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FY2017 Basis of reporting

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This document provides additional details about the scope and calculation methods used in the Deloitte 2017 Global Impact Report (the “Global Report”), available at www.deloitte.com/GlobalReport. It should be read in conjunction with the Global Report and all definitions used therein unless otherwise stated also apply to this document.

Defining Global Report content

The Deloitte Touche Tohmatsu Limited (Deloitte Global) Corporate Responsibility Policy points to defining principles for establishing member firm policies. These defining principles include environmentally sustainable operations and a commitment to local communities and the wider society. Deloitte people engage continuously with key stakeholders, both internal and external, as part of routine business. Along with this ongoing engagement, in FY2017, Deloitte Global commissioned a formal stakeholder engagement process and materiality assessment to assist with identifying key areas of impact upon which to focus the Global Report content.

The materiality assessment process was grounded in the Global Reporting Initiative (GRI) principles of materiality and stakeholder inclusiveness. The strength of the materiality assessment methodology utilized revolves around the design and implementation of a systematic and disciplined approach to stakeholder engagement, as well as topic prioritization. The first step in the process was to investigate the expectations for corporate responsibility and sustainability for Deloitte by analyzing supplier questionnaires, benchmarking reports of peers and sustainability award winners, examining sustainability guidelines and researching publications of internationally recognized nongovernmental organizations (NGOs). Using this process narrowed a large universe of issues down to a list of potential relevant topics. To gather further stakeholder insight into material topics, Deloitte Global identified a specific list of stakeholders and identified engagement methods designed to maximize feedback from each group. Deloitte Global conducted interviews with external stakeholders including strategic member firm clients, academic institutions and internationally recognized NGOs. The direct feedback from interviews helped identify emerging issues and prioritize each group’s concerns. Internally, we conversed with Deloitte Global leaders and member firm leaders in client-service roles. The annual [Deloitte Millennial Survey](#) provided insight into the interests of current and future talent. Involvement by Deloitte Global people in external bodies working on standards development also served as a source for industry perspectives. Systems and processes in place within Deloitte were also considered as they often reflect a response to stakeholder concerns (see the [Stakeholder engagement summary](#) for specific examples). Finally, a systematic weighting methodology was applied to the feedback and research to prioritize the list of potential relevant topics. Parameters used in the weighting methodology included the prevalence of an issue across multiple sources, the identification and frequency of mention of specific issues by individuals interviewed and the consideration of specific systems or processes put into place by Deloitte as a result of direct stakeholder feedback. The topics were prioritized across a materiality matrix comparing Deloitte’s topics with significant economic, environmental and social impacts against topics of importance to stakeholders. Financial performance was removed from the FY2017 matrix because it is an implied concern for any organization.

The Global Report uses the GRI Standard in defining report content. The FY2017 Global Report has been prepared in accordance with the GRI standards: Core option.

Scope and methods for performance measurements

Deloitte Global adhered to widely accepted standards in developing the Global Report. These standards define a systematic approach to understanding the issues that the Global Report should cover and measuring and documenting performance with regard to those issues. Performance measures for societal impact and environmental sustainability are based on widely recognized guidelines.

For reporting on societal impact, Deloitte Global considered the reporting standards from the Committee Encouraging Corporate Philanthropy (CECP) and the London Benchmarking Group (LBG). The monetary value of community activities was estimated according to the type of service performed. The value of volunteer work was based on local Deloitte member firms' ("member firms") staff costs. Pro bono work, defined as work that the member firms have delivered to not-for-profit organizations free of charge or at significantly reduced rates, has been valued at fair-market rates representative of the local member firms' client-service rates for comparable services.

Estimates of carbon emissions were prepared according to the Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard created by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), with emissions accounted for on the basis of operational control. While the reporting for FY2017 includes a significant number of Scope 3 sources, it does not consider full upstream and downstream emissions from all sources.

FY2017 environmental performance data in the Global Report was directly collected from across the Deloitte network and collectively represented 97 percent of aggregate Deloitte people and 99 percent of aggregate member firm revenues. Extrapolations were used to account for the emissions of the remainder of the organization that did not directly report data. FY2017 societal impact data was reported from across the Deloitte network and collectively represented 99 percent of aggregate Deloitte people and 98 percent of aggregate member firm revenues. Estimates of societal impact contributions were not made for the member firms that did not report this data due to the wide range of societal impact activities across member firms. It should be recognized that these reporting gaps limit the year-to-year comparability of the data. Comparability is expected to improve over time as the number of nonreporting member firms decreases. Data that formed the basis of the reporting was obtained from financial reporting systems, other internal records and outside sources such as travel agencies, utilities and property managers. In FY2017, environmental data was gathered from across the global network using a single carbon software system. Member firms entered their building electricity, fuel usage and business travel, and these activities were converted to tonnes of carbon dioxide equivalent. The methodology for extrapolating member firm emissions was reviewed in FY2016. Based on this review and an analysis of materiality considerations the following changes were made to the GHG reporting process:

