

Transport & Mobility

When it comes to goods transportation, protecting the environment and climate is very important to Migros. In 2015, it switched more shipments from road to rail, optimised its recyclable containers and made a commitment to developing transport solutions that are fit for the future.

Environmentally friendly goods transportation is a key component of Migros' 2020 climate and energy strategy. Migros has been using **innovative and sustainable transport solutions** for decades. To achieve the ambitious climate objectives, Migros is constantly striving to increase the share of rail shipments, reduce the emissions of its lorry fleet and use more recyclable containers.

From road to rail

As an environmentally aware company, Migros has been transporting a large proportion of its goods by **rail** for decades. All distribution centres and most M-Industry companies have their own rail connections.

In the reporting year, the goods wagons of SBB Cargo covered around 11.5 million kilometres for the Migros Group. In total, more than 1.3 million tonnes of freight were transported by rail. The close partnership was further cemented in 2015 with a new **framework agreement** for the next three years.

Kilometrage Migros Group in km

	2011	2012	2013	2014	2015	Change from previous year
Rail transport kilometrage in CHF million ^[1]						
Rail transport kilometrage	10.5	10.3	11.3	11.6	11.5	-1.0%

1 Domestic transport by Cooperative Retailing, Migros Industry and the retailers Globus and Migrol

In Cooperative Retailing, Migros remains the **number one for rail freight** in terms of turnover. It already transports around half of its goods by rail, and the proportion is growing all the time. More shipments were switched from road to rail in the reporting year. For example, the proportion of Vittel mineral water shipped by rail from France to the operating centres of the ten regional Cooperatives and to the Migros distribution centre in Suhr was 48%. This proportion will be increased to 70% during the course of this year, due to a rearrangement of national and international transport routes in favour of rail

freight.

Expansion of intermodal transport

To **intelligently combine** the two shipping modes of road and rail, Migros is making systematic use of intermodal transport and continuously increasing the proportion of goods sent via this method.

With intermodal transport, the goods cover the **longest part of the journey by rail** in swap bodies or semitrailers and only the first and last few kilometres by road in **low-emission lorries**. Transportation by lorry mainly involves deliveries to the sales outlets, as they are not connected to the rail network.

For example, Globus primarily uses intermodal transport to ship non-food goods from the distribution centre in Otelfingen (Zurich) to various regions of Switzerland. This allowed it to reduce CO2 emissions by 217t and lorry kilometrage by more than 290'000 kilometres in the reporting year. In addition, around 80% of food from the Migros distribution centre in Suhr (Aargau) was sent to Ticino primarily by rail. This enables Migros to reduce CO2 emissions by 256t and lorry kilometrage by close to more than 345'000 kilometres per year on the transalpine north-south route. Furthermore, goods from Ticino and Italy are sent back by rail in the semitrailers, in order to **avoid empty trips**. Both intermodal transport projects have been recognised as CO2 offset projects by the Federal Office for the Environment (FOEN).

80%

of food from the Migros distribution centre in Suhr was sent to Ticino primarily by rail.

Since 2015, SBB Cargo has been offering a night service from Ticino to Zurich, which provides even more opportunities for switching shipments from road to rail. Denner now transports more than 8'200t of goods on the transalpine north-south route by intermodal transport and is constantly assessing the viability of switching more shipments.

Expansion of international rail traffic

Migros obtains a large proportion of its goods from **neighbouring European countries by rail**. Along with Germany and Italy, Belgium and the Netherlands are also important trading partners.

Antwerp and Rotterdam are Migros' most important North Sea ports. A large percentage of goods from overseas – fruit, vegetables, coffee and cocoa from Africa and South America, as well as non-food items from Asia – are delivered there as standard. From 2016, this will also include all bananas intended for Migros.

The bananas sent by boat from Central America now arrive in Europe exclusively via the North Sea ports of Vlissingen (Netherlands) and Antwerp. From there, they are sent to Switzerland by rail and lorry. Due to the local **concentration of different goods**, different products can be combined more **flexibly** for transportation purposes. This allows train **capacities to be utilised more efficiently**, which has a positive impact on freight costs and CO2 emissions.

Due to the higher volumes, the **shipping frequency** can be increased from

three to five trains per week, which improves **delivery reliability** even further. The bananas are transported from Basel directly to the ripening facility in refrigerated rail wagons. In 2015, 27% of bananas for Migros were transported from the North Sea ports by rail, 5% by intermodal transport and 68% by road. By 2017, the aim is to increase the proportion of rail shipments to 50% at the expense of road transport and reduce CO2 emissions by a further 400t per year.

From 2016, Migros will ship an additional 12'500t of tinned tomatoes from southern Italy to Switzerland by rail each year, which will reduce lorry kilometrage by more than 500'000 kilometres and CO2 emissions by approx. 400t in comparison to road-based solutions.

