Home | LCIA Methods | Background Systems | Foreground Systems | Output
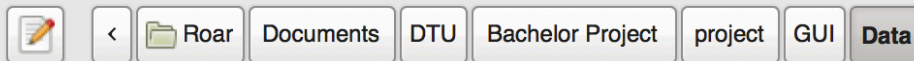
Selected Method: ReCiPe

European Commission

Horizon 2020
European Union Funding
for Research & Innovation
Grant Agreement #688338

DTU

Load Data | Save Data

Choose the file to open

	‹	📁 Roar	Documents	DTU	Bachelor Project	project	GUI	**Data**

Places

- 🔍 Search
- 🧭 Recently Used
- 📁 Debug
- 📁 Roar
- 📁 Desktop
- 🖥 File System

Name ⌄	Size	Modified
ReCiPeMethod	7.0 kB	Saturday
example	756.1 kB	Saturday
outputtest.csv	24.4 kB	Saturday

Cancel   Load

Home | Impact Categories | Background Systems | Foreground Systems | Output

Selected Method: ReCiPe

LCIA methods

ReCiPe ⬍

| New Method |
| Add Category |
| Add Multiple Categories |
| Remove Category |
| Save Method |
| Select Method |

Impact Category	Unit
Agricultural land occupation	m2*a
Climate Change	kg CO2 eq
Fossil depletion	kg oil eq
Freshwater ecotoxicity	kg 1,4-DB eq
Freshwater eutrophication	kg P eq
Human toxicity	kg 1,4-DB eq
Ionising radiation	kg U235 eq
Marine ecotoxicity	kg 1,4-DB eq
Marine eutrophication	kg N eq
Metal depletion	kg Fe eq
Natural land transformation	m2
Ozone depletion	kg CFC-11 eq
Particulate matter formation	kg PM10 eq
Photochemical oxidant formation	kg NMVOC
Terrestrial acidification	kg SO2 eq
Terrestrial ecotoxicity	kg 1,4-DB eq
Urban land occupation	m2*a
Water depletion	m3

| Remove Method |

Data Prompt Window

Columns are separated by tabs

[Cancel] [OK]

Home | LCIA Methods | Background Systems | Foreground Systems | Output

Selected Method: ReCiPe

Background Systems:

New Background System
Add Background System Data

New Unit Process
Add Unit Process Data
Add Impact Quantity Data
Add Multiple Quantities

DK heating grid

Impact Category	Quantity	Unit
Agricultural land occupation	0.0265	m2*a
Climate Change	0.0562	kg CO2 eq
Fossil depletion	0.0185	kg oil eq
Freshwater ecotoxicity	0.000268	kg 1,4-DB eq
Freshwater eutrophication	1.02E-05	kg P eq
Human toxicity	0.00812	kg 1,4-DB eq
Ionising radiation	0.00106	kg U235 eq
Marine ecotoxicity	0.000271	kg 1,4-DB eq
Marine eutrophication	5.38E-06	kg N eq
Metal depletion	0.000536	kg Fe eq
Natural land transformation	1.17E-05	m2
Ozone depletion	6.3E-09	kg CFC-11 eq
Particulate matter formation	3.86E-05	kg PM10 eq
Photochemical oxidant formation	8.26E-05	kg NMVOC
Terrestrial acidification	0.000127	kg SO2 eq
Terrestrial ecotoxicity	1.5E-06	kg 1,4-DB eq
Urban land occupation	0.000452	m2*a
Water depletion	0.0275	m3

Unit Process	Usage
biogas	0.0001814270(
biomass	0.0005563763
coal	0.0228380394
electric boilers	0
geothermal	0
heat pumps	0
natural gas	0
oil	0.8805958306
solar	0
waste	0.0958283264