- Extrapolation was only done for the three most material emission sources: electricity, air travel and hotel stays.
- The multiplier for extrapolation is based on the weighted average of all reporting member firms for the specific activity data. Before FY2016 the extrapolation multiplier was also based on geographical location and member firm size.

This change was made to simplify reporting and was continued in FY2017. A thorough materiality assessment confirmed that these changes would not materially impact reported results.

Deloitte Global streamlined the way it reported environmental sustainability data in FY2014. We have continued with these practices in FY2017 including the following:

- Refrigerants, district heating and district cooling are excluded from aggregate network reporting as previous analysis showed these emission sources were not material to the overall GHG footprint.
- Paper consumption is tracked, but associated greenhouse gas emissions are not.
- Methane (CH₄) and nitrous oxide (N₂O) are not separately calculated in instances where published sources do not incorporate these into carbon-dioxide equivalent (CO₂e) factors.

- Global warming potentials (GWPs) incorporated into published emission factors are used “as is” and no attempt is made to reconcile to one common set of GWPs. Where choices can be made, we use the 100-year Fifth Assessment Report (AR5) with climate-carbon feedback incorporated as published by the Intergovernmental Panel on Climate Change.

Emission factors

The software system used for reporting emissions incorporates standard emission factors, the majority of which come from the following sources:

- The GHG Protocol published by the WRI and WBCSD;
- The International Energy Agency (IEA);
- The UK’s Department for Environment, Food and Rural Affairs (DEFRA); and
- The US Department of Energy (US DOE).

Member firms have also identified emission factors that more accurately reflect localized source-specific emissions, such as specific emission factors for a local electric utility. These factors are also incorporated into the software system and used as appropriate for the emissions source. A compilation of emission factors used to calculate the data in the Global Report is included at the end of this section.

Changes from FY2016

New emission factors were applied for global air travel in FY2017. All air travel, except for air travel by Deloitte UK, used DEFRA’s International emission factor for business travel-air. Previously, flight segments were identified by distance, and emission factors were applied according to whether the flight segment was categorized as long haul (more than 1108 km), medium haul (463 to 1108 km) or short haul (less than 463 km). This application of emission factors by distance was maintained for the UK only. This change in emission factors resulted in a significant drop in overall emissions and the performance table shows both the reported values for FY2015 and FY2016, as well as the value that would have been reported had this new emission factor been applied to the previous years’ emissions.

Certain sources of commuting data have historically been readily available because the commuting service was coordinated through the member firm. This service is being phased out and data on the commuting activities replacing it are not being captured. Because of this, emissions reductions due to commuting are related to the change in activity capture rather than true reductions in emissions.

Building-related emission sources

Building-related emission sources included in the GHG emissions data of the Global Report were those associated with the use of electricity, heating oil and natural gas in the office buildings and data centers that member firms either own or over which they have operational control. Upstream building-related emission sources, such as those associated with electric transmission and distribution line losses, were not included in the GHG emissions inventory.

Some of the activity data associated with building-related emission sources was available directly to the member firms. For example, some facilities have direct utility meters or sub-meters from which member firms obtain readings. For facilities that have no available meter data, activity data for the entire building was typically allocated on the basis of the percentage of total building floor space used (based on rentable square meters) by the member firm. Where building-spe-

cific data was unavailable, member firms estimated electricity and fuel usage using actual data from a similar building or an average from a recognized source.

A simplifying assumption is used for calculating the volume of diesel fuel used for backup power generation. It is assumed that diesel fuel purchased during the fiscal year is used that year. This method likely overestimates actual emissions in some years and underestimates them in others but, over time, captures the related emissions.

Business travel—Air

Reported GHG emissions from air travel are those resulting from Deloitte people flying for business reasons in accordance with Deloitte Global and member firm policies. GHG emissions from flights taken by non-Deloitte people are also reported in instances where flight activity data are captured in Deloitte Global or member firm travel systems and reimbursed or paid for by Deloitte Global or a member firm (such as travel by family members in accordance with policies or travel by prospective Deloitte Global and member firm people). The majority of business air travel data was obtained from Deloitte Global and member firm travel systems. Much of the rest was obtained from travel expense records.