Strategic use of southern ports

The Swiss north-south route is of strategic importance for international rail transport. This is due firstly to the close trade relations with Italy, and secondly to the fact that Migros imports around a quarter of its goods from India and the Far East through the Ligurian ports on the Mediterranean.

In comparison to the more distant ports in the north, this offers **shorter routes** and **lower emissions**. Migros therefore uses the southern ports strategically and is planning to increase the volume of goods sent via these ports even further, from 2'300 containers per year at present to 3'700 containers. Since 2015, Migros has been the only retailer in Switzerland to bundle all containers arriving via the ports of La Spezia and Genoa and transport them by rail to the distribution centres in Switzerland.

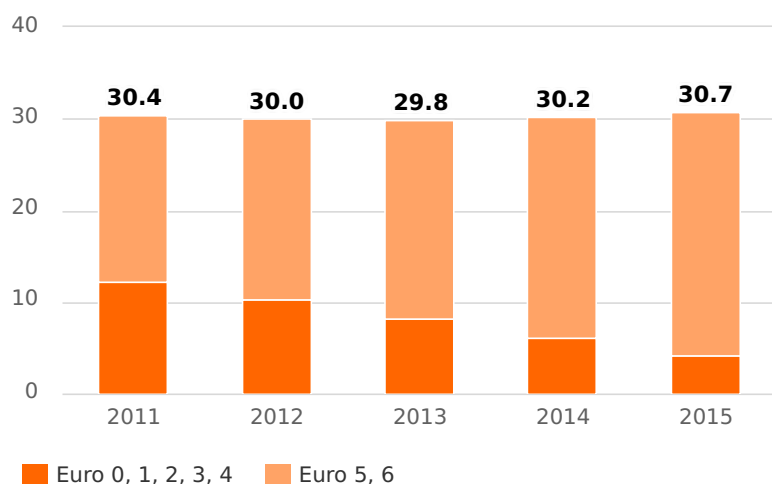
Resource-efficient lorry transport

To make road transport as environmentally friendly as possible, the ten regional Cooperatives have their own fleet of **low-emission vehicles**.

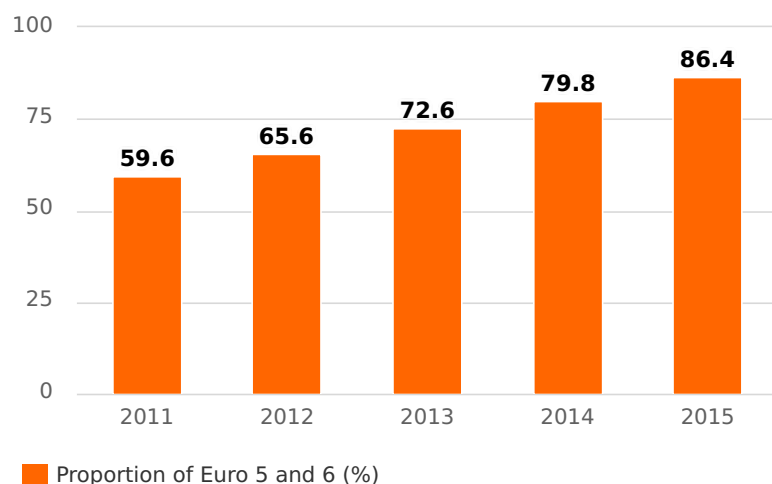
In 2015, 86.4% of kilometres driven (in-house lorry fleets of the Migros Cooperatives and Saviva) were covered by low-emission lorries that meet the strict **Euro 5 and 6** emission standards.

Kilometrage lorry by Euro category

Kilometrage of Euro category
in million km



Proportion of kilometres with Euro 5 and 6
in %



CO2 emissions absolute, lorry

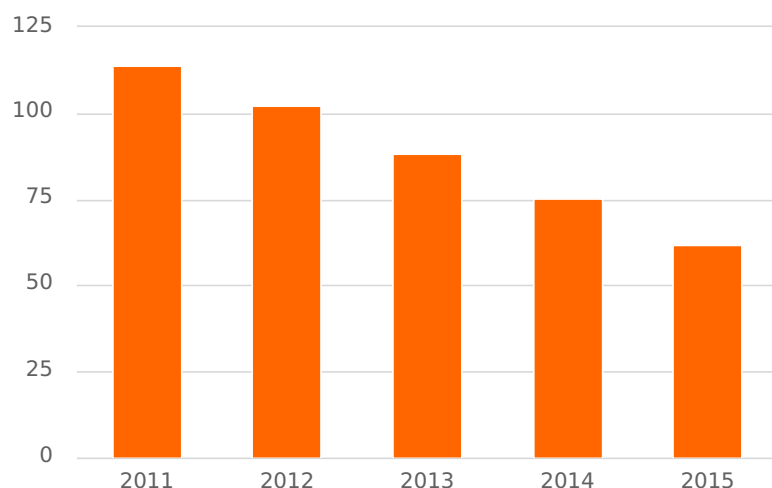
	2011	2012	2013	2014	2015	Change from previous year
CO2 emissions from goods transportation with lorries (in-house fleet) ^[1]						
CO2 emissions from fuel, absolute (in 1'000 tonnes CO2)	24.9	24.4	24.2	23.7	23.4	-1.3%
CO2 emissions from fuel, specific (in g CO2/tonne kilometres)	30.2	29.9	29.8	28.5	27.3	-4.3%

