CDP Auto and Auto Component Manufacturing Sector Module 2017

Drafting Document

CDP

[respond@cdp.net](mailto:respond@cdp.net)

+44 (0) 20 3818 3946

[www.cdp.net](http://www.cdp.net)

|  |  |
| --- | --- |
|  | Introduction to the drafting document |
|  |

**Introduction to this document**

This document is solely for the purpose of drafting a response to the Auto and Auto Component Manufacturing sector module of the 2017 climate change questionnaire. Your final response must be entered via the CDP Online Response System (ORS).

We highly recommend that you activate your access to the ORS and review the sector module’s structure and related guidance before proceeding with this drafting document. If you do not already have access to the ORS for your disclosing organization, please email [respond@cdp.net](mailto:respond@cdp.net) to request access.

The ORS consists of questions that you will be asked to answer depending on other questions answered. Please note that text fields have a character limit which are listed throughout this document.

**What is the deadline for responses?**

Companies will receive a request to participate and activation link in February 2017. This will allow them to access the questionnaire and begin inputting their response. The deadline for submissions is the June 29 2017.

**Guidance**

This drafting document contains no guidance on how to answer the questions. Please use this document in conjunction with the Auto and Auto Component Manufacturing sector module reporting guidance, which can be found on your dashboard or by following [this link](https://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/guidance_docs/pdfs/000/000/421/original/CDP-Auto-Module-Reporting-Guidance.pdf?1478598505).

|  |  |
| --- | --- |
|  | **Contents** |
|  |

[AU0. Reference Dates 4](#_Toc445141035)

[AU1. Sales volumes 5](#_Toc445141037)

[AU2. Regulatory compliance 17](#_Toc445141039)

[AU3. Clean technologies 21](#_Toc445141041)

|  |  |
| --- | --- |
|  | Reference Dates |
|  |

AU0. Reference Dates

**Pre-population**

If you responded last year, question AU0.1 on this page is eligible for pre-population. To take advantage of this function, click “copy from last year” prior to entering any data on the page.

**AU0.1: Please enter the dates of the periods for which you will be providing data in the subsequent tables. The years given as column headings in subsequent tables correspond to the year ending dates selected below**

|  |  |
| --- | --- |
| Year ending | Date range |
| Select from:   * 2010 * 2011 * 2012 * 2013 * 2014 * 2015 * 2016 * 2017 * 2018 * 2019 * 2021   **Please note:** data for 2020 is not requested and is therefore absent from this list. | Calendar field |

For multiple years, please use the “Add Row” button which can be found at the bottom right of the table in the ORS.

|  |  |
| --- | --- |
|  | Sales volumes |
|  |

AU1. Sales volumes

**Pre-population**

If you responded last year, questions AU1.1a-i, AU1.2a-h, AU1.3a-c on this page are eligible for pre-population. To take advantage of this function, click “copy from last year” prior to entering any data on the page.

**AU1.1a: Sales (in thousands) of gas/petrol vehicles - Country totals**

**Please note:** sales figures should be provided for the following tables in thousands of vehicles, rounded to the nearest hundred.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| USA | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |
| EU |  |  |  |  |  |  |  |  |  |  |
| Japan |  |  |  |  |  |  |  |  |  |  |
| China - imports |  |  |  |  |  |  |  |  |  |  |
| China – domestic production |  |  |  |  |  |  |  |  |  |  |
| India |  |  |  |  |  |  |  |  |  |  |
| Brazil |  |  |  |  |  |  |  |  |  |  |
| Russia |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |

**AU1.1b: Sales (in thousands) of gas/petrol vehicles – USA – Passenger vehicles**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Two-seaters * Sedans mini-compact * Sedans sub-compact * Sedans compact * Sedans mid-size * Sedans large * Station wagons small * Station wagons mid-size * Station wagons large   Passenger car total | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.1c: Sales (in thousands) of gas/petrol vehicles – USA – Light Trucks & SUVs**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Pick-up * Van * SUV * Others * Light trucks & SUVs total | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.1d: Sales (in thousands) of gas/petrol vehicles – EU**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Segment A-B * Segment C * Segment D * Segment E-F * Others | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.1e: Sales (in thousands) of gas/petrol vehicles – Japan**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Large * Standard * Small * Mini | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.1f: Sales (in thousands) of gas/petrol vehicles – China – imports**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Segment A * Segment B * Segment C * Segment D * Segment E * MPV * SUV | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.1g: Sales (in thousands) of gas/petrol – China – domestic production**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Segment A * Segment B * Segment C * Segment D * Segment E * MPV * SUV | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.1h: Sales (in thousands) of gas/petrol vehicles – India**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * A1 * A2 * A3 * A4 * A5 * A6 * B1 * B2 * SUV | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.1i: Sales (in thousands) of gas/petrol vehicles – Brazil**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Small * Medium * Large * MPV * SUV | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

