., Håkansson, N., Åkesson, A., Wolk, A., & Sonesson, U. (2018). Climate impact of alcohol consumption in Sweden. *Journal of Cleaner Production*, 201, 287-294.
- Holm, E. (2017). *Vattenanvändning hos samhällsbrukare - En studie om flöden och maxfaktorer för en förbättrad dimensionering*. Uppsala Universitet.
- IEA (2017). Statistics. <http://www.iea.org/stats/index.asp>
- IEA (2018). Statistics. <http://www.iea.org/stats/index.asp>.
- IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate
- ISO/TS 14067: 2018
- Laurijssen, Jobien & Marsidi, Marc & Westenbroek, Annita & Worrell, Ernst & Faaij, Andre. (2010). Paper and biomass for energy? The impact of paper recycling on energy and CO2

- emissions. *Resources, Conservation and Recycling*. 54. 1208-1218. 10.1016/j.resconrec.2010.03.016.
- London.
 - Lucart Group. (2019). *Environmental Product Declaration (EPD) - Toilet Paper Lucart 10 Rolls*. Environdec
 - Maria Zafeiridou, Nicholas S Hopkinson, and Nikolaos Voulvoulis. (201) Cigarette Smoking: An Assessment of Tobacco's Global Environmental Footprint Across Its Entire Supply Chain. *Environmental Science & Technology* 2018 52 (15), 8087-8094
 - Miljöfordon.se. (2019, March 28). Miljöpåverkan | Miljöfordon. Hämtat från: <https://www.miljofordon.se/bilar/miljoepaaverkan/>
 - Monfared, B., Furberg, R., & Palm, B. (2014). Magnetic vs. vapor-compression household refrigerators: A preliminary comparative life cycle assessment. *International Journal of Refrigeration*, 42, 69-76. doi:10.1016/j.ijrefrig.2014.02.013
 - Network for Transport Measures (NTM), 2017.
 - Nilsson, K., Florén, B., & Sonesson, U. (n.d.). *Klimatpåverkan Från Primärförpackningar för olika livsmedelsgrupper - underlag för klimatcertifiering (2009:1)*. Klimatmärkning För Mat.
 - NTM (2017). NTMCalc Advanced 4.0. Environmental performance report.
 - Numbeo (2015). Taxi Fares in Stockholm. http://www.numbeo.com/taxi-fare/city_result.jsp?country=Sweden&city=Stockholm
 - Oatley. (2019). iKaffe. Hämtat från: <https://www.oatly.com/se/products/ikaffe>
 - Paper Profiles (2016). Paper Profiles database. Updated October 2016. Available at: <http://www.paperprofile.com/>.
 - PAS 2060; 2014
 - Rööf, E. (2014). *Mat-klimat-listan (077)*. SLU, Sveriges lantbruksuniversitet.
 - Roos, S., & Larsson, M. (2018). *Klimatdata för textilier*. Naturvårdsverket.
 - SEPA (2016). Emissionsfaktorer Klimat 2016. Swedish Environmental Protection Agency.
 - SEPA (2018). Emissionsfaktorer och värmevärden 2018. Swedish Environmental Protection Agency.
 - SJ (2018). SJ Sustainability Report 2017.
 - Swedish Energy Agency (2015) Summary of energy statistics for dwellings and nonresidential premises for 2014, ES 2015:07
 - Swedish Match. (2018) Annual Report.
 - The Swedish Institute for Food and Biotechnology (SIK) (2004). Jämförelse av dricksvatten - översiktlig livscykelanalys (LCA).
 - Trafikverket, (2019). *Vägtrafikens utsläpp*.
 - TRB (2017). TRB-ÖVERSIKT KLIMATPRESTANDA DRIVMEDEL. Nov 2017.
 - Vattenfall. (2019). *EPD® of Electricity from Vattenfall's Nordic Hydropower*. Environdec.
 - Vattenfall. (2019). *EPD® of Electricity from Vattenfall's Wind Farms*. Environdec.