1 In-house lorry fleet of Migros Cooperatives and Saviva, tonne kilometres (tkm) according to LSVA survey

Particle emissions and nitrogen oxide emissions

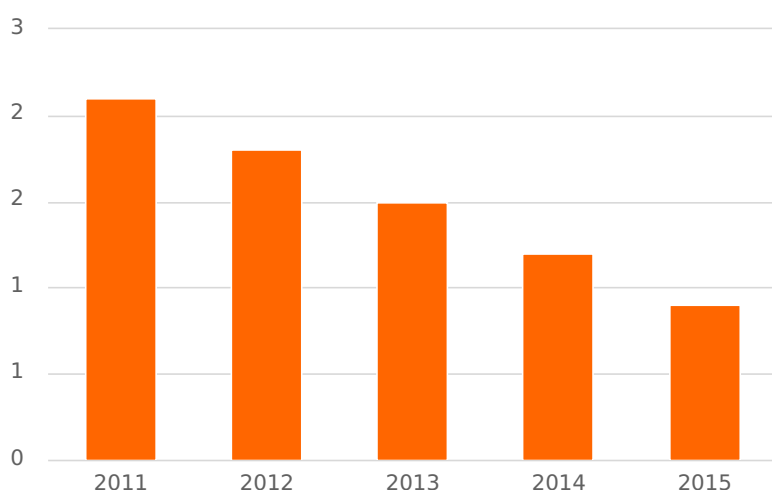
Carbon dioxide

in tonnes



Fine dust emissions

in tonnes



The CO₂ emissions of the lorry fleet are reduced through optimised routes and loads, more economical driving and alternative fuels. The Migros Cooperative Aare uses 100% biodiesel in around 20 of its lorries. The Neuchâtel/Fribourg, Geneva and Eastern Switzerland Cooperatives also use biodiesel in combination with fossil fuel. Biodiesel allows the Cooperatives to reduce CO₂ emissions by 1'800t per year.

To transport goods on their premises, the Migros Cooperatives Aare and Zurich started using lorries with electric engines (e-trucks) in 2014. The e-trucks reduce CO₂ emissions in logistics by 30t per year.

Since 2015, Denner has been completing all journeys with vehicles that meet the Euro 5 and 6 emission standards; the company is aiming to complete all journeys with Euro 6 lorries by 2019. At the same time, it is continuously optimising its lorry routes. The aim is to keep the distances as short as possible and thereby reduce transport costs and CO₂ emissions.

Returnable containers

Migros always tries to use **robust returnable containers** in place of disposable cardboard boxes to transport its goods. It is the only retailer in Switzerland to use returnable containers on such a large scale.

All Cooperatives, M-Industry and the national distribution centres are connected to the **recycling system**, along with more than 1'200 third-party suppliers in Switzerland and abroad. By using returnable containers to transport its goods, Migros saved more than 90'700t of cardboard in 2015.

For decades, Migros has been the only retailer in the world to use returnable containers to **transport bananas**. It currently transports around 46% of the approx. 30'000t of bananas each year in this way. The aim is to increase this proportion to 70% by working closely with the local producers. In the reporting year, Migros introduced a **safer** and more **space-saving** design for its banana containers. They are now easier to stack and ship, and the bananas are better protected in transit.

Cargo sous terrain – a new freight network

In addition to using the existing transport infrastructure in a way that conserves resources to the greatest possible extent, Migros is committed to **developing new solutions that are fit for the future**.

Via the freight working group of the Swiss retail stakeholder group IG DHS, Migros has supported and co-financed a **feasibility study for a visionary, underground infrastructure system** together with the government and other companies.

Cargo sous terrain is a sustainable, automated logistics system that enables flexible, underground transportation of goods and waste (both supply and disposal). This new type of freight infrastructure could supplement the Swiss road and rail network in just twenty years' time and relieve it at critical points by connecting the country's main business centres.

Awards & events

Award for improved delivery process

The Migros Cooperative Eastern Switzerland was presented with the Retail Technology Award Europe 2015 by the EHI Retail Institute for a project to improve control over the supply chain. A new IT solution makes it possible to determine the location of a product at any time during the delivery process. The system increases the flexibility of goods movements and enables optimum planning of lorry capacities, which reduces transport kilometrage.

Bike to work

In 2015, 340 teams with 1'360 Migros employees took part in the Bike to work initiative. Migros therefore had more participants than any other private company in Switzerland.