*If you have not been able to provide information in answer to questions AU1.1a-i:*

**AU1.1j: Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive** [maximum 5000 characters]

**AU1.2a: Sales (in thousands) of diesel vehicles – Country totals**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| USA | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |
| EU |  |  |  |  |  |  |  |  |  |  |
| Japan |  |  |  |  |  |  |  |  |  |  |
| China - imports |  |  |  |  |  |  |  |  |  |  |
| China – domestic production |  |  |  |  |  |  |  |  |  |  |
| India |  |  |  |  |  |  |  |  |  |  |
| Brazil |  |  |  |  |  |  |  |  |  |  |
| Russia |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |

**AU1.2b: Sales (in thousands) of diesel vehicles – USA**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Passenger car total | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |
| Light trucks & SUVs total |  |  |  |  |  |  |  |  |  |  |

**AU1.2c: Sales (in thousands) of diesel vehicles – EU**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Segment A-B * Segment C * Segment D * Segment E-F * Others | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.2d: Sales (in thousands) of diesel vehicles – Japan**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Large * Standard * Small * Mini | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.2e: Sales (in thousands) of diesel vehicles – China – imports**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Segment A * Segment B * Segment C * Segment D * Segment E * MPV * SUV | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.2f: Sales (in thousands) of diesel vehicles – China – domestic production**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Segment A * Segment B * Segment C * Segment D * Segment E * MPV * SUV | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

For multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.2g: Sales (in thousands) of diesel vehicles – India**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * A1 * A2 * A3 * A4 * A5 * A6 * B1 * B2 * SUV | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU1.2h: Sales (in thousands) of diesel vehicles – Brazil**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Segment types | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| Select from:   * Small * Medium * Large * MPV * SUV | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

*If you have not been able to provide information in answer to questions AU1.2a-h:*

**AU1.2i: Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive** [maximum 5000 characters]

**AU1.3a: Sales (in thousands) of Battery electric vehicles (BEV) by region**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| USA | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |
| EU |  |  |  |  |  |  |  |  |  |  |
| Japan |  |  |  |  |  |  |  |  |  |  |
| China - imports |  |  |  |  |  |  |  |  |  |  |
| China – domestic production |  |  |  |  |  |  |  |  |  |  |
| India |  |  |  |  |  |  |  |  |  |  |
| Brazil |  |  |  |  |  |  |  |  |  |  |
| Russia |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |

**AU1.3b: Sales (in thousands) of plug-in hybrid electric vehicles (PHEV) by region**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| USA | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |
| EU |  |  |  |  |  |  |  |  |  |  |
| Japan |  |  |  |  |  |  |  |  |  |  |
| China - imports |  |  |  |  |  |  |  |  |  |  |
| China – domestic production |  |  |  |  |  |  |  |  |  |  |
| India |  |  |  |  |  |  |  |  |  |  |
| Brazil |  |  |  |  |  |  |  |  |  |  |
| Russia |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |

**AU1.3c: Sales (in thousands) of other alternatively-powered vehicles – Country totals**

**Please note:** this category includes vehicles powered by Liquid Petroleum Gas (LPG), Compressed Natural Gas (CNG), fuel cells and compressed air

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2018 estimated | 2019 estimated |
| USA | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |
| EU |  |  |  |  |  |  |  |  |  |  |
| Japan |  |  |  |  |  |  |  |  |  |  |
| China - imports |  |  |  |  |  |  |  |  |  |  |
| China – domestic production |  |  |  |  |  |  |  |  |  |  |
| India |  |  |  |  |  |  |  |  |  |  |
| Brazil |  |  |  |  |  |  |  |  |  |  |
| Russia |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |

*If you have not been able to provide information in answer to questions AU1.3a-c:*

**AU1.3d: Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive** [maximum 5000 characters]

|  |  |
| --- | --- |
|  | Regulatory compliance |
|  |

AU2. Regulatory compliance

**Pre-population**

If you responded last year, questions AU2.2 and AU2.3a-c are eligible for pre-population. To take advantage of this function, click “copy from last year” prior to entering any data on the page. Pre-population is not available on AU2.1 and AU2.3d as these request narrative answers that are more likely to change.

