



This is Svemo

Svemo is the Swedish national motorcycle federation and manages the Swedish motorcycle and snowmobile sports. Svemo is a member of the Swedish Sports Confederation (Olympic Committee) and FIM, the international federation for motorcycle and snowmobile sports.



Björn Eriksson, President of the Swedish Sports Confederation

In what way is Svemo an important part of the Swedish sports movement?

-In our strategy work towards 2025, one of the development areas is to create a sports environment which is open for everyone. Svemo plays an important role in this mission.

What other benefits does Svemo provide?

-Svemo is a forerunner in the Swedish sports movement when it comes to their work with sustainability, environment and community.

What is your opinion about Svemo's environmental work?

-Svemo puts a lot of effort and resources into their environmental work. That competence built within motorsports is important and contributes to the positive development of sports the Swedish sports movement.

The organisation of Svemo

The National Svemo Congress is Svemo's highest decision-making body, which appoints the board, approves the strategy and sets the direction for the federation's overall business.

The Board is elected every second year and bears the responsibility for the federation's activities. They decide on the federations main business direction and lead the work related to the main business objectives.

The federation's headquarter and its staff in Norrköping manage the everyday work.

The Sports Commissions manage the development of their respective sports: Motocross, Supermoto, Road Racing, Track Racing, Drag Racing, Trial, Snowmobile and Enduro.

The six regional Districts are supporting the Board and the Sports Commissions by taking care of local and regional tasks.

3 Advantages with Svemo

- **1. Reliability.** Being one of Sweden's largest sports federations, Svemo has the resources to deal with major and minor challenges, always focusing on democracy and safety.
- **2. Safety.** Sporting rules and mandatory licenses for riders and officials support riding under equal and safe conditions.
- **3. Sustainability.** Svemo makes a significant effort to reduce noise, air pollution and handling of waste and chemicals. Svemo also promotes electrically driven vehicles and shows that tracks can be a resource for biodiversity. This contributes to sustainable sports within the federation and also internationally.

Svemo in Numbers

Founded in 1935
20 employees at the headquarter
More than 460 associated clubs
Almost 160.000 members
21 000 licensed riders and 10 000 licensed officials
About 1 000 competitions are organised yearly by the federation's clubs

The Community

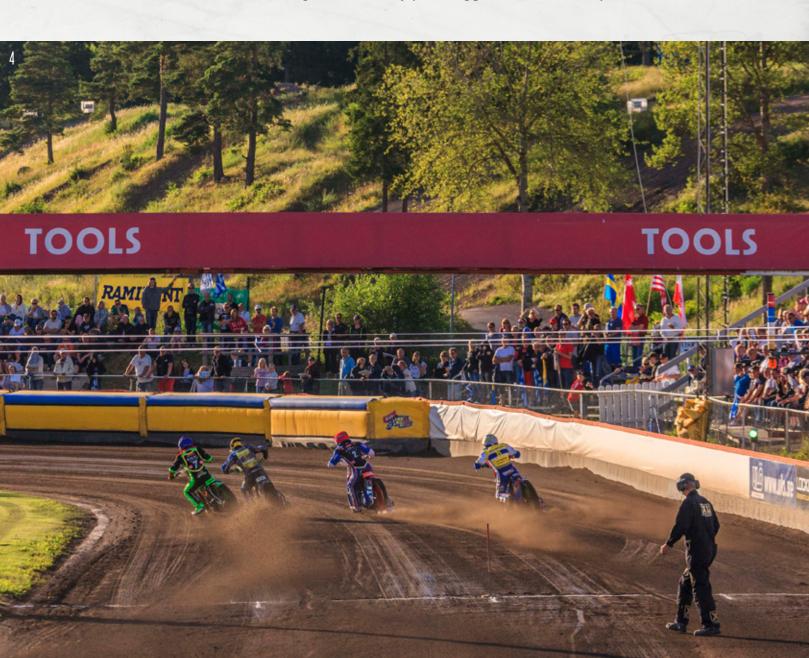
Community and unity

Svemo has more than 460 associated clubs with a total of more than 160 000 members. The main reason for joining a club is to be part of a community with shared interests. Our clubs and tracks are mostly found in traditional rural environments where the range of activities for young people often is lower than in the metropolitan areas. The club often becomes a meeting point for both, parents and children. Motorcycle and snowmobile activities are very much a family affair. Unlike in many other sports, there are activities for all ages.

