

# Package: EFFORT (via r-universe)

November 4, 2024

**Type** Package

**Title** Emission Factors For IMPACT

**Version** 1.2.3

**Description** Emission Factors FOR impacT.

**License** GPL (>= 3)

**Encoding** UTF-8

**RoxygenNote** 7.2.3

**Imports** dplyr (>= 1.1.3), openxlsx2 (>= 1.4), janitor (>= 2.2.0),  
Hmisc (>= 5.1.1), collapse (>= 2.0.10), tidyr (>= 1.3.0),  
DOORMAT (>= 3.14.0), utils

**Remotes** github::eddelbuettel/drat

**Additional\_repositories** <https://ifpri.github.io/drat>

**Repository** <https://ifpri.r-universe.dev>

**RemoteUrl** <https://github.com/IFPRI/EFFORT>

**RemoteRef** HEAD

**RemoteSha** 8609a2f54e03505eaed0c1d91f2cc17683639d59

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calcEmissionIntensities  
*Calculate Emission Intensities*

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**Description**

Calculate Emission Intensities

**Usage**

```
calcEmissionIntensities(source_folder = NULL)
```

**Arguments**

source\_folder Folder where FAOSTAT data (unzipped) is saved

**Value**

Emission intensities for IMPACT activities

**Author(s)**

Abhijeet Mishra

**Examples**

```
## Not run:  
calcEmissionIntensities(source_folder)  
  
## End(Not run)
```

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calcImpactEmissions *Calculate emissions from an IMPACT run*

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**Description**

Calculate emissions from an IMPACT run

**Usage**

```
calcImpactEmissions(  
 .gdx = NULL,  
  source_folder = NULL,  
  ef_db = NULL,  
  efficiency_improvement = 0.02  
)
```

**Arguments**

gdx path to an IMPACT run GDX

source\_folder Folder where FAOSTAT data (unzipped) is saved

ef\_db name of the object in environment which contains the output of calcEmissionIntensities(). If this is not provided the function calcEmissionIntensities() will be called. This is time consuming process and it is advised that you run calcEmissionIntensities() before running this function and feed the output of that function in "ef\_db" parameter of this function.

efficiency\_improvement Improvement in Emission intensities annually (defaults to 2 percent i.e., 0.02)

**Value**

Emissions from an IMPACT run

**Author(s)**

Abhijeet Mishra

**Examples**

```
## Not run:
calcImpactEmissions()

## End(Not run)
```

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clean_fao	<i>Cleanup fao data</i>
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**Description**

Cleanup fao data

**Usage**

```
clean_fao(f)
```

**Arguments**

f Name of file downloaded from FAOSTAT

**Value**

Cleaned FAO data

**Author(s)**

Abhijeet Mishra

**Examples**

```
## Not run:  
clean_fao(f = "Emissions_crops_E_All_Data_(Normalized).csv")  
  
## End(Not run)
```

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mapping

*Function to return mapping for IMPACT results*

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**Description**

Function to return mapping for IMPACT results

**Usage**

```
mapping(type = "j")
```

**Arguments**

type                    which mapping to return (j or c or cty to region)

**Value**

Mapping set (activity, commodity etc.)

**Author(s)**

Abhijeet Mishra

**Examples**

```
## Not run:  
mapping(type = "j")  
  
## End(Not run)
```

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readEmissions	<i>Read Emission data from FAO</i>
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**Description**

Read Emission data from FAO

**Usage**

```
readEmissions(indicator = "crops", source_folder = NULL)
```

**Arguments**

indicator	Options are "crop" emissions (reads file "Emissions_crops_E_All_Data_(Normalized).csv"), "livestock" emissions (reads file "Emissions_livestock_E_All_Data_(Normalized).csv"), and "total" emissions (reads file "Emissions_Totals_E_All_Data_(Normalized).csv"). These files are all part of the bulk download from FAOSTAT.
source_folder	Folder where FAOSTAT data (unzipped) is saved

**Value**

Emissions from FAO

**Author(s)**

Abhijeet Mishra

**Examples**

```
## Not run:  
readEmissions(indicator = "crops")  
  
## End(Not run)
```

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readProduction	<i>Read Production data from FAO</i>
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**Description**

Read Production data from FAO

**Usage**

```
readProduction(source_folder = NULL)
```

**Arguments**

source\_folder Folder where FAOSTAT data (unzipped) is saved

**Value**

Emissions from FAO

**Author(s)**

Abhijeet Mishra

**Examples**

```
## Not run:  
readProduction(indicator = "crops")  
  
## End(Not run)
```

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