



**DIRECCIÓN DE COOPERACIÓN INTERNACIONAL Y CAMBIO CLIMÁTICO
UNIDAD DE CAMBIO CLIMÁTICO**

Solicitud de información Ref. UAIP-00199-2024

Información solicitada:

"Buen día, solicito información sobre los factores de emisión de CO₂ que se manejan en El Salvador sobre: energía eléctrica consumida, agua, Fuel Oil, GLP y Papel para cartón y papel reciclado, esto con el fin de realizar un inventario de las emisiones de GEI de la compañía para la cual trabajo."

RESPUESTA:

Con respecto al factor de emisión de la Red eléctrica del país, por favor dirigir la solicitud de información a la Dirección General de Energía, Hidrocarburos, y Minas; quien es la institución que calcula dicho factor.

Con respecto a los factores de emisión de combustibles (sector energía), y de la industria (sector IPPU: Procesos Industriales y Uso de Productos), por favor consultar las **Directrices del IPCC de 2006 para los inventarios nacionales de gases de efecto invernadero**, las cuales se encuentran en el siguiente enlace:

<https://www.ipcc-nggip.iges.or.jp/public/2006gl/spanish/index.html>

En dichas directrices se encuentra la metodología a seguir para calcular las emisiones de CO₂ equivalente para diferentes sectores: Energía, Residuos, AFOLU, e IPPU.

En el siguiente enlace se encuentra **la base de datos de factores de emisión del IPCC (EFDB: Emission Factor Database)**. El usuario encontrará diversos factores de emisión para diferentes sectores y actividades.

<http://www.ipcc-nggip.iges.or.jp/EFDB/main.php>

En la Base de Datos de Factores de Emisión (EFDB), se encuentran los datos por defecto de las Directrices revisadas del IPCC de 1996, los informes de Orientación sobre las buenas prácticas y las Directrices del IPCC del 2006. Esta base de datos también incluye datos enviados por investigadores y otros expertos en Gases de Efecto Invernadero de todo el

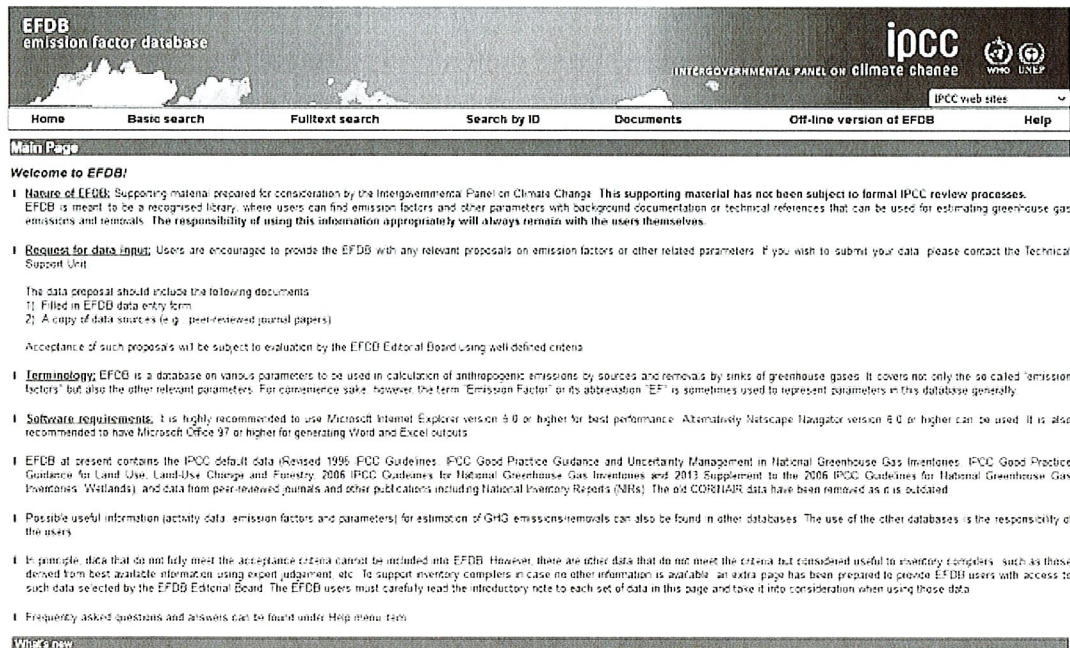
mundo. Las fuentes de información incluyen publicaciones científicas, comunicaciones nacionales, inventarios de GEI y otros documentos técnicos [GHG Management Institute; 2024].

