



## Report of Independent Accountants

To the Board of Directors and Management of Verisk Analytics, Inc.

We have reviewed Verisk Analytics, Inc.'s ("Verisk") management's assertion, included in the accompanying Appendix A, that the total of Verisk's Scope 1 (direct energy consumption and fugitive emissions from refrigerant gas loss), Scope 2 (indirect energy consumption – location based and market based), and Scope 3 (indirect energy consumption from business air travel) Greenhouse Gas ("GHG") emissions inventory for the year ending December 31, 2019 is presented in conformity with the assessment criteria set forth in management's assertion (the "assessment criteria").

Verisk's management is responsible for its assertion and for the selection and development of the assessment criteria, which management believes provide an objective basis for measuring and reporting on the GHG emissions inventory. Our responsibility is to express a conclusion on management's assertion based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants ("AICPA") in AT-C section 105, *Concepts Common to All Attestation Engagements*, and AT-C section 210, *Review Engagements*. Those standards require that we plan and perform the review to obtain limited assurance about whether any material modifications should be made to management's assertion in order to be fairly stated. A review is substantially less in scope than an examination, the objective of which is to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects, in order to express an opinion. Accordingly, we do not express such an opinion. We believe that our review provides a reasonable basis for our conclusion.

In performing our review, we have complied with the independence and other ethical requirements of the Code of Professional Conduct issued by the AICPA.

We applied the Statements on Quality Control Standards established by the AICPA and, accordingly, maintain a comprehensive system of quality control.

GHG emissions quantification is subject to inherent measurement uncertainty because of such things as GHG emissions factors that are used in mathematical models to calculate GHG emissions and the inability of those models, due to incomplete scientific knowledge and other factors, to accurately measure under all circumstances the relationship between various inputs and the resultant GHG emissions. Environmental and energy use data used in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for measuring such data. The selection by management of different but acceptable measurement techniques could result in materially different amounts or metrics being reported.

As discussed in Appendix A, Verisk has estimated GHG emissions for certain emissions sources for which no primary usage data is available.

Based on our review, we are not aware of any material modifications that should be made to Verisk management's assertion presented in Appendix A in order for it to be fairly stated.

*PricewaterhouseCoopers LLP*

July 29, 2020

## Appendix A

### Management Statement Regarding Verisk Analytics, Inc.’s Scope 1 (direct energy consumption and fugitive emissions from refrigerant gas loss), Scope 2 (indirect energy consumption – location-based and market-based), and Scope 3 (indirect energy consumption from business air travel) Greenhouse Gas (GHG) Emissions Inventory for the year ended December 31, 2019

#### Overview

Management of Verisk Analytics, Inc. (“Verisk”) is responsible for the completeness, accuracy and validity of the selected GHG emissions (the “Metrics”) for the year ended December 31, 2019. Management is also responsible for the collection, quantification and presentation of the Metrics for the year ended December 31, 2019 and for the selection or development of the assessment criteria, which management believes provide an objective basis for measuring and reporting on the Metrics.

Management of Verisk asserts the following Metrics are presented in conformity with the assessment criteria set forth below.

GHG emission	Definition of Metric /Assessment Criteria	Year ended December 31, 2019
Scope 1: GHG emissions (MT CO2e) from direct energy consumption and fugitive emissions from refrigerant gas loss	<p>Metric tons of carbon dioxide equivalent emissions (MT CO2e) for the year ended December 31, 2019, based on direct Scope 1 energy consumption and fugitive emissions from refrigerant gas loss</p> <p>Scope 1 emissions are based on the stationary combustion of natural gas, heating oil, stationary diesel fuel, and owned/leased mobile sources (motor gasoline and aviation fuel) multiplied by their associated emission factors. In addition, Scope 1 emissions include fugitive emissions from refrigerant gas loss</p> <p>See the Estimation Methodology, GHG Emission Factors, and</p>	Scope 1 MT CO2e: 8,721.24

