

# What can I choose in the calculator?

The calculator lets you choose the share of the freight transport demand covered by rail transport in Switzerland in the selected year (2035 or 2050).

## Rail Freight Transport



Kabelleger / David Gubler, via Wikimedia Commons

## Contents

- [Impact](#)
- [Global market](#)
- [Definition](#)
- [Constraints](#)
- [Assumptions](#)
- [References](#)

## IMPACT - What are the impacts of Rail Freight Transport?

In Switzerland, increasing the share of Rail Freight Transport will have the following impacts:

### Energy system

- 😊 Reduce final energy demand.
- 😞 Increase total electricity consumption.

- 😊 Reduce total diesel / gasoline consumption.
- 😊 Likely to increase the share of renewable energy sources in the energy mix.
- 😞 Likely to raise pressure on the grid by increasing electricity demand.
- 😊 Likely to increase energy independence and energy security.

## Environment & Climate

- 😊 Very likely to reduce global CO2 emissions.
- 😊 Avoid emissions of harmful pollutants, especially in urban areas.
- 😊 Reduce noise pollution.
- 😞 Likely to increase deposited waste.

## Society & Economy

- 😞 Likely to increase the cost of the energy transition.
- 😊 May improve balance of payments by substituting oil imports by domestic electricity.
- 😞 Reduce Confederation income from the tax on mineral oil under the current taxation system.

# GLOBAL MARKET - What is the trend in Rail Freight Transport in the EU?

In 2011, 37% of freight transport was covered by rail in Switzerland. This is significantly more than the EU-27 average of 19% in that same year. Between 1993 and 2012 the total rail freight transport activity in Switzerland has increased by 33% whereas the total road freight transport activity has increased by 51% (for comparison, the population size has increased by 15% in that same period).[1] At EU-27 level the rail freight transport activity remained constant between 1995 and 2010 whereas the road freight transport activity grew by 38%. [2]

Both Switzerland and the EU-27 have seen a reduction of ~10% in the volume of goods transported by rail between 2008 and 2012. This can be explained by the economic crisis as similar figures are reported for road transport. [1]

## DEFINITION / CONSTRAINTS

### DEFINITION - What is Rail Freight Transport?

The "Rail freight (%)" slider increases or decreases the quantity of goods (in tonne-kilometre (tkm))

that is transported by rail instead by trucks.

## CONSTRAINTS - What are the key barriers facing Rail Freight Transport deployment?

- The existing infrastructure is reaching its maximum capacity but new infrastructure is increasingly expensive.
- Higher rail freight costs compared to water or road freight are difficult for operators to accept as margins in the transport sector are small.

## ASSUMPTIONS - What are the assumptions considered in the calculator?

You will find more information about the freight transport model of the calculator [here](#).

## REFERENCES

[1] [Swiss Statistical Office, Le transport de marchandises en Suisse, 2013.](#)