**AU2.1: Please explain any historic and anticipated changes in CO2 emissions profile of vehicles sold (e.g. introduction of clean technologies, changes to sales mix) for the time period 2010-2021** [maximum 5000 characters]

**AU2.2: Please explain the methodology used to calculate CO2 emissions from sold vehicles and any differences with data published by industry associations or governmental agencies or the methodologies they have used** [maximum 5000 characters]

**AU2.3a: Sales-weighted fleet average CO2 emissions for all vehicles sold, before credits received**

This category includes vehicles powered by internal combustion engines as well as alternatively powered vehicles

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | Units | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2019 estimated | 2021 estimated |
| USA | Select from:   * gCO2/km * gCO2/mile | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |
| EU |  |  |  |  |  |  |  |  |  |  |  |
| Japan |  |  |  |  |  |  |  |  |  |  |  |
| China - imports |  |  |  |  |  |  |  |  |  |  |  |
| China – domestic production |  |  |  |  |  |  |  |  |  |  |  |
| India |  |  |  |  |  |  |  |  |  |  |  |
| Brazil |  |  |  |  |  |  |  |  |  |  |  |
| Russia |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |

**AU2.3b: Sales-weighted fleet average CO2 emissions for all vehicles sold, after credits received**

This category includes vehicles powered by internal combustion engines as well as alternatively powered vehicles

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2019 estimated | 2021 estimated | Comment |
| USA | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |  |
| EU |  |  |  |  |  |  |  |  |  |  |  |
| Japan |  |  |  |  |  |  |  |  |  |  |  |
| China - imports |  |  |  |  |  |  |  |  |  |  |  |
| China – domestic production |  |  |  |  |  |  |  |  |  |  |  |
| India |  |  |  |  |  |  |  |  |  |  |  |
| Brazil |  |  |  |  |  |  |  |  |  |  |  |
| Russia |  |  |  |  |  |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  |  |  |  |  |  |  |  |  |  |

**AU2.3c: Sales-weighted regulatory parameters**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country and parameter | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 estimated | 2019 estimated | 2021 estimated |
| USA: Sales-weighted average vehicle footprint (square feet) | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |
| EU: Sales-weighted average running order mass(kg) |  |  |  |  |  |  |  |  |  |  |
| Japan: sales-weighted average vehicle curb weight (kg) |  |  |  |  |  |  |  |  |  |  |
| China – imports: sales-weighted average curb mass (kg) |  |  |  |  |  |  |  |  |  |  |
| China – domestic production: sales-weighted average curb mass (kg) |  |  |  |  |  |  |  |  |  |  |

*If you are not able to provide information to questions AU2.3a-c:*

**AU2.3d: Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive** [maximum 5000 characters]

|  |  |
| --- | --- |
|  | Clean technologies |
|  |

AU3. Clean technologies

**Pre-population**

If you responded last year, questions AU3.2 and AU3.3 are eligible for pre-population, however you should remove rows copied over for any vehicle models no longer available during the current reporting period. To take advantage of this function, click “copy from last year” prior to entering any data on the page.

**Please note**: there are two sets of questions under AU3.1; one set of questions for auto-manufacturers (AU3.1a-f) and one set of questions for auto-equipment manufacturers (AU3.1g).

Questions AU3.2-3.4 then apply only to auto-manufacturers and lastly question AU3.5 applies to both auto-manufacturers and auto-equipment manufacturers.

**AU3.1a: Auto-manufacturers only – please give the % of your range of vehicles for which the following technologies are available:**

Technology category – ICE

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Improving direct injection * Downsizing with turbo charge * Optimized/advanced cooling circuit * Exhaust heat recovery * Flexfuel (>B20: >E30) * Other (please specify) | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU3.1b: Auto-manufacturers only – please give the % range of your vehicles for which the following technologies are available:**

Technology category – hybrids

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Start & stop * Start & stop regenerative braking * Mild hybrid (motor assisted) * Full hybrid (electric drive) * Plug-in hybrid * Other (please specify) | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU3.1c: Auto-manufacturers only – please give the % range of vehicles for which the following technologies are available:**

Technology category – zero emissions

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Full electric * Hydrogen fuel cell * Compressed air * Other (please specify) | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU3.1d: Auto-manufacturers only – please give the % range of vehicles for which the following technologies are available:**

Technology category – Transmission

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Optimized gearbox ratios * Piloted gearbox * Dual-clutch * Other (please specify) | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU3.1e: Auto-manufacturers only – please give the % range of vehicles for which the following technologies are available:**

Technology category – Body

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Improved aerodynamic efficiency * Weight reduction * Other (please specify) | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU3.1f: Auto-manufacturers only – please give the % range of vehicles for which the following technologies are available:**