GHG emission	Definition of Metric /Assessment Criteria	Year ended December 31, 2019
	<p>Uncertainty sections below for additional information on GHG emission factors and estimates</p>	
<p>Scope 2: GHG emissions (MT CO2e) from indirect energy consumption (Location-based)</p>	<p>Metric tons of carbon dioxide equivalent emissions (MT CO2e) for the year ended December 31, 2019, based on indirect Scope 2 energy consumption</p> <p>Scope 2 emissions are the result of the use of purchased electricity, purchased steam and purchased chilled water multiplied by their associated emission factors</p> <p>See the Estimation Methodology, GHG Emission Factors, and Uncertainty sections below for additional information on GHG emission factors and estimates</p>	<p>Scope 2 MT CO2e: 11,649.08</p>
<p>Scope 2: GHG emissions (MT CO2e) from indirect energy consumption (Market-based)</p>	<p>Metric tons of carbon dioxide equivalent emissions (MT CO2e) for the year ended December 31, 2019, based on indirect Scope 2 energy consumption</p> <p>Scope 2 emissions are the result of the use of purchased electricity, purchased steam and purchased chilled water multiplied by their associated emission factors</p> <p>See the Estimation Methodology, GHG Emission Factors, and Uncertainty sections below for additional information on GHG emission factors and estimates</p>	<p>Scope 2 MT CO2e: 138.59</p>

GHG emission	Definition of Metric /Assessment Criteria	Year ended December 31, 2019
Scope 3: GHG emissions (MT CO2e) from indirect energy consumption from business air travel	Business air travel, worldwide. Metric tons of carbon dioxide equivalent emissions (MT CO2e) for the year ended December 31, 2019, based on energy consumption of our air travel providers in transporting our employees See the GHG Emission Factors and Uncertainty sections below for additional information on GHG emission factors and estimates	Scope 3 MT CO2e: 9,998.39
	Totals	Total Scope 1, 2 and 3 (business air travel) MT CO2e using Location-based: 30,368.70  Total Scope 1, 2 and 3 (business air travel) MT CO2e using Market-based: 18,858.22

### Overview of GHG Data

Verisk uses the principles and guidance of the World Resources Institute (WRI) and the World Business Council for Sustainable Development’s (WBCSD) *Greenhouse Gas Protocol Initiative’s Corporate GHG Accounting and Reporting Standard, Revised* (the “GHG Protocol”) for its Scope 1 and Scope 2 emissions, and the *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*, recognized external standards, to determine the criteria to assess, calculate and report direct and indirect GHG emissions.

- For location-based reporting, metric tons of greenhouse gases by gas are approximately 29,783.19, 5.68, and 0.60 of CO2, CH4, and N2O, respectively. Metric tons of greenhouse gases associated with refrigerant emissions are 0.000227, 0.0213, 0.0149, 0.0428, and 0.0231, for HCFC-123a, HFC-134a, R407c, R410a, and R22, respectively. In addition, 93.77 tons of CO2e are not identified by a specific gas since electricity emissions factors for Australia are reported only as carbon equivalencies.
- For market-based reporting, metric tons of greenhouse gases by gas are approximately 18,434.37, 4.706, and 0.442 of CO2, CH4, and N2O, respectively. Metric tons of greenhouse gases associated with refrigerant emissions are 0.000227, 0.0213, 0.0149, 0.0428, and 0.0231, for HCFC-123a, HFC-134a, R407c, R410a, and R22, respectively.

Note: WRI and WBCSD issued additional guidance for Scope 2 emissions in 2015 (in *GHG Protocol Scope 2 Guidance, An amendment to the GHG Protocol Corporate Standard*), which sets forth reporting under both location-based and market-based methodologies, where the prior version of the GHG Protocol only addressed a location-based methodology. The location-based method applies average emissions factors that correspond to the grid where the consumption occurs, whereas the market-based method applies emissions factors that correspond to energy purchased through contractual instruments, such as Market Based Instruments. Where contractual instruments were not purchased, the market-based emissions factors represent either the residual mix, where available, or the location grid-average factors. Verisk is reporting under both location-based and market-based methodologies for 2019.

### **Organizational Boundary of the GHG Inventory**

Except as noted below, the organizational boundary for Verisk's GHG inventory, which is in conformance with the GHG protocol, covers 100% of the units conducting business within Verisk Analytics, Inc. where Verisk has operational control, for the year ended December 31, 2019, all of which are wholly owned. The following boundary assumptions are reflected in the 2019 reported data:

- The 2019 emissions of four companies acquired by Verisk have been added for the months indicated: Keystone Aerial Surveys (August through December), Property Pres Wizard (September through December), Build Fax (November and December), Genscape (December).
- The boundary includes Verisk's eastern datacenter, located in a third party-operated facility in Somerset, New Jersey, where Verisk has operational control over the datacenter's Verisk-related activities.