La base de datos EFDB no recomendará al usuario que utilice un factor en específico. El usuario será responsable de seleccionar los datos que mejor se ajusten a las circunstancias de su inventario. En algunos casos, esto puede significar que debe seguir buscando más allá de la EFDB del IPCC si no encuentra un factor de emisión que se ajuste a sus necesidades [GHG Management Institute; 2024].

A continuación los pasos para buscar un factor de emisión en la EFDB, para el siguiente ejemplo: Buscar un factor de emisión de N₂O para gasoil empleado en camiones de carga pesada [GHG Management Institute; 2024]:

⇒ **Paso 1: Introduzca la dirección web de la EDFB** [GHG Management Institute; 2024]

<https://www.ipcc-nggip.iges.or.jp/EFDB/main.php>



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IPCC web sites

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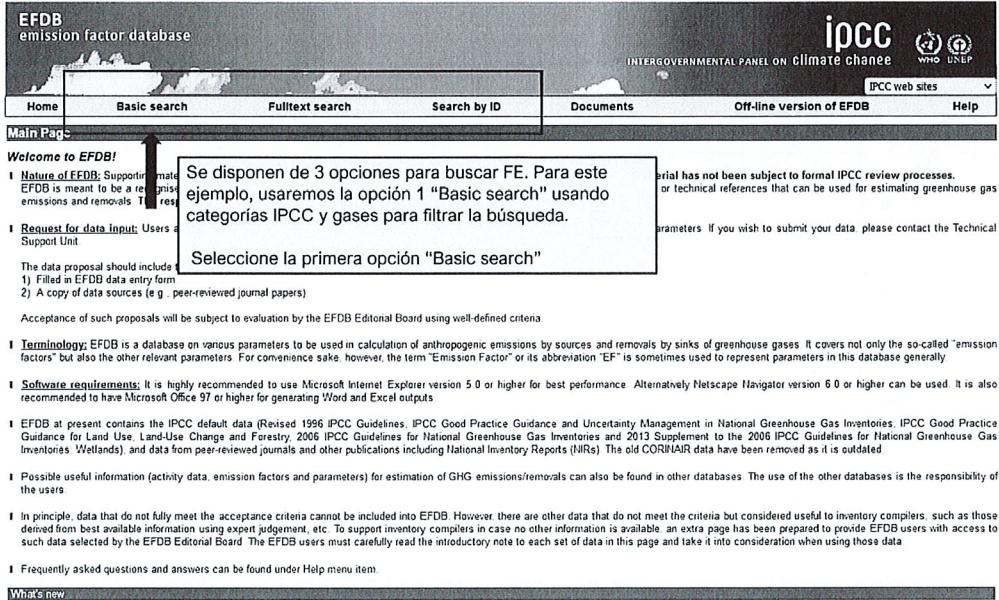
Main Page

Welcome to EFDB!

- Nature of EFDB:** Supporting material prepared for consideration by the Intergovernmental Panel on Climate Change. This supporting material has not been subject to formal IPCC review processes. EFDB is meant to be a recognised library, where users can find emission factors and other parameters with background documentation or technical references that can be used for estimating greenhouse gas emissions and removals. The responsibility of using this information appropriately will always remain with the users themselves.
- Request for data input:** Users are encouraged to provide the EFDB with any relevant proposals on emission factors or other related parameters. If you wish to submit your data, please contact the Technical Support Unit.
The data proposal should include the following documents:
 - 1) Filled in EFDB data entry form.
 - 2) A copy of data sources (e.g. peer-reviewed journal papers).Acceptance of such proposals will be subject to evaluation by the EFDB Editorial Board using well defined criteria.
- Terminology:** EFDB is a database on various parameters to be used in calculation of anthropogenic emissions by sources and removals by sinks of greenhouse gases. It covers not only the so called "emission factors" but also the other relevant parameters. For convenience sake, however, the term "Emission Factor" or its abbreviation "EF" is sometimes used to represent parameters in this database generally.
- Software requirements:** It is highly recommended to use Microsoft Internet Explorer version 9.0 or higher for best performance. Alternatively Netscape Navigator version 8.0 or higher can be used. It is also recommended to have Microsoft Office 97 or higher for generating Word and Excel outputs.
- EFDB at present contains the IPCC default data (Revised 1996 IPCC Guidelines, IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories, IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry, 2006 IPCC Guidelines for National Greenhouse Gas Inventories and 2013 Supplement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Wetlands), and data from peer-reviewed journals and other publications including National Inventory Reports (NIRs). The old CORRIAIR data have been removed as it is outdated.
- Possible useful information (activity data, emission factors and parameters) for estimation of GHG emissions/removals can also be found in other databases. The use of the other databases is the responsibility of the users.
- In principle, data that do not fully meet the acceptance criteria cannot be included into EFDB. However, there are other data that do not meet the criteria but considered useful to inventory compilers, such as those derived from best available information using expert judgement, etc. To support inventory compilers in case no other information is available, an extra page has been prepared to provide EFDB users with access to such data selected by the EFDB Editorial Board. The EFDB users must carefully read the introductory note to each set of data in this page and take it into consideration when using those data.
- Frequently asked questions and answers can be found under Help menu item.