Remove Unit Process
Remove Background System

Dynamic Background System Data Window

Active Background System: DK heating grid

	Start	f(t,q)	End

Add Dynamic Property

Remove Dynamic Property

Add Usage

Add Multiple Usages

Remove Usage

biogas

☑ Interpolate between usages

Timestamp	Usage
1972	0.000181427069(
1973	0.000193946211:
1974	0.000206465353(
1975	0.000218984495(
1976	0.000201561429:
1977	0.000198551894(
1978	0.000193788434;
1979	0.000185196617(
1980	0.000198825603(
1981	0.000206321696;
1982	0.000206560356(
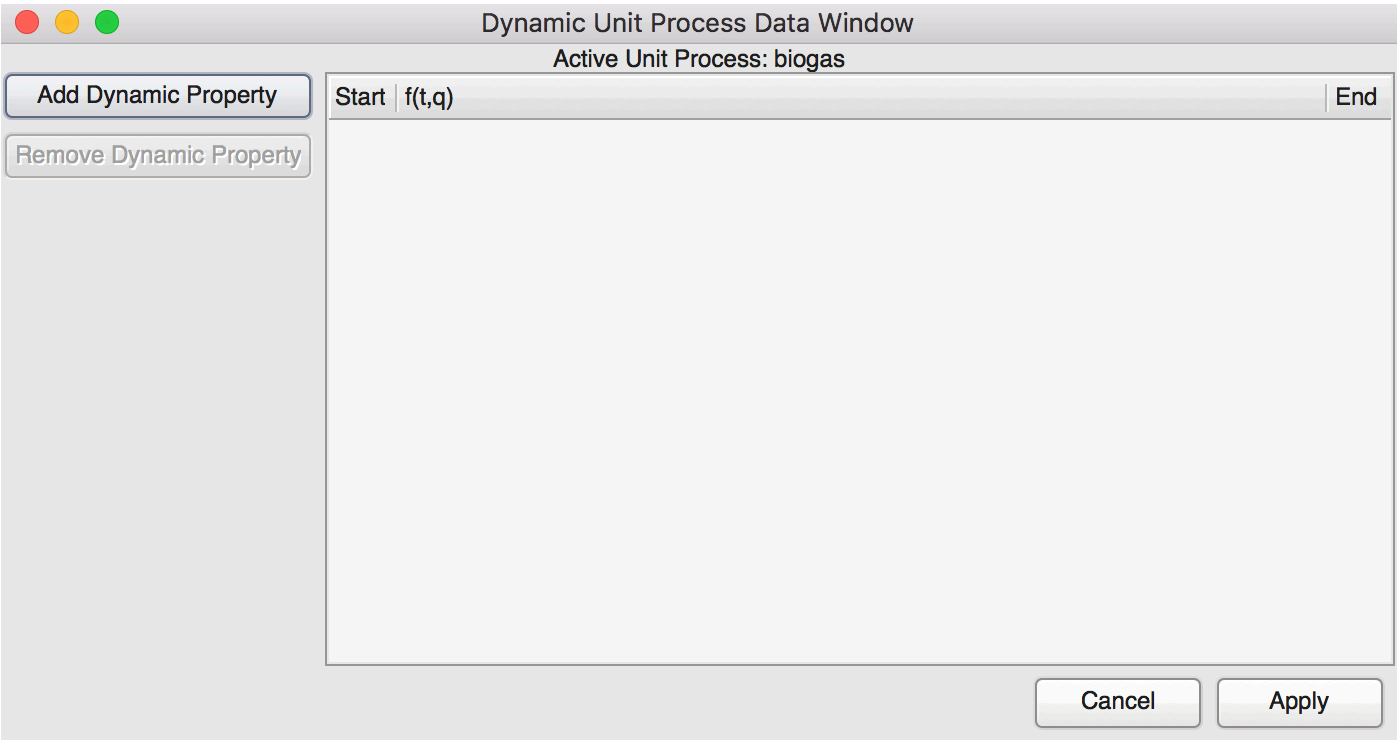
Cancel   **Apply**

Dynamic Unit Process Data Window

Active Unit Process: biogas

Start	f(t,q)	End

Add Dynamic Property

Remove Dynamic Property

Cancel   Apply

Active impact: Agricultural land occupation

☑ Interpolate between datapoints

Timestamp	Impact Quantity		Start	f(t,q)	End
0	0.0265				

Add Quantity

Add Multiple Quantities

Remove Quantity

Add Dynamic Property

Remove Dynamic Property

Cancel   Apply

Home | LCIA Methods | Background Systems | Foreground Systems | Output

Selected Method: ReCiPe

Foreground Systems:

DREM1

New Foreground System

Add Foreground System Data

New Unit Process

Add Unit Process Data

Add Impact Quantity

Add Multiple Quantities

Initial impact quantities of chosen Foreground System:

Impact Category	Quantity	Unit

Unit Process	Usage
brick	0.392
rockwool	11.86
roof	1.059
transport	1

Background Systems in Foreground System:

Background System	Usage
DK heating grid	6192

Remove Unit Process

Add BackgroundSystem

Remove Background System

Remove Foreground System

Dynamic Foreground System Data Window

Active Foreground System: DREM1

Unit Process	Set Unit Process Usages	Set Background System Usages and Dynamic Property	Set Category Dynamic Properties	Set General Dynamic Property

Unit Process

[Add Usage]

[Add Multiple Usages]

[Remove Usage]

Background Systems

[Add Usage]

[Add Multiple Usages]

[Remove Usage]

[Add Dynamic Property]

[Remove Dynamic Property]

Impact Category

[Add Dynamic Property]

[Remove Dynamic Property]

General Foreground System

[Add Dynamic Property]

[Remove Dynamic Property]

Set Unit Process Usages

[rockwool ⌄]

☑ Interpolate between usages

Timestamp	Usage
0	3.24

Set Background System Usages and Dynamic Property

[DK heating grid ⌄]

☑ Interpolate between usages

Timestamp	Usage
0	21780

Start	f(t,q)

Set Category Dynamic Properties

[Agricultural land occupation ⌄]

Start	f(t,q)

Set General Dynamic Property

Start	f(t,q)	End

[Cancel] [Apply]