### **Base data**

Base data utilized in the calculation of Scope 1 (direct), Scope 2 (indirect) and Scope 3 (indirect) GHG emissions is obtained from direct measurements for Scope 1; third-party invoices for Scopes 1, 2, and 3; and estimates for Scopes 1 and 2, and 3. Estimates for oil, natural gas, aviation fuel, purchased electricity, purchased chilled water and refrigerant gas loss are generated where measurement data or third party invoices are not readily available. Base data utilized in the calculation of Scope 3 (indirect) business air travel GHG emissions is obtained from reports provided by a third party with flight distance for business air travel.

### **Estimation methodology for oil, natural gas, aviation fuel, purchased electricity and refrigerant gas loss**

Where oil, natural gas, fugitive emissions from refrigerants, purchased electricity, and purchased chilled water usage data is unavailable for a given location or time period, consumption is estimated based on actual data from sources similar in size and location. When no such information is available, estimates were calculated as follows:

- For electricity consumption estimations in US offices: Estimated using the office's surface area and an average electricity intensity for offices in the United States (source: *2012 Commercial Buildings Energy Consumption Survey (CBECS)*). Available online: <http://www.eia.gov/consumption/commercial/>).
- For electricity consumption estimations in Canadian offices: Estimated using the office's surface area and an average electricity intensity for offices in Canada (source: OEE (2019). *Energy Use Data Handbook Tables (Canada)*. Commercial/Institutional sectors. 1990-2016. Office of Energy Efficiency. Available online: <http://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/showTable.cfm?type=HB&sector=com&juris=00&rn=1&page=0>).
- For natural gas heating estimations in US offices: Estimated using the office's surface area and an average natural gas intensity for offices in the United States (source: *2012 Commercial Buildings Energy Consumption Survey (CBECS)*). Available online: <http://www.eia.gov/consumption/commercial/>).
- For natural gas heating estimations in Canadian offices: Estimated using the office's surface area and an average natural gas intensity for offices in Canada (source: OEE (2019). *Energy Use Data Handbook Tables (Canada)*. Commercial/Institutional sectors. 1990-2016. Office of Energy Efficiency. Available online from: <http://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/showTable.cfm?type=HB&sector=com&juris=00&rn=1&page=0>)
- For natural gas heating estimations in Australian offices: Estimated using the office's surface area and an average natural gas intensity for offices in Melbourne (source: 2012 *Commercial Buildings Baseline Study (Offices)*). Available online: <https://www.energy.gov.au/publications/baseline-energy-consumption-and-greenhouse-gas-emissions-commercial-buildings-australia>)
- For electricity consumption estimations in Germany and Czech Republic: Estimated using the office's surface area and an average electricity intensity for offices in Europe (source: The Chartered Institution of Building Services Engineers (2012). *Energy efficiency in buildings, CIBSE Guide F.*)
- For natural gas heating estimations in Germany and Czech Republic: Estimated using the office's surface area and an average natural gas intensity for offices in Europe (source: The Chartered Institution of Building Services Engineers (2012). *Energy efficiency in buildings, CIBSE Guide F.*)
- For conversion of weight of steam into energy for US offices: Consumption was originally reported in mlbs steam and converted into thermal energy using an assumed

enthalpy of 1194 BTU/lb which is recommended by Energy Star for US district heating systems that utilize steam.

- Management has assessed the portfolio of air conditioning units within the reporting boundary, and also reviewed regions for known spillages, and concluded that 5% is representative of the expected gas leakage across their locations. Known refrigerant leakages have also been included for specific locations, where applicable.

These estimates over natural gas, oil, diesel and fugitive emissions from refrigerants account for approximately 4.03% of Scope 1 emissions and 5.35% of Scope 2 purchased electricity, purchased steam and purchased chilled water emissions.

- Aviation fuel used in the Geomni business is based on actual fuel expenditure applied to an average fuel cost per gallon based on a sample of invoices to determine an estimated consumption amount of aviation fuel.

This estimate over aviation fuel accounts for approximately 62.69% of Scope 1 emissions.

### GHG Emission Factors

Carbon dioxide emissions and equivalents have been determined on the basis of measured or estimated energy and fuel usage, multiplied by the associated carbon emission factors, and for carbon dioxide equivalent emissions taking into account global warming potentials.