What's new

⇒ Paso 2: Inicio de la búsqueda del factor de emisión [GHG Management Institute; 2024]



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Main Page

Welcome to EFDB!

1 Nature of EFDB: Support information. EFDB is meant to be a repository for emissions and removals data. It is not a technical reference that can be used for estimating greenhouse gas emissions. If you wish to submit your data, please contact the Technical Support Unit.

Request for data input: Users should include:

- 1) Filled in EFDB data entry form
- 2) A copy of data sources (e.g., peer-reviewed journal papers)

Acceptance of such proposals will be subject to evaluation by the EFDB Editorial Board using well-defined criteria.

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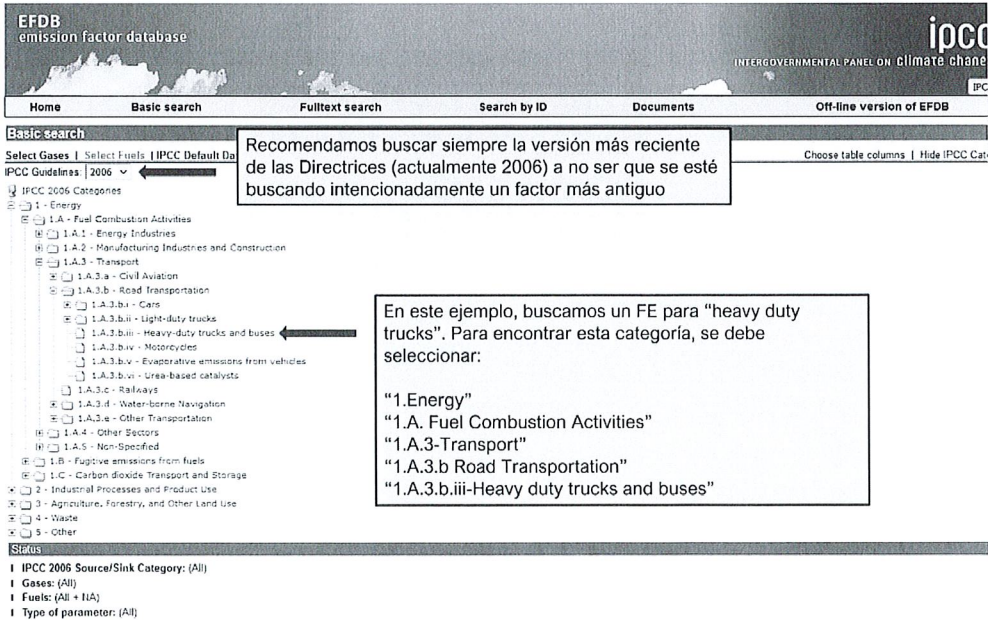
Frequently asked questions and answers can be found under Help menu item.

What's new

Se disponen de 3 opciones para buscar FE. Para este ejemplo, usaremos la opción 1 "Basic search" usando categorías IPCC y gases para filtrar la búsqueda.

