

Instructions for Data providers on necessary information in each data field

Data Field	Note
Technical information	
Description	<p>MANDATORY FIELD</p> <ul style="list-style-type: none"> ➤ This field should provide enough description to tell the user basically what the value presented is, without being too wordy or generic. ➤ Data providers should follow, to the extent possible, the terminology used in the IPCC Methodology Reports.
Properties	<p>MANDATORY FIELD (At least one of five sub-fields should be filled.)</p> <ul style="list-style-type: none"> ➤ “Properties” define what EFDB users might see as important information after the categorisation stage in searching or inputting data. ➤ This field consists of 5 sub-fields as shown below. Necessary information should be fully described in appropriate sub-fields. <ul style="list-style-type: none"> • Technologies/Practices <ul style="list-style-type: none"> <i>For example:</i> - combustion technology - fertiliser dosage - manure management system <ul style="list-style-type: none"> <i>For 3.B and 3.C of the 2006 IPCC Guidelines:</i> - land subcategory/subdivision • Abatement/Control Technologies <ul style="list-style-type: none"> <i>For example:</i> - CO₂ capture - catalyst type <ul style="list-style-type: none"> <i>For 3.B and 3.C of the 2006 IPCC Guidelines:</i> - management type & intensity • Parameters/Conditions <ul style="list-style-type: none"> <i>For example, for 3.B and 3.C of the 2006 IPCC Guidelines:</i> - vegetation/crop type/subtype; - species; - biomass attributes/age; - soil type/nutrient content. • Region/Regional Conditions <ul style="list-style-type: none"> <i>For example:</i> - country <ul style="list-style-type: none"> <i>For 3.B and 3.C of the 2006 IPCC Guidelines:</i> - spatial boundaries (country, continent, etc.); - climate (zone); - ecological zone; - temperature; - moisture. • Other Properties ➤ Information to be included as properties varies from one source category to another.

Value	<p>MANDATORY FIELD</p> <ul style="list-style-type: none"> ➤ Values should be precisely indicated. ➤ If the proposal is a range of value rather than a single value, it should be indicated as “10 – 20” for example. ➤ A range of value should be distinguished from uncertainty ranges. (Uncertainty ranges should be indicated in Upper and Lower Confidence Limit fields.) ➤ The appropriate unit should be chosen from the drop-down list. If there is not any appropriate unit in the list, type the new unit in the field.
Value in common unit	<ul style="list-style-type: none"> ➤ If the value is presented with such a unit that is not used in the <i>IPCC Guidelines</i> (e.g., barrel or gallon for petroleum) in the “Value” field above, you are encouraged to convert it into a value in unit commonly used in the <i>IPCC Guidelines</i> (e.g., tC/TJ for Carbon emission factors for Fuels) and indicate it in this field.
Equation	<ul style="list-style-type: none"> ➤ If the proposed data fit an equation presented in the <i>IPCC Guidelines</i> or <i>GPG reports</i>, the following information should be clearly indicated for users’ convenience. <ol style="list-style-type: none"> 1) Equation number (if applicable) 2) Page number 3) IPCC Methodology Reports (e.g. 2006 IPCC Guidelines, Revised 1996 IPCC Guidelines, GPG2000 or GPG-LULUCF) ➤ For example, “Equation 4.15 on Page 4.30 of the IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories” ➤ If no IPCC equation fits, it is desirable to refer to technical reference or source of data where equation is found and can be used.
IPCC Worksheet No.	<ul style="list-style-type: none"> ➤ If the proposed data fit a worksheet of the <i>IPCC Guidelines</i>, correct worksheet numbers should be indicated for users’ convenience. (For example, “Worksheet 4-1, Sheet 1 of 2”) ➤ If the data are not applicable to any IPCC worksheets, then this field should be “Not applicable”.
Source of data	<p>MANDATORY FIELD</p> <ul style="list-style-type: none"> ➤ The appropriate source should be chosen from the drop-down list in the data entry form. <p style="margin-left: 40px;"><i>For non-defaults:</i></p> <ul style="list-style-type: none"> • <i>Peer-reviewed journal</i> • <i>National inventory report</i> • <i>National Communications</i> • <i>Biennial Update Report</i> • <i>Other</i>
Full Technical Reference	<p>MANDATORY FIELD</p> <ul style="list-style-type: none"> ➤ Technical reference should be quoted fully and precisely.
URL	<ul style="list-style-type: none"> ➤ Data providers can specify external URL link of web site where more information about emission factor or other parameter can be found.
Reference Language	<p>MANDATORY FIELD</p> <ul style="list-style-type: none"> ➤ It should be indicated in which language the technical reference is available.