Emission Source	Emission Source Type	Emission Factors Utilized
Scope 1, U.S.	Gasoline vehicles	For CO <sub>2</sub> : EPA (2018). GHG Emission Factors Hub. Center for Corporate Climate Leadership (March 2018). <a href="https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf">https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf</a> For CH <sub>4</sub> and N <sub>2</sub> O: EPA (2018). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016. United States Environmental Protection Agency.
Scope 1, U.S.	Aviation fuel	GHG emissions are calculated using EPA (2018). GHG Emission Factors Hub. Center for Corporate Climate Leadership (March 2018). <a href="https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf">https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf</a>
Scope 1, U.S.	Stationary Combustion of diesel	For CO <sub>2</sub> : EIA (2016). Carbon Dioxide Emissions Coefficients by Fuel (February 2, 2016). <a href="http://www.eia.gov/environment/emissions/co2_vol_mas.s.cfm">http://www.eia.gov/environment/emissions/co2_vol_mas.s.cfm</a>

		For CH <sub>4</sub> and N <sub>2</sub> O: IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.
Scope 1, U.S.	Stationary Combustion of natural gas	GHG emissions are calculated using factors from the EPA (2018). GHG Emission Factors Hub. Center for Corporate Climate Leadership (March 2018). <a href="https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf">https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf</a> and EPA (2018). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016. United States Environmental Protection Agency.
Scope 1, Australia	Stationary Combustion of natural gas	GHG emissions are calculated using factors from the Commonwealth of Australia 2019 (Department of the Environment and Energy). National Greenhouse Account Factors (NGA) - Australian National Greenhouse Accounts. August 2019. Online: <a href="http://www.environment.gov.au/system/files/resources/cf13acc9-c660-445e-bd82-3490d74e9d09/files/national-greenhouse-accounts-factors-august-2019.pdf">http://www.environment.gov.au/system/files/resources/cf13acc9-c660-445e-bd82-3490d74e9d09/files/national-greenhouse-accounts-factors-august-2019.pdf</a>
Scope 1, Canada	Stationary Combustion of natural gas	For CO <sub>2</sub> : Environment Canada (2009). National Inventory Report. Greenhouse Gas Sources and Sinks in Canada: 1990 - 2007. Environment Canada. For CH <sub>4</sub> and N <sub>2</sub> O: Emission factors derived from EC (2019). National Inventory Report. Greenhouse Gas Sources and Sinks in Canada: 1990 - 2017. Environment Canada. Online: <a href="https://unfccc.int/documents/194925">https://unfccc.int/documents/194925</a>
Scope 1, Canada	Stationary combustion of diesel	GHG emissions are calculated using emission factors derived from EC (2019). National Inventory Report. Greenhouse Gas Sources and Sinks in Canada: 1990 - 2017. Environment Canada. Online: <a href="https://unfccc.int/documents/194925">https://unfccc.int/documents/194925</a>
Scope 1, China	Stationary Combustion of natural gas	GHG emissions are calculated using IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.
Scope 1, United Kingdom/Germany	Stationary combustion of natural gas, diesel and heating oil	GHG emissions are calculated using factors from the Department for Business, Energy and Industrial Strategy (2019). 2019 Government GHG Conversion Factors for Company Reporting.



Scope 1, India/Nepal	Stationary combustion of diesel	GHG emissions are calculated using factors from IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.
Scope 1, Global	Refrigerant gas loss	GHG emissions are calculated using global warming potentials from IPCC (2013). IPCC Fifth Assessment Report: Climate Change 2013. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.
Scope 2, U.S.	Purchased electricity	GHG emissions are calculated using factors from the United States EPA eGRID sub-region 2018 emissions factors for electricity purchased in the U.S. EPA (2020). eGrid2018v2. (Accessed March 11, 2020). <a href="https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid">https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid</a>
Scope 2, U.S.	Purchased steam and purchased chilled water	Chilled water: GHG emissions are calculated using factors from the United States EPA eGRID sub-region 2018 emissions factors for electricity purchased in the U.S. EPA (2020). eGrid2018v2. (March 11, 2020). <a href="https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid">https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid</a> Steam: EPA (2018). GHG Emission Factors Hub. Center for Corporate Climate Leadership (March 2018). <a href="https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf">https://www.epa.gov/sites/production/files/2018-03/documents/emission-factors_mar_2018_0.pdf</a>
Scope 2, Australia	Purchased electricity	GHG emissions are calculated using factors from the Commonwealth of Australia 2019 (Department of the Environment and Energy). National Greenhouse Account Factors (NGA) - Australian National Greenhouse Accounts. August 2019. Online: <a href="http://www.environment.gov.au/system/files/resources/cf13acc9-c660-445e-bd82-3490d74e9d09/files/national-greenhouse-accounts-factors-august-2019.pdf">http://www.environment.gov.au/system/files/resources/cf13acc9-c660-445e-bd82-3490d74e9d09/files/national-greenhouse-accounts-factors-august-2019.pdf</a>
Scope 2, Canada	Purchased electricity	GHG emissions are calculated using factors derived from EC (2019). National Inventory Report. Greenhouse Gas Sources and Sinks in Canada: 1990 - 2017. Environment Canada. Online: <a href="https://unfccc.int/documents/194925">https://unfccc.int/documents/194925</a>
Scope 2, China	Purchased electricity, Chilled water	Chilled water: GHG emissions are calculated using factors derived from IEA (2019). Statistics. <a href="http://www.iea.org/stats/index.asp">http://www.iea.org/stats/index.asp</a> , and IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas

		Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.
Scope 2, United Kingdom	Purchased electricity	GHG emissions are calculated using factors from the Department for Business, Energy and Industrial Strategy (2019). 2019 Government GHG Conversion Factors for Company Reporting.
Scope 2, Other	Purchased electricity	GHG emissions for purchased electricity for the following countries were calculated using factors derived from IEA (2019). Statistics. <a href="http://www.iea.org/stats/index.asp">http://www.iea.org/stats/index.asp</a> , and IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge. China, Denmark, Germany, India, Ireland, Israel, Japan, Malaysia, Nepal, Russia, Singapore, Spain, United Arab Emirates, New Zealand, Czech Republic, Netherlands
Scope 2, Singapore	Purchased chilled water	GHG emissions were calculated using factors derived from IEA (2019). Statistics. <a href="http://www.iea.org/stats/index.asp">http://www.iea.org/stats/index.asp</a> , and IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge.
Scope 2, Denmark	Purchased steam	GHG emissions were calculated using supplier-specific emission factors from Affaldvarme Aarhus (28 kgCO <sub>2</sub> per MWh), the main supplier of district heating in Aarhus. Affaldvarme Aarhus (2019) ( <a href="https://affaldvarme.aarhus.dk/varme/tilslutning-til-fjernvarme/er-du-interesseret-i-at-faa-fjernvarme/">https://affaldvarme.aarhus.dk/varme/tilslutning-til-fjernvarme/er-du-interesseret-i-at-faa-fjernvarme/</a> 3) Accessed on 17/06/2019.
Scope 2, Germany	Purchased steam	GHG emissions were calculated using factors from AGFW (2017). Liste der CO <sub>2</sub> -Bescheinigungen nach FW 309-6 nach Städten sortiert.
Scope 3	Business air travel	GHG emissions are calculated using factors from the Department for Business, Energy and Industrial Strategy (2019). 2019 Government GHG Conversion Factors for Company Reporting. GHG emissions for business air travel are calculated using mileage information provided by Verisk's commercial travel managers.

In quantifying Scope 2 market-based electricity GHG emissions, GHG Protocol Scope 2 Guidance defines a hierarchy of factors for quantifying market-based emissions, in order from highest to lowest preference. The table below provides a description of the hierarchy and the relevance to Verisk for the current year inventory.

Emission Source Type	Emission Factor Employed
Direct line connection	Not applicable
Energy attribute certificates	Verisk applies the emission factors listed on the renewable energy attribute certificates or those provided by the supplier of the attribute certificate
Electricity contracts	Not applicable
Energy supplier-specific emission factors	Verisk uses publicly available documents (i.e. websites, sustainability reports) from its energy suppliers to seek supplier factors, where applicable
Residual mix	Europe: Verisk uses available country emission factors from Association of Issuing Bodies (AIB)
Location-based factors	If none of the above options are available, Verisk uses location-based factors as described in the table above

### Uncertainty

GHG emissions quantification is subject to inherent measurement uncertainty because of such things as GHG emissions factors that are used in mathematical models to calculate GHG emissions and the inability of those models, due to incomplete scientific knowledge and other factors, to accurately measure under all circumstances the relationship between various inputs and the resultant GHG emissions. Environmental and energy use data used in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for measuring such data. The selection by management of different but acceptable measurement techniques could result in materially different amounts or metrics being reported.

Verisk recognizes that air travel remains an estimate since unforeseen circumstances can occur (e.g., different routes due to adverse weather, or unforeseen aircraft fleet changes), however the figures presented follow DEFRA methodology commonly used, and is considered to be a reasonable estimate of Verisk's air travel emissions (see 2015 Guidelines to Defra/DECC's GHG Conversion Factors for Company Reporting, Version 1.0 July 2015) (refer to <https://www.defra.gov.uk/environment/economy/business-efficiency/reporting/>