Seleccione la primera opción "Basic search"

⇒ Paso 3: Seleccionar la Categoría [GHG Management Institute; 2024]



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Basic search

Select Gases | Select Fuels | IPCC Default Database

IPCC Guidelines | 2006

IPCC 2006 Categories

- 1 - Energy
 - 1.A - Fuel Combustion Activities
 - 1.A.1 - Energy Industries
 - 1.A.2 - Manufacturing Industries and Construction
 - 1.A.3 - Transport
 - 1.A.3.a - Civil Aviation
 - 1.A.3.b - Road Transportation
 - 1.A.3.b.i - Cars
 - 1.A.3.b.ii - Light-duty trucks
 - 1.A.3.b.iii - Heavy-duty trucks and buses
 - 1.A.3.b.iv - Motorcycles
 - 1.A.3.b.v - Evaporative emissions from vehicles
 - 1.A.3.b.vi - Urea-based catalysts
 - 1.A.3.c - Railways
 - 1.A.3.d - Water-borne Navigation
 - 1.A.3.e - Other Transportation
 - 1.A.4 - Other Sectors
 - 1.A.5 - Non-Specified
 - 1.B - Fugitive emissions from fuels
 - 1.C - Carbon dioxide Transport and Storage
- 2 - Industrial Processes and Product Use
- 3 - Agriculture, Forestry, and Other Land Use
- 4 - Waste
- 5 - Other

Recomendamos buscar siempre la versión más reciente de las Directrices (actualmente 2006) a no ser que se esté buscando intencionadamente un factor más antiguo

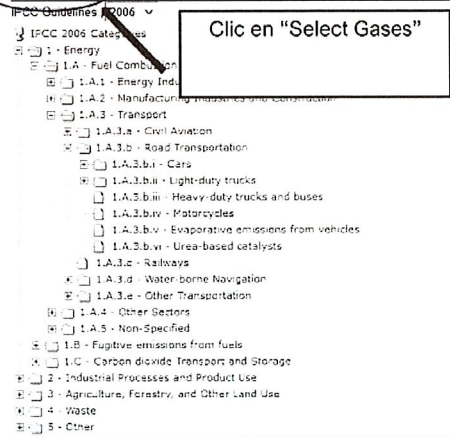
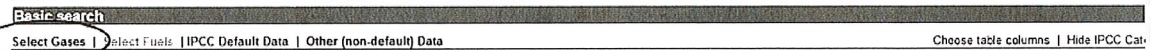
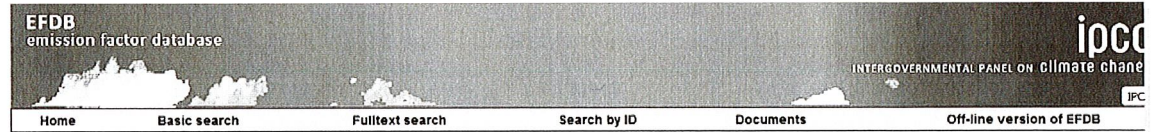
En este ejemplo, buscamos un FE para "heavy duty trucks". Para encontrar esta categoría, se debe seleccionar:

- "1.Energy"
- "1.A. Fuel Combustion Activities"
- "1.A.3-Transport"
- "1.A.3.b Road Transportation"
- "1.A.3.b.iii-Heavy duty trucks and buses"

Status

- IPCC 2006 Source/Sink Category: (All)
- Gases: (All)
- Fuels: (All + IA)
- Type of parameter: (All)

⇒ Paso 4: Seleccionar el gas [GHG Management Institute; 2024]



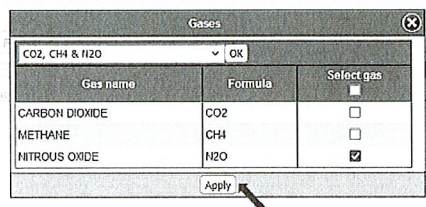
STATUS

IPCC 2006 Source/Sink Category: (All)

Gases: (All)