The default GHG emission factors used to calculate emissions from air travel were based on information published by DEFRA. International emission factors were applied for all countries except the UK as noted previously. Seat class-specific emission factors (e.g., first, business, premium economy, economy) were used for a small number of member firms as experience in earlier reporting years showed significant uncertainties around reported seat-class data. The DEFRA emission factors used incorporated an uplift factor to account for nondirect routes, delays and circling, but exclude radiative forcing and indirect emissions.

Business travel—Road

Reported GHG emissions from Deloitte business travel by automobiles includes travel in Deloitte-owned vehicle fleets (personnel driving in vehicles owned by a member firm), reimbursed driving (personnel driving in personal cars for which they are reimbursed), rental cars (personnel driving in rented/hired cars for which the member firm pays), buses and taxis (reimbursed personnel trips in buses, taxis, car-service vehicles and limousines).

For road travel, activity data was gathered from expense reports, rental agency records, travel agency records, Deloitte accounting systems, fuel receipts, odometer logs and receipts or other records indicating distance and location of trip segments. When fuel information was available, GHG emissions were calculated on the basis of mobile combustion factors for the given fuel type. When only distance information was available, GHG emissions were calculated on the basis of average emissions factors (emissions per kilometer traveled) for vehicles according to vehicle type (bus or car), fuel type (diesel, petrol, hybrid or unknown) and location.

A very limited amount of personnel commuting activity data for was available from member firms. Where available, this information was added to the emissions total.

Business travel—Rail

Rail travel accounts for GHG emissions from trips by personnel on subways, railways and trams, with different GHG emission factors used for each type of rail system. Activity data sources included travel agency reports, expense reports, accounting systems, receipts and other records indicating the distance and location of trip segments. In cases where actual distance was unavailable, estimates were made using travel expense data and average travel costs per unit of distance traveled.

Accommodations

The GHG emissions inventory in the report includes emissions from accommodations at hotels, guest houses and apartments for business reasons and in accordance with Deloitte Global and member firm policies. Data was collected from travel agency records, travel expense reports and internal records.

Estimations

In calculating emissions, various estimations and extrapolations were made to account for known data gaps.

For many travel activities, activity information and cost data were available both from travel providers (reservation systems, travel agencies or travel vendors) and from Deloitte Global or member firm expense systems. Travel expenses recorded in Deloitte Global or member firm expense systems often exceeded the corresponding expenses recorded by travel providers because of travel arrangements made outside of reservation systems or without travel agencies. In cases where such differences were identified, the travel activity data associated with the incremental cost was estimated based on the same proportion of cost-to-activity that was reflected by the travel system reservations.

Not every member firm has the capacity to report activity data for GHG emissions, and some member firms report on some, but not all, of the activities within the report boundaries. Ratios of emissions per full-time equivalent (FTE) by emission source were calculated for the member firms that reported, and averages of these ratios were calculated and used to estimate emissions for airlines, hotels and electricity. Consistent with other GRI indicators, emissions intensity per FTE was calculated using the FTE total at the reporting year end (31 May 2017).

While the above description is intended to be as accurate as possible, invariably, the inventory will contain some exceptions to this reporting basis. None of the known exceptions are considered to materially change the total emissions reported.

Emission factors

The table below shows emission factors that were used in the inventory. Where factors are used in specific countries only, these are listed after the emission source.

Emission source	Emission factor	Unit kg CO ₂ e/unit	Reference
Air Travel (various lengths and seat classes)	0.012-0.310	Passenger km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04); various factors used to depend on class and distance
Bus (Europe)	0.101	Passenger km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting
Bus (Outside Europe)	0.1017	Passenger km	WRI Emission Factors from Cross Sector Tools (March 2017)
Electricity (Canada)	2-810	MWh	Environment Canada National Inventory Report 1990-2015
Electricity (Australia)	120-1130	MWh	Australian Government—National Greenhouse & Energy Reporting Act 2008, Technical Guidelines 2012
Electricity (India)	820	MWh	CO2 Baseline Database for the Indian Power Sector—User Guides, 2017
Electricity (Japan)	418-802	MWh	Various Japanese power companies
Electricity (Mexico)	478	MWh	Electricity Federal Commission Life Cycle Analysis (LCA)
Electricity (New Zealand)	119	MWh	New Zealand Ministry of Economic Development—Quarterly Energy Update