Education and training

Svemo's Board has appointed a committee which is dedicated to work with all education related topics within the federation. In addition to the centrally organised educational activities, training is also offered by the sports commissions, other committees and the Districts. Two of the federation's employees help managing and developing all educational activities.

In 2017 Svemo started to update and digitalise large parts of their educational scheme, especially for officials in the different sports. The aim is to increase the knowledge of the individual member, thus strengthening them in their different roles. The combination of modern digital technology and traditional educational activities is an important part of that work. Svemo wants their members to grow and to find joy in being part of the community.



The Community



Equality

In most of our sports all genders are competing side by side and on the same terms. Svemo works actively with encouraging more female riders and officials to be part of the community. Over 75% of all our licensed riders are male, but the number of girls/women riders is rising. Our leading female riders are competing in their sports at the highest international level.

Svemo Women MX Camps

Women MX Camp is one example of an event for girls from 8 years and older. There are activities like motorcycle riding, physical training and seminars about related topics. For two days, the riders get help with developing their riding technique and they learn how to take care of their bike. They also learn about the importance of physical training as well as healthy food. Girls are given an opportunity to meet like-minded people and the chance to make friends for life. In combination with well-known female trainers, who are role models and idols for the young riders more girls get inspired to continue with their sport over a long period of time. In 2017 more than 80 riders participated in the first two Women MX Camps that were held in Älvbygden and Örebro. Following these pilot projects, several clubs have organised Women MX Camps where girls of all ages have the possibility to test-ride Motocross.

The Community

Racing where it belongs

The size of Svemo's organisation with all tracks and clubs offer great training conditions for all types of riders.

Together with Sveriges Motorcyklister (SMC) Svemo works for increasing traffic safety nationally and internationally. Riders who want to learn to ride safe in traffic can takes courses with SMC. Riders who love to develop their skills further and want to compete find education and training possibilities for racing within Svemo's organization. This is also part of the active safety work which both organisations work for, nationally and internationally.

Safety

"No one shall get hurt for life!" - This is the vision for our safety work throughout the federation. Since 2012, Svemo has actively worked with improving the safety for our members when they train and compete. Together, we work for a safer sport, regardless the role we have within the federation.

Our work is based on the actual risks for our riders/officials/spectators. That way we pursue or long-term work and follow up the results and effects on a regular basis. Collecting information of the incidents and types of personal injury that occur important for various efforts in our safety work.

In our work, we follow development in technique for vehicles as well as personal protective clothing or safety equipment for riders. Factors that affect track safety when they are built or changed are important to follow up, which involves an active dialogue with the track owner.

Most rule changes for our sports have to do with improving the safety of our members.

Health and safety

We work for easy to understand and clear rules regarding health and safety requirements at our tracks during training and competition, and that these are followed. We actively support our clubs in their safety work. We actively spread knowledge about which personal injuries can occur in the event of an accident. Especially important is to be aware of injuries that are difficult to detect and can have serious consequences for the individual, such as concussion.

The basis for successful safety work is that everything we can do to increase safety also easily can be put into practice. We then follow up the results of the work and to carry out risk analysis. Clear and easy to follow structures for communication and support for everyone is absolute key, which is why we are constantly working on improvements in that area.



20 years of environmental progress

In 1996, Svemo started strategic and hands on work with environmental topics. In 2000 Svemo founded the Environmental Committee. There are 16 Swedish national environmental goals, and Svemo's work is based on these as well as Svemo's own environmental policy.