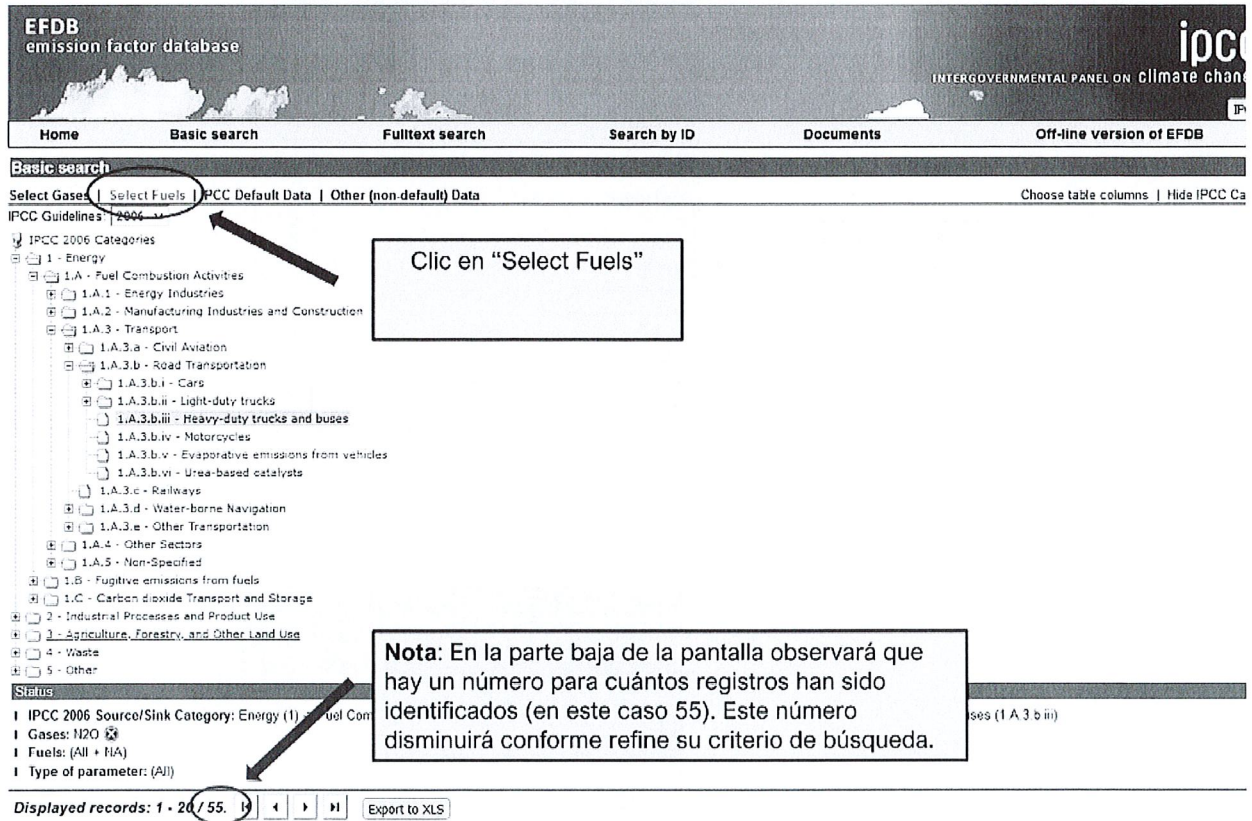
Fuels: (All + NA)

Type of parameter: (All)



Click en N₂O y después en "Apply"

⇒ Paso 5: Seleccionar el Combustible [GHG Management Institute; 2024]



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Basic search

Select Gases | **Select Fuels** | IPCC Default Data | Other (non-default) Data

IPCC Guidelines: 2006

IPCC 2006 Categories

- 1 - Energy
 - 1.A - Fuel Combustion Activities
 - 1.A.1 - Energy Industries
 - 1.A.2 - Manufacturing Industries and Construction
 - 1.A.3 - Transport
 - 1.A.3.a - Civil Aviation
 - 1.A.3.b - Road Transportation
 - 1.A.3.b.i - Cars
 - 1.A.3.b.ii - Light-duty trucks
 - 1.A.3.b.iii - Heavy-duty trucks and buses
 - 1.A.3.b.iv - Motorcycles
 - 1.A.3.b.v - Evaporative emissions from vehicles
 - 1.A.3.b.vi - Urea-based catalysts
 - 1.A.3.c - Railways
 - 1.A.3.d - Water-borne Navigation
 - 1.A.3.e - Other Transportation
 - 1.A.4 - Other Sectors
 - 1.A.5 - Non-Specified
 - 1.B - Fugitive emissions from fuels
 - 1.C - Carbon dioxide Transport and Storage
 - 2 - Industrial Processes and Product Use
 - 3 - Agriculture, Forestry, and Other Land Use
 - 4 - Waste
 - 5 - Other