Technology category – Others

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Low-rolling resistance tires * Advanced after-treatment * Other (please specify) | Numerical field | Numerical field |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU3.1g: Auto-equipment manufacturers only – please select the technology categories that are relevant to your business:**

**Please note:** the selections made in AU3.1g populate the following additional questions AU3.1gi-gvi

* ICE
* Hybrids
* Zero emissions
* Transmission
* Body
* Others

*If “ICE” is selected in question AU3.1g:*

**AU3.1gi: Technology category – ICE – please state if you provide the following technologies:**

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Improving direct injection * Downsizing with turbo charge * Optimized/advanced cooling circuit * Exhaust heat recovery * Flexfuel (>B20: >E30) * Other (please specify) | Select from:   * Yes * No | Select from:   * Yes * No |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

*If “Hybrids” is selected in question AU3.1g:*

**AU3.1gii: Technology category – Hybrids – please state if you provide the following technologies:**

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Start & stop * Start & stop regenerative braking * Mild hybrid (motor assisted) * Full hybrid (electric drive) * Plug-in hybrid * Other (please specify) | Select from:   * Yes * No | Select from:   * Yes * No |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

*If “Zero emissions” is selected in question AU3.1g:*

**AU3.1giii: Technology category – Zero emissions – please state if you provide the following technologies:**

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Full electric * Hydrogen fuel cell * Compressed air * Other (please specify) | Select from:   * Yes * No | Select from:   * Yes * No |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

*If “Transmission” is selected in question AU3.1g:*

**AU3.1giv: Technology category – Transmission – please state if you provide the following technologies:**

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Optimized gearbox ratios * Piloted gearbox * Dual-clutch * Other (please specify) | Select from:   * Yes * No | Select from:   * Yes * No |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

*If “Body” is selected in question AU3.1g:*

**AU3.1gv: Technology category – Body – please state if you provide the following technologies:**

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Improved aerodynamic efficiency * Weight reduction * Other (please specify) | Select from:   * Yes * No | Select from:   * Yes * No |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

*If “Others” is selected in question AU3.1g:*

**AU3.1gvi: Technology category – Others – please state if you provide the following technologies:**

|  |  |  |
| --- | --- | --- |
| Type | 2016 | 2021 estimated |
| Select from:   * Low-rolling resistance tires * Advanced after-treatment * Other (please specify) | Select from:   * Yes * No | Select from:   * Yes * No |

To add multiple entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU3.2: Auto-manufacturers only – Please provide the following details for existing and new BEV and FCV models available during the current reporting period**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model name | Technology | Market | Retail price currency | Market retail price | Range units | Urban electric range | Extra-urban electric range | Combined electric range | Minimum electric charge time (hours) | Maximum electric charge time (hours) |
| Text Field | Select from:   * BEV * FCV | Text Field [maximum 1000 characters] | Select from currency drop down menu | Numerical field | Select from:   * KM * Miles | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple model entries, please use the “Add Row” button of the bottom right of the table in the ORS.

**AU3.3: Auto-manufacturers only – Please provide the following details for existing and new PHEV models available during the current reporting period**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Model name | Market | Retail price currency | Market retail price | Emissions units | Urban emissions | Extra urban emissions | Combined emissions | Fuel consumption units | Urban fuel consumption units | Extra-urban fuel consumption | Range units | Urban electric range | Extra-urban electric range | Combined electric range | Minimum electric charge time (hours) | Maximum electric charge time (hours) |
| Text field | Text field [maximum 1000 characters] | Select from drop down currency menu | Numerical field | Select from:   * gCO2/km * gCO2/mile | Numerical field | Numerical field | Numerical field | Select from:   * L/100km * MPG | Numerical field | Numerical field | Select from:   * KM * Miles | Numerical field | Numerical field | Numerical field | Numerical field | Numerical field |

To add multiple model entries, please use the “Add Row” button to the bottom right of the table in the ORS

**AU3.4: Auto manufacturers only – Please indicate your spend in the following research and development (R&D) categories for the reporting year**

|  |  |  |
| --- | --- | --- |
| Type | R&D spend | Comment |
| Optimizing combustion engine vehicles | Numerical field (currency selected in CC0.4) | Text field [maximum 2400 characters] |
| Traditional hybrids |  |  |
| Advanced vehicles (BEV, PHEV, FCV) |  |  |
| Autonomous vehicles |  |  |
| Other |  |  |

*If you have not been able to provide information in questions AU3.1-3.4:*

**AU3.5: For both auto manufacturers and auto-equipment manufacturers: please provide an explanation if data cannot be provided according to the proposed nomenclature or if it is unavailable or commercially sensitive** [maximum 5000 characters].