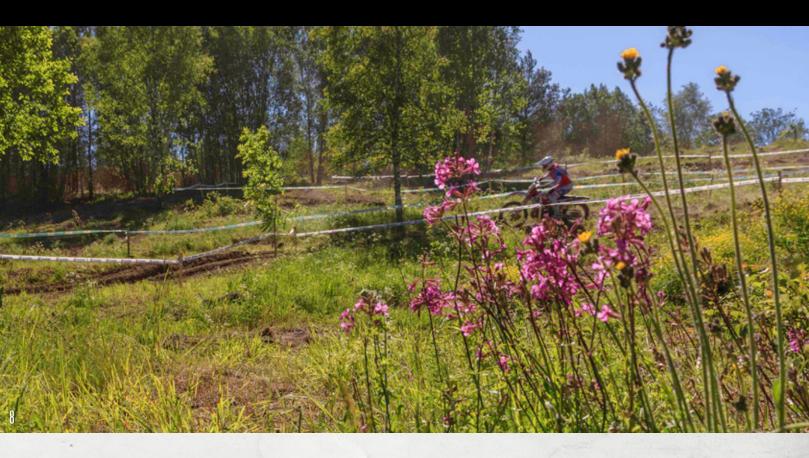
Svemo has an environmental action plan with measurable objectives. One of the results of the environmental action plan is Svemo's own environmental certification for tracks. Since 2007 a track license can only be issued when certain specified environmental requirements are fulfilled by the track owning club. Also, the use of environmental mats under all vehicles is mandatory, during both training and competition.

Svemo has for long worked to lower noise levels. The intention is that neighbouring residents and others who may be disturbed should be affected as little as possible by training activities or competition. In recent years, noise levels have been lowered by more strict technical control and by teaching the riders how to reduce the noise level of their vehicles. The work with reducing noise levels continues since it has become vital for the survival of our activities in certain areas of the country. Surveys in 2017 show that noise levels have been lowered considerably, but we can always do more. Joint efforts nationally and internationally between federations are required to influence the international motorcycle federation FIM as well as the vehicle manufacturers.

More efforts regarding climate and environment

- Promoting electric motorcycles we even have some that the clubs can borrow and test.
- An active dialogue with manufacturers in order to encourage the development of new environmentally friendly technology.
- Electric Trial bike activities for children.
- Educational efforts.
- Encouraging the clubs to promote the use of public transport and car-pooling to visitors of the events.
- In Speedway and Ice Racing, the fuel type methanol has a potential to replace other fuel in the future, if it is produced from biomass. Svemo initiated this work.
- Emissions from the competition vehicles at the Swedish Championship for senior riders are climate compensated by "VI-skogen", a Swedish aid organization which plants trees.
- Promoting biodiversity that some tracks offer with their meadow and sand environments. In the future, even biofuel could be produced from the biomass that is harvested from the tracks.





Motorsport tracks contribute to biodiversity

Svemo has been working on a project since 2011 that perhaps requires new thinking: "Program for biodiversity - The motorway as an environmental resource". The Swedish Environmental Protection Agency, the Swedish Society for Nature Conservation's paper Swedish Nature, the Encyclopedia of the Swedish Flora and Fauna and county boards and others have reported on the potential of motorways for increased biodiversity.

Svemo's goal, as part of the association's other environmental work, is to establish this knowledge and that the clubs manage their facilities to promote biodiversity even more. There are educational materials with general care advice. If necessary, visits are also made to Svemo's management where more site-specific maintenance plans are developed in consultation with the club. Approximately 60 clubs have been visited, they have received care advice and often representatives from the municipality have been involved in these very positive and rewarding visits.

In recent years, four major checks species-inventories have been carried out at Järva MK, Finspångs MS, SMK Kolmården and Landskrona MK. The results are very good and show that the motorways have a lot of species richness. This is thanks to the activities of our clubs which, among other things, prevent overgrowth. More checks are planned.

Six projects at motor clubs have so far received nature conservation grants ("LONA") from the respective municipal and county administrative boards. Svemo sees this as a mark of quality for environmental work and part of a paradigm shift in the view of motorways as something important for the