Abstract in English	➤ Data providers are encouraged to provide the abstract in English of the technical reference in order to enable EFDB users to better understand the nature of the data.
Lower/Upper Confidence Limit (Uncertainties expressed as 95% confidence limit¹)	MANDATORY FIELDS ➤ If no information on the lower/upper values is available, “Unknown” should be chosen from drop-down list. ➤ Do not confuse with a range of value which should be indicated in “Value” field.
Data quality	➤ If data quality ratings have been made by the data provider according to his/her own standard, the information can be quoted here. The explanation of the standard used should be also provided. ➤ No new quality rating scheme will be developed specifically for the EFDB.
Data quality reference	➤ Reference should be indicated if it is different from the technical reference presented above.
Other information on data quality	➤ Other information relevant to the data quality, if any. ➤ For example, clarification of the following points could be given. <ul style="list-style-type: none"> • Are the measurement techniques including raw data validated and/or verified? • Are the modelling techniques including supporting data validated and/or verified? • Is the extrapolation from the model assumptions or measurement conditions to annual emission factors sufficiently treated?
Distribution shape (ID)	➤ If applicable, appropriate information should be chosen from the drop-down list. If no desired value exists in the list “Other” should be chosen.

Usage/Review information	
Type of parameter (ID)	MANDATORY FIELD Currently, there are three types of non-default parameters defined: <ul style="list-style-type: none"> • Measured • Modelled • Other (e.g. Compiled) ➤ Data providers can choose only one of these three types from the drop-down list in the data entry form. ➤ In case “Other (e.g. Compiled)” is chosen, the data provider should provide an explanatory note on the type of parameter in the “Comments from the data provider” field.

¹ Confidence limits give the range within which the underlying value of an uncertain quantity is thought to lie for a specified probability. This range is called the confidence interval. **The IPCC Guidelines suggest the use of a 95% confidence interval which is the interval that has a 95% probability of containing the unknown true value.**

Measurement technique/ standard	<p>These fields are relevant only when the data provider choose “Measured” as “Type of parameter”.</p> <p>➤ Data providers are highly encouraged to provide appropriate information (e.g., description about representativeness of sampling) unless it is not available at all.</p> <p>➤ In particular, clarification of the following points should be given in the field “Measurement technique/standard”.</p> <ul style="list-style-type: none"> • Are measurement techniques/standards used comparable with national or internationally recognised standards? <p>➤ In particular, clarification of the following points should be given in the field “Periodicity of measurement”.</p> <ul style="list-style-type: none"> • Have measurements been made on multiple systems or sites and over sufficient time and range of conditions to capture the variability of emissions and to provide a stable annual average?
Periodicity of measurement	
External quality control performed	
Date of measurement	
Date calculated	➤ This field can be left blank if the information is not available.
Comments from Data Provider	<p>➤ Any other information relevant to the proposed data can be provided in this field.</p> <p>➤ For example, data providers are encouraged to provide additional description of emission factor development where needed to elaborate.</p> <p>➤ Data providers can also provide information on further improvement need to be done and describe what measures could be taken to improve its accuracy and applicability.</p> <p>➤ In the case that data providers have not directly consulted the original author, it should be mentioned in this field.</p>

Administrative information	
Data Provider	<p>MANDATORY FIELDS</p> <p>➤ Enter the name of data provider and choose a country from the drop-down list in the EFDB data entry form.</p>
Data Provider Country (CODE)	
Data Provider Contact (email address)	➤ The data provider is encouraged to show his/her e-mail address. If no email address is provided, ipcc-efdb@iges.or.jp will be shown in this field so as to enable EFDB users to contact him/her (the data source) via Technical Support Unit of the IPCC Task Force on National Greenhouse Gas Inventories (IPCC TFI TSU).