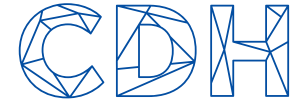


Environmental Law

ALERT | 28 November 2024



In this issue

SOUTH AFRICA

Newly released 2022 Grid Emission Factors Report: A guide to accurate emission reporting for electricity usage

 [For more insight into our expertise and services](#)

Newly released 2022 Grid Emission Factors Report: A guide to accurate emission reporting for electricity usage

In the face of an increasingly environmentally-conscious landscape, South African businesses have been under pressure to accurately report on their carbon footprint, particularly in relation to Scope 2 emissions.

Environmental, social and governance (ESG) reporting frameworks, including the Greenhouse Gas (GHG) Protocol, generally require companies to disclose both their direct and indirect emissions, thereby providing a means for stakeholders to assess an organisation's progress in reducing its carbon footprint, and to evaluate its sustainability efforts.

The 2022 Grid Emission Factors Report (Report), which was published on 1 November 2024, provides critical data on the carbon intensity of grid-supplied electricity. This information is invaluable for both organisations and individuals aiming to accurately track and report on their carbon footprint, especially emissions associated with electricity usage.

Understanding grid emission factors

A challenge for many companies in South Africa has been the lack of clear information on the specific emission factors for the emission intensity of Eskom's grid, making it difficult to assess the true environmental impact of their energy consumption or to quantify the avoided emissions when using renewable sources. The Report (and its predecessor published in February 2024) fills this gap by offering updated data on Eskom's grid emissions factors (GEFs), enabling companies to accurately report on both their Scope 2 emissions from grid usage and the emissions they avoid through the procurement and use of renewable energy.

According to the GHG Protocol's Scope 2 Guidance, companies using renewable energy must report on the avoided emissions from fossil fuels associated with grid electricity because it allows them to accurately disclose their environmental impact. Scope 2 emissions refer to indirect emissions from purchased electricity, and when companies reduce their reliance on grid power, they effectively lower their Scope 2 emissions footprint. To ensure transparency, the GHG Protocol recommends that companies quantify and report on the carbon dioxide emissions they avoid by using renewable sources, like rooftop solar, instead of grid power, which is fossil-fuel intensive.

This detailed reporting prevents companies from misrepresenting their sustainability efforts, which could lead to claims of greenwashing. It provides a clear picture of how renewable energy choices contribute to reducing GHG emissions, benefiting stakeholders and supporting companies' ESG goals.

Newly released 2022 Grid Emission Factors Report: A guide to accurate emission reporting for electricity usage

CONTINUED



The 2022 Grid Emission Factors Report explained

A GEF represents the amount of GHG emissions related to electricity usage per kilowatt hour. Four location-based GEFs were developed, with their intended uses being as follows:

GEF	Description	Calculation	Intended use
Domestic generation GEF (DGGEF)	Represents the GHG emissions per unit of electricity generated, excluding exports, auxiliary consumption, and own-use generation.	$DGGEF = \text{Domestic emissions} / \text{domestic generation}$	Policy development and international reporting – mainly for Government.
National generation GEF (NGGEF)	Represents the relationship between emissions and end-user electricity consumption, including imported electricity.	$NGGEF = (\text{national emissions} + \text{imported emissions}) / (\text{national generation} + \text{imported generation})$	Corporate reporting and Scope 2 emissions reporting – mainly for consumers and corporate entities.
Transmission losses GEF (TLGEF)	Represents emissions associated with transmission losses, which occur between the generation and consumption points.	$TLGEF = \text{Transmission losses emissions} / \text{electricity consumed}$	Corporate reporting and Scope 3 emissions reporting – mainly for consumers, corporate entities and Government.
Distribution losses GEF (DLGEF)	Represents emissions related to distribution losses, which occur after electricity is transmitted to the distribution network.	$DLGEF = \text{Distribution losses emissions} / \text{electricity consumed}$	Corporate reporting and Scope 3 emissions reporting – mainly for consumers, corporate entities and Government.

**ENVIRONMENTAL LAW
ALERT**

Newly released 2022 Grid Emission Factors Report: A guide to accurate emission reporting for electricity usage

CONTINUED

The Report also notes significant improvements in South Africa's carbon intensity, with reductions in the GEFs for both domestic and national electricity generation. Compared to 2021, the domestic generation GEF decreased from 1.013 tCO₂e/MWh to 0.960 tCO₂e/MWh, largely due to a decrease in coal-based power generation and an increase in renewable sources like solar and wind. This shift reflects ongoing efforts to decarbonise the country's energy mix in line with its commitments under the Paris Agreement.

Conclusion

The Report enables organisations to calculate their GHG emissions based on reliable, up-to-date data. This ensures that emissions disclosures made in terms of Scope 2 and 3 reporting are both transparent and credible, reducing the risk of misleading claims about environmental performance. Government entities can also leverage GEFs to analyse emission trends, model climate change scenarios, and shape policies for effective climate change mitigation.

Alysa Bunting, overseen by Alecia Pienaar and Alistair Young



OUR TEAM

For more information about our Environmental Law practice and services in South Africa and Kenya, please contact:



Allan Reid

Executive Consultant:
Corporate & Commercial
T +27 (0)11 562 1222
E allan.reid@cdhlegal.com



Alistair Young

Director:
Corporate & Commercial
T +27 (0)11 562 1258
E alistair.young@cdhlegal.com



Clarice Wambua

Consultant | Kenya
T +254 731 086 649
+254 204 409 918
+254 710 560 114
E clarice.wambua@cdhlegal.com



Alecia Pienaar

Counsel:
Environmental Law
M +27 (0)82 863 6279
E alecia.pienaar@cdhlegal.com



Anton Ackermann

Senior Associate:
Corporate & Commercial
T +27 (0)11 562 1895
E anton.ackermann@cdhlegal.com



James Ross

Senior Associate:
Corporate & Commercial
T +27 (0)21 481 6424
E james.ross@cdhlegal.com



Lauriene Maingi

Associate | Kenya
T +254 731 086 649
+254 204 409 918
+254 710 560 114
E lauriene.maingi@cdhlegal.com

BBBEE STATUS: LEVEL ONE CONTRIBUTOR

Our BBBEE verification is one of several components of our transformation strategy and we continue to seek ways of improving it in a meaningful manner.

PLEASE NOTE

This information is published for general information purposes and is not intended to constitute legal advice. Specialist legal advice should always be sought in relation to any particular situation. Cliffe Dekker Hofmeyr will accept no responsibility for any actions taken or not taken on the basis of this publication.

JOHANNESBURG

1 Protea Place, Sandton, Johannesburg, 2196. Private Bag X40, Benmore, 2010, South Africa.

Dx 154 Randburg and Dx 42 Johannesburg.

T +27 (0)11 562 1000 F +27 (0)11 562 1111 E jhb@cdhlegal.com

CAPE TOWN

11 Buitengracht Street, Cape Town, 8001. PO Box 695, Cape Town, 8000, South Africa. Dx 5 Cape Town.

T +27 (0)21 481 6300 F +27 (0)21 481 6388 E ctn@cdhlegal.com

NAIROBI

Merchant Square, 3rd floor, Block D, Riverside Drive, Nairobi, Kenya. P.O. Box 22602-00505, Nairobi, Kenya.

T +254 731 086 649 | +254 204 409 918 | +254 710 560 114

E cdhkenya@cdhlegal.com

STELLENBOSCH

14 Louw Street, Stellenbosch Central, Stellenbosch, 7600.

T +27 (0)21 481 6400 E cdhstellenbosch@cdhlegal.com

©2024 14200/NOV