Emission source	Emission factor	Unit kg CO₂e/unit	Reference
Electricity (South Africa)	1030	MWh	Eskom's 2016 data
Electricity (Switzerland)	30	MWh	DEFRA's 2014 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.2)
Electricity (UK)	412	MWh	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Electricity (US)	166-809	MWh	US EPA eGRID 2014
Electricity (various countries)	0-1785	MWh	IEA Statistics, "CO2 Emissions from Fuel Combustion Highlights," 2015 edition
Hotel Stays	30.84	Nights	Based on select information from Green Hotels Global™ Q4 2016
Hotel Stays (New Zealand)	2.56-7.97	Nights	Carbonzero.co.nz
Mobile combustion—car (average) (various fuels) (Finland, Luxembourg)	0.131-0.147	Km	Actual information from the fleet company
Mobile combustion—car (diesel)	2.611	Liter	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Mobile combustion—car (various fuels) (New Zealand)	2.43	Liter	Ministry for the Environment, Guidance For Voluntary, Corporate Greenhouse Gas Reporting
Mobile combustion—car (petrol/gasoline)	2.196	Liter	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Mobile combustion—car (unknown fuel)	0.249	Km	Deloitte Global estimated using data from WRI Emission Factors from Cross Sector Tools (March 2017)
Mobile combustion—car (unknown fuel) (Australia)	2.289	Liter	Australian Government—National Greenhouse & Energy Reporting Act 2008, Technical Guidelines 2012
Mobile combustion—car (unknown fuel) (New Zealand)	0.209	Km	Ministry for the Environment, Guidance for Voluntary, Corporate Greenhouse Gas Reporting
Mobile combustion—car or van (various fuels) (Netherlands)	2.78-3.13	Liter	Stichting Klimaatvriendelijk Aanbesteden en Ondernemen (SKAO)
Mobile combustion—car (various fuels) (Europe)	0.183-0.191	Km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Mobile combustion—van (various fuels)	0.265-0.283	Km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Mobile combustion—luxury car (various fuels)	0.234-0.347	Km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)

Emission source	Emission factor	Unit kg CO₂e/unit	Reference
Mobile combustion—motorcycle	0.119	Km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Mobile combustion—outside Europe car (average) (various fuels)	0.384-0.450	Mile	WRI Emission Factors from Cross Sector Tools (March 2017)
Mobile combustion—taxi	0.236	Passenger mile	WRI Emission Factors from Cross Sector Tools (March 2017)
Mobile combustion—taxi (New Zealand)	0.2	Passenger km	Ministry for the Environment, Guidance For Voluntary, Corporate Greenhouse Gas Reporting
Mobile combustion—car service (US)	0.351	Passenger mile	US Environment Protection Agency (EPA)
Mobile combustion—taxi (UK)	0.162	Passenger km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Mobile combustion—car (hybrid)	0.132	Km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Mobile combustion—black car/limo	0.218	Passenger Km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Rail—average (light rail or tram)	0.163	Passenger km	WRI Emission Factors from Cross Sector Tools (March 2017)
Rail—national rail	0.185	Passenger km	WRI Emission Factors from Cross Sector Tools (March 2017)
Rail—subway	0.163	Passenger km	WRI Emission Factors from Cross Sector Tools (March 2017)
Rail (Eurostar)	0.012	Passenger km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Rail (Germany)	0.075	Passenger km	Deutsche Bahn
Rail (Netherlands)	0.030	Passenger km	National Rail
Rail (UK)	0.048	Passenger km	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting (version 1.04)
Stationary combustion—diesel/heating oil	2.69	Liter	WRI Emission Factors from Cross Sector Tools (April 2014)
Stationary combustion—LNG	1.229	Liter	DEFRA's 2016 Government Greenhouse Gas (GHG) Conversion Factors for Company Reporting
Stationary combustion—liquefied petroleum gas (LPG)	1.615	Liter	WRI Emission Factors from Cross Sector Tools (March 2017)

Emission source	Emission factor	Unit kg CO₂e/unit	Reference
Stationary combustion—liquefied petroleum gas (LPG) (Mexico)	2.54	Liter	Mexicanuih. Mexican Life Cycle Inventory Database
Stationary combustion—natural gas (Japan)	2.244	Cubic meters	Japan Ministry of the Environment
Stationary combustion—natural gas (low heating value)	1.889	Cubic meters	WRI Emission Factors from Cross Sector Tools (March 2017)
Stationary combustion—natural gas (Switzerland)	0.184	kWh	Swiss National Inventory Report
Stationary combustion—natural gas (New Zealand)	0.194	kWh	Ministry for the Environment, Guidance For Voluntary, Corporate Greenhouse Gas Reporting

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