Status

1 IPCC 2006 Source/Sink Category: Energy (1) Fuel Combustion Activities (1.A.3.b.iii)

1 Gases: N2O

1 Fuels: (All + H4)

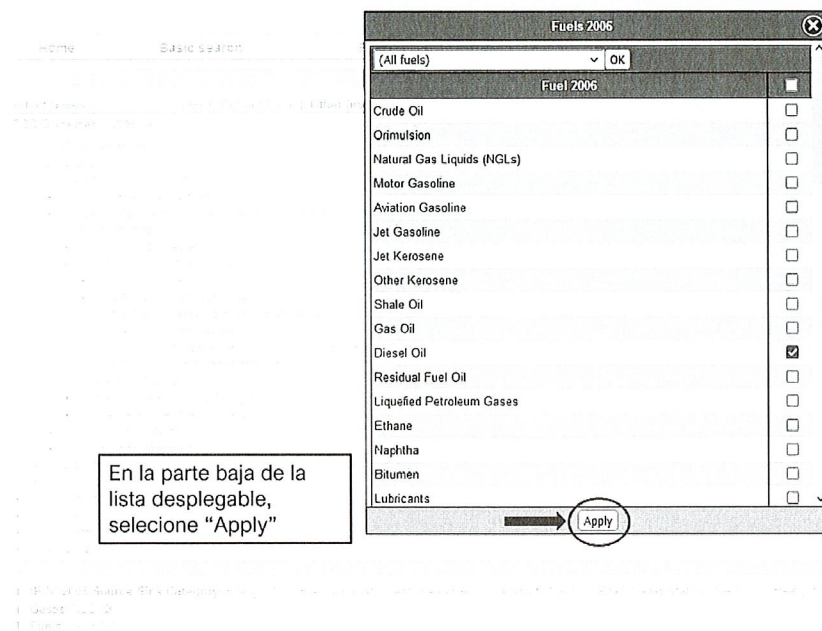
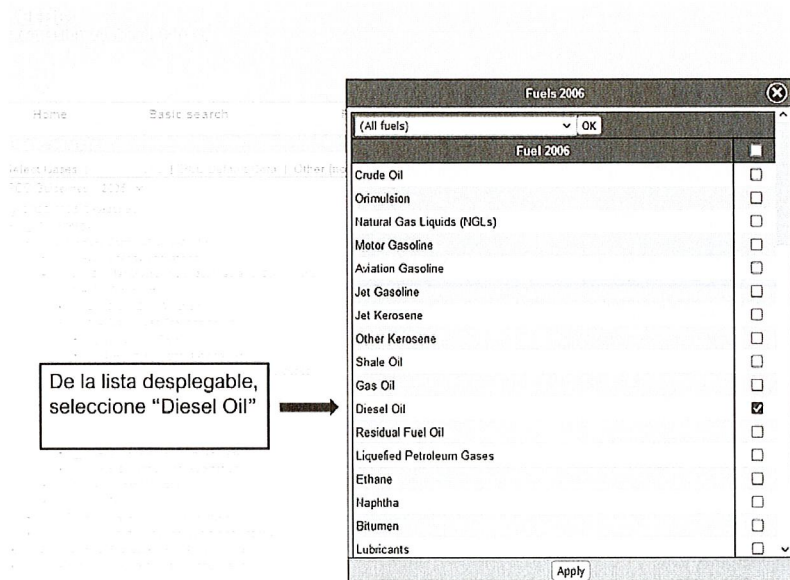
1 Type of parameter: (All)