[2] [European Commission, EU transport in figures statistical pocketbook, 2012.](#)

```
.dokuwiki div.page { padding: 5px; } #wrapper #content h1 { margin-top: 0; padding-top: 0; }
#wrapper #content.padded, #wrapper #content .padded { padding: 0 0px; } #wrapper #content
.blocWrapper { margin: 0 5px 0 5px; } #wrapper #content .blocGroupWrapper { margin: 0; width:
915px; float: left; } #wrapper #content .bloc { float: left; margin: 0px 10px 10px 0px; } #wrapper
#content .bloc header { padding: 1px 5px; } #wrapper #content .bloc header.lined { border-bottom:
1px solid #c2c2c2; } #wrapper #content .bloc h2 { font-size: 20px; font-family: 'ProximaNovaCond-
Light'; color: #535559; font-weight: normal; text-transform: uppercase; margin: 0; } #wrapper
#content .bloc.single { width: 295px; } #wrapper #content .bloc.double { width: 610px; } #wrapper
#content .bloc.triple { width: 915px; } #wrapper #content .bloc.bgWhite { background: #fff; }
#wrapper #content .bloc header.bgOrange h2 { color: #fff; font-weight: normal; } #wrapper
#content .bloc header.bgOrange .blocLink { border-left: 1px solid #fe984d; color: #fff; } #wrapper
#content .bloc .blocLink { float: right; line-height: 17px; border-left: 1px solid #c2c2c2; padding-left:
20px; font-size: 14px; text-transform: uppercase; padding-top: 3px; color: #535559; font-family:
'ProximaNovaCond-Regular'; } #wrapper #content .bloc .newsBloc { border-bottom: 1px solid
#c2c2c2; padding: 0px 0px 20px 0px; /*padding-bottom: 20px;*/ margin-bottom: 20px; } #wrapper
#content .bloc .newsBloc h3 { font-size: 14px; margin-bottom: 10px; } #wrapper #content .bloc
.newsBloc p { font-size: 13px; line-height: 17px; margin-bottom: 10px; } #wrapper #content .bloc a {
color: #00a9e0; text-decoration: none; font-size: 14px; } #wrapper #content .half { width: 50%; float:
left; } #wrapper #content .larged { width: 33%; float: left; } #wrapper #content .questionAnswer h4
{ color: #fe6b00; margin-bottom: 10px; font-size: 14px; line-height: 17px; } #wrapper #content
.questionAnswer h4 img { float: left; margin-right: 4px; } #wrapper #content .questionAnswer p {
font-size: 13px; line-height: 17px; margin-bottom: 10px; } #wrapper #content .questionAnswer p img
{ float: left; margin-right: 4px; } #wrapper #content .questionAnswer .bg { float: left; color: #fff;
border-radius: 8px; width: 15px; height: 15px; text-align: center; font-size: 11px; font-weight: normal;
} #wrapper #content .questionAnswer .bg.question { background: #fe6b00; } #wrapper #content
.questionAnswer .bg.answer { background: #535559; } #wrapper #content .intro { margin-bottom:
```

```
60px; } #wrapper #content .intro .img { float: left; width: 460px; } #wrapper #content .intro .txt {
float: left; width: 480px; } #wrapper #content .intro .txt h1 { font-family: 'ProximaNovaCond-
Semibold'; font-size: 44px; color: #1d1d1b; text-transform: uppercase; margin-bottom: 6px; }
#wrapper #content .intro .txt h2 { font-family: 'ProximaNovaCond-Light'; font-size: 32px; color:
#535559; text-transform: uppercase; margin-bottom: 6px; } #wrapper #content .intro .txt p { color:
#1d1d1b; font-size: 16px; line-height: 20px; margin-bottom: 20px; } #wrapper #content
#newsWrapper { background: #fff; } #wrapper #content #newsWrapper .news { padding: 20px; }
#wrapper #content #newsWrapper .news .img { float: left; /*width: 280px;*/ width: 220px; }
#wrapper #content #newsWrapper .news .txt { float: left; width: 100px; padding-left: 10px; }
#wrapper #content #newsWrapper .news h3 { font-family: 'ProximaNovaCond-Light'; font-size: 16px;
text-transform: uppercase; margin-bottom: 8px; } #wrapper #content #newsWrapper .news h2 {
font-family: 'ProximaNovaCond-Regular'; font-size: 28px; margin-bottom: 15px; } #wrapper #content
#newsWrapper .news p { font-size: 16px; margin-bottom: 20px; } #wrapper #content
#newsWrapper.detail { margin-bottom: 20px; } #wrapper #content #faqWrapper h2 { text-align:
center; font-family: 'ProximaNovaCond-Semibold'; font-size: 26px; text-transform: uppercase; color:
#1d1d1b; margin-bottom: 20px; } #wrapper #content #faqWrapper .blocWrapper .bloc { height:
200px; position: relative; } #wrapper #content #faqWrapper .blocWrapper .bloc .content { padding:
20px; } #wrapper #content #faqWrapper .blocWrapper .bloc h3 { font-family: 'ProximaNovaCond-
Semibold'; font-size: 26px; text-transform: uppercase; color: #1d1d1b; text-align: left; } #wrapper
#content #faqWrapper .blocWrapper .bloc h4 { font-family: 'ProximaNovaCond-Light'; font-size: 19px;
text-transform: uppercase; color: #1d1d1b; margin-bottom: 20px; } #wrapper #content #faqWrapper
.blocWrapper .bloc .bluecornerlink { position: absolute; bottom: 20px; } #wrapper #content
#faqWrapper .blocWrapper .bloc .bluecornerlink a { color: #fff; } #wrapper #content
#faqWrapper.detail { margin-bottom: 40px; } #wrapper #content #faqWrapper.detail li {