Home | Impact Categories | Background Systems | Foreground Systems | Output
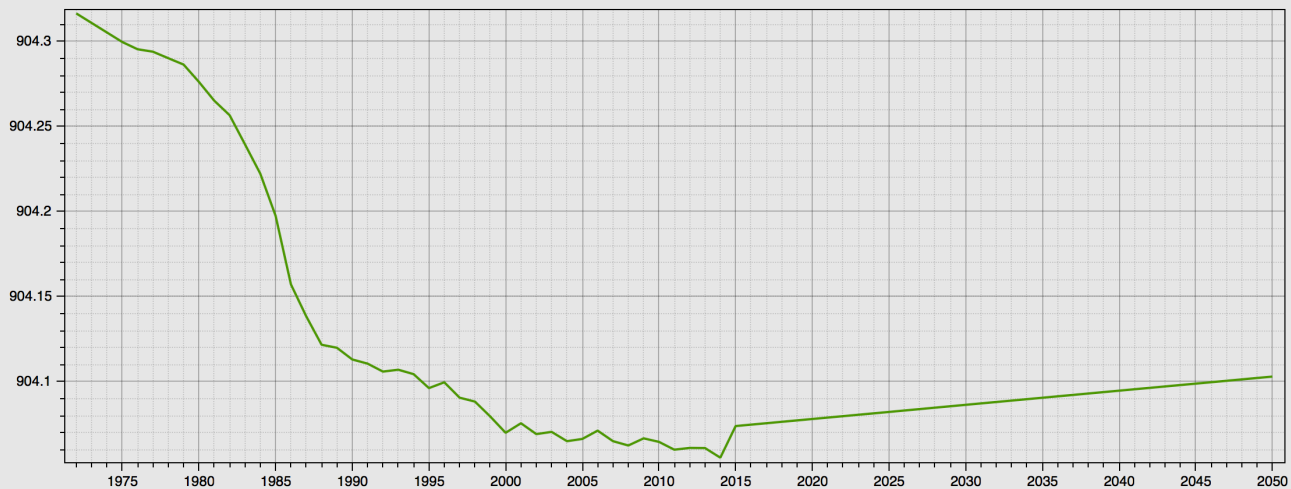
Selected Method: ReCiPe

Output

Foreground Systems

DEAM1

Marine eutrophication

Marine eutrophication [kg N eq]

Start timestamp: 1972   Interval size: 1.0   End timestamp: 2050   Calculate | Print Output

Choose the file to open

Name:

Save in folder: ‹ | 📁 Roar | Documents | DTU | Bachelor Project | project | GUI | **Data** | Create Folder

Places
- 🔍 Search
- ⊗ Recently Used
- 📁 Debug
- 📁 Roar
- 📁 Desktop
- 🖥 File System

Name	Size	Modified
📄 outputtest.csv	24.4 kB	Saturday

Comma Separated Values (csv) ⇅

Cancel | Save

DREM1	Agricultural land occupation	Climate Change	Fossil depletion	Freshwater ecotoxicity	Freshwater eutrophication
1972	86605.8189764022	113121.906011268	30147.6962897506	845.291254197268	32.5349837133308
1973	86606.9027179564	113085.634213435	30135.6913587062	845.246761911729	32.5342691314504
1974	86607.9864595106	113049.362415602	30123.6864276597	845.202269626191	32.53355454957
1975	86609.0702010649	113013.09061777	30111.6814966133	845.157777340652	32.5328399676896
1976	86610.0258583018	112964.79151851	30095.696714163	845.097627978339	32.5318741254733
1977	86611.3608081634	112943.55296528	30088.6662180068	845.072676744808	32.5314651219294
1978	86612.4650508279	112890.981970596	30071.2675122738	845.007358629528	32.5304175627306
1979	86616.2330927119	112850.674018199	30057.9225362324	844.961995903451	32.5296608030471
1980	86622.9426157147	112760.671336877	30028.1276181557	844.858053960208	32.5279495915592
1981	86623.4453848824	112666.884322357	29997.090603897	844.739201158703	32.5260599562268
1982	86623.7345988557	112588.663354044	29971.2050954177	844.639843650335	32.5244807078245
1983	86631.6218619991	112433.441987498	29920.0125312548	844.45327474798	32.521456109224
1984	86645.0875331004	112304.705284752	29878.2155530789	844.305261569016	32.519028184171
1985	86653.5078959188	112169.58384563	29836.0180161924	844.129197083742	32.5162911027072
1986	86700.6344694195	112003.17107649	29784.5515116595	843.968698147052	32.5135196530045
1987	86781.5005474121	111917.976286646	29757.4869756826	843.981986486537	32.5130113954956
1988	86818.3328302026	111811.876783068	29722.646355076	843.904119820196	32.5114473673828
1989	86851.038271704	111805.853368578	29719.6136826076	843.981824709541	32.5124177394716
1990	86871.133838976	111751.064925476	29701.460208313	843.947532387684	32.5117167749663