



Consumption-based greenhouse gas emissions input-output model

StatisticsNZ, MBIE, MFE

Data Documentation  
Motu Economic and Public Policy Research

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“Consumption-based greenhouse gas emissions input-output model”. 2014. Obtained by Motu Economic and Public Policy Research from Statistics New Zealand, MBIE and MFE in 2013. Unrestricted dataset available online from [www.motu.org.nz](http://www.motu.org.nz)

**Raw or derived data:** Derived dataset

**Restrictions:** Unrestricted

Can Motu put this data on our website? Yes

Can Motu put this dataset documentation on our website? Yes

**Contact Details**

Motu Economic and Public Policy Research  
Level 1, 97 Cuba St, Te Aro,  
PO Box 24390  
Wellington  
New Zealand

Email [info@motu.org.nz](mailto:info@motu.org.nz)  
Telephone +64 4 9394250  
Website [www.motu.org.nz](http://www.motu.org.nz)

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## Data Documentation

Please note that this is informal documentation intended to help users.  
It is not a polished document. Additions/corrections are welcomed at [info@motu.org.nz](mailto:info@motu.org.nz).

### 1. Main Motu contact for this data:

Suzi Kerr, email: [suzi.kerr@motu.org.nz](mailto:suzi.kerr@motu.org.nz)

### 2. Other contacts for this data:

Carl Romanos, email: [cromanos@stanford.edu](mailto:cromanos@stanford.edu)

Campbell Will, email: [campbell.j.will@gmail.com](mailto:campbell.j.will@gmail.com)

### 3. Data keywords:

consumption-based greenhouse gas emissions, input-output model, distribution of emissions, household emissions, household expenditure

### 4. Dataset abstract:

Using input-output tables, fuel emissions factors and industry fuel requirements, we derive a carbon intensity vector. This carbon intensity vector shows the emissions associate with one dollar of gross output by each industry. There are two carbon intensity vectors derived. One includes and the other excludes process emissions. These are then matched to HES consumption categories to show the emissions associated with one dollar of expenditure. Incorporating household expenditure, we then calculate total household emissions and emissions by consumption category.

### 5. Motu Working Papers using this data set.

Romanos, Carl, Suzi Kerr and Campbell Will. 2013. "Greenhouse gas emissions in New Zealand: A consumption-based analysis"

### 6. Variables:

In data file

### 7. Additional notes.

The data reference is separated into two sections. The DATA folder is the raw data for all of the parts of the components of the model as outline in the Data section of the paper. In the MODEL folder are the excel tables used to create the model itself. Most of it is automated- all one has to do is paste a new raw entry from the HES into the template to churn out household emissions for that entry. Feel free to email me at [cromanos@stanford.edu](mailto:cromanos@stanford.edu) with any questions.