background: #fff; padding-top: 20px; border-bottom: 1px solid #c2c2c2; cursor: pointer; } #wrapper
#content #faqWrapper.detail li .number { float: left; width: 30px; height: 30px; margin: 0 35px 15px
15px; text-align: center; background: #fe6b00; border-radius: 15px; line-height: 30px; color: #fff; }
#wrapper #content #faqWrapper.detail li .question { float: left; font-family: 'ProximaNovaCond-
Regular'; font-size: 28px; line-height: 30px; width: 840px; padding-bottom: 20px; padding-right: 20px;
} #wrapper #content #faqWrapper.detail li .question p { font-size: 28px; line-height: 30px; }
#wrapper #content #faqWrapper.detail li .answer { display: none; background: #fff; padding: 20px
20px 20px 80px; font-size: 16px; line-height: 20px; } #wrapper #content #faqWrapper.detail li
.answer p { margin-bottom: 20px; } #wrapper #content #faqWrapper.detail li.active { background:
#fe6b00; } #wrapper #content #faqWrapper.detail li.active .number { background: #fff; color:
#fe6b00; } #wrapper #content #faqWrapper.detail li.active .question { color: #fff; } #wrapper
#content #faqWrapper.detail li.noborder { border-bottom: none; } #wrapper #content
#lexiqueWrapper .ulWrapper { text-align: center; } #wrapper #content #lexiqueWrapper .ulWrapper
ul li { display: inline-block; *display: inline; zoom: 1; border-right: 1px solid #c2c2c2; padding: 0 11px;
} #wrapper #content #lexiqueWrapper .ulWrapper ul li.noborder { border: none; } #wrapper
#content #lexiqueWrapper .ulWrapper ul li a { color: #535559; font-family: 'ProximaNovaCond-Light';
font-size: 18px; } #wrapper #content #lexiqueWrapper .ulWrapper ul li a.active { color: #000; }
#wrapper #content #lexiqueWrapper #listWrapper { margin: 20px 0; } #wrapper #content
#lexiqueWrapper #listWrapper ul li { background: #fff; padding: 20px; border-bottom: 1px solid
#c2c2c2; } #wrapper #content #lexiqueWrapper #listWrapper ul li h4 { font-family:
'ProximaNovaCond-Regular'; font-size: 24px; margin-bottom: 6px; } #wrapper #content
#lexiqueWrapper #listWrapper ul li p { margin-bottom: 20px; } #wrapper #content #map { width:
100%; height: 550px; background: #e8e8e8; } /* TEXTE PAGES ET ADMION */ #content.text,
.redactor_box { font-family: Arial, Helvetica, Sans Serif; font-size: 16px; color: #333333; padding:
20px; } #content.text body, .redactor_box body { background: none; } #content.text h1,
.redactor_box h1, #content.text h3, .redactor_box h3 { font-family: 'ProximaNovaCond-Light'; color:
```

```
#535559; font-size: 32px; text-transform: uppercase; } #content.text h3, .redactor_box h3 { font-size: 20px; } #content.text h2, .redactor_box h2, #content.text h4, .redactor_box h4 { font-family: 'ProximaNovaCond-Semibold'; font-size: 44px; color: #000; text-transform: uppercase; margin-bottom: 10px; } #content.text h4, .redactor_box h4 { font-size: 26px; } #content.text p, .redactor_box p { color: #333333; margin-bottom: 20px; } #content.text #wysiwyg, .redactor_box #wysiwyg { margin-bottom: 80px; } #content.text ul li, .redactor_box ul li { margin-bottom: 10px; line-height: 20px; display: block; padding-left: 20px; background: url(lib/tpl/ses/images/bg_bullet-text.png) top left no-repeat; background-position: 0 8px; } #content.text table, .redactor_box table { margin-top: 50px; } #content.text table td, .redactor_box table td { vertical-align: top; } #content.text table td p, .redactor_box table td p, #content.text table td li, .redactor_box table td li { font-family: Arial, Helvetica, Sans Serif; font-size: 16px; color: #535559; } #content.text table td.w50, .redactor_box table td.w50 { width: 460px; padding-right: 20px; } #content.text table td.w50.right, .redactor_box table td.w50.right { width: 460px; padding-right: 0; } hr { background: none; border: none; border-top: 1px solid #c2c2c2; } hr.marged { margin: 40px 0; } .pagination { margin: 20px auto 40px auto; height: 20px; } .pagination ul li { float: left; padding: 0 10px; border-left: 1px solid #c2c2c2; } .pagination ul li a { font-family: 'ProximaNovaCond-Light'; font-size: 20px; line-height: 23px; color: #797a7f; } .pagination ul li a.active { color: #000; } .pagination ul li.prev, .pagination ul li.next { width: 11px; height: 20px; } .pagination ul li.prev, .pagination ul li.nobl, .pagination ul li.next { border-left: 0; } .paddedContent { padding: 20px; } #sponsorsWrapper { margin: 40px 0 30px 20px; } #sponsorsWrapper h2 { font-family: 'ProximaNovaCond-Regular'; font-size: 14px; text-transform: uppercase; } #sponsorsWrapper .sponsor { float: left; margin-right: 60px; } .dokuwiki div.page { overflow: auto; }
```

From:  
<http://wiki.energyscope.ch/> -

Permanent link:  
[http://wiki.energyscope.ch/doku.php?id=freight\\_model\\_more](http://wiki.energyscope.ch/doku.php?id=freight_model_more)



Last update: **2019/10/22 09:17**