Displayed records: 1 - 20 / 55

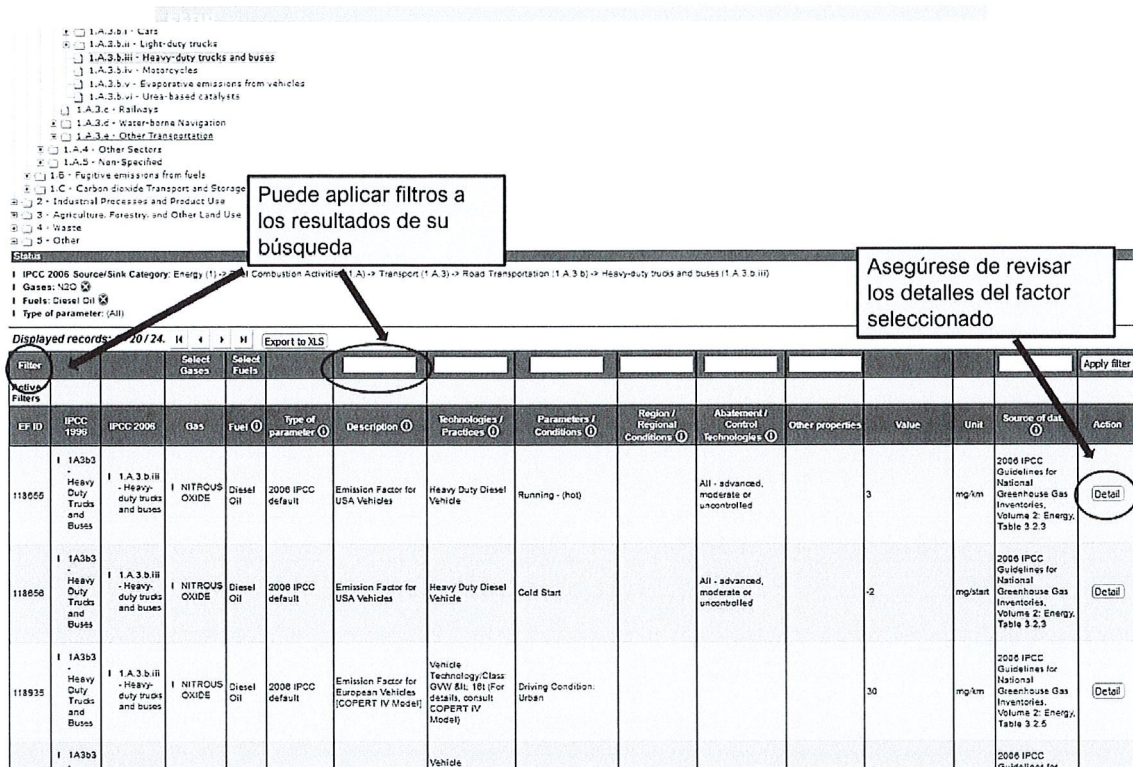
Export to XLS

Clic en "Select Fuels"

Nota: En la parte baja de la pantalla observará que hay un número para cuántos registros han sido identificados (en este caso 55). Este número disminuirá conforme refine su criterio de búsqueda.



⇒ Paso 6: Seleccionar el Factor de Emisión [GHG Management Institute; 2024]



Puede aplicar filtros a los resultados de su búsqueda

Asegúrese de revisar los detalles del factor seleccionado

EP ID	IPCC 1996	IPCC 2006	Gas	Fuel	Type of parameter	Description	Technologies / Practices	Parameters / Conditions	Region / Regional Conditions	Abatement / Control Technologies	Other properties	Value	Unit	Source of data	Action
118055	I 1A3b3 - Heavy Duty Trucks and Buses	I 1 A 3 b.iii - Heavy-duty trucks and buses	I NITROUS OXIDE	Diesel Oil	2008 IPCC default	Emission Factor for USA Vehicles	Heavy Duty Diesel Vehicle	Running - (hot)		All - advanced, moderate or uncontrolled		3	mg/km	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Table 3.2.3	Detail
118058	I 1A3b3 - Heavy Duty Trucks and Buses	I 1 A 3 b.iii - Heavy-duty trucks and buses	I NITROUS OXIDE	Diesel Oil	2008 IPCC default	Emission Factor for USA Vehicles	Heavy Duty Diesel Vehicle	Cold Start		All - advanced, moderate or uncontrolled		-2	mg/start	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Volume 2: Energy, Table 3.2.3	Detail
118935	I 1A3b3 - Heavy Duty Trucks and Buses	I 1 A 3 b.iii - Heavy-duty trucks and buses	I NITROUS OXIDE	Diesel Oil	2008 IPCC default	Emission Factor for European Vehicles (COPERT IV Model)	Vehicle Technology/Class GVW &L 18t (For details, consult COPERT IV Model)	Driving Condition: Urban				30	mg/km	2006 IPCC Guidelines for National Greenhouse Gas Inventories, Table 3.2.5	Detail

NOTA: Es importante mencionar que de la lista de factores, puede hacer clic en el botón “DETAIL” para aquellos que potencialmente se adapten a sus necesidades. Para cada factor, la tabla proporciona una referencia. Antes de tomar la decisión final de cuál factor utilizar, se deben leer los detalles del factor de emisión [GHG Management Institute; 2024].

Referencia:

Greenhouse Gas Management Institute, GHG Management Institute; 2024.
www.ghginstitute.org



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Jefa Unidad de Cambio Climático
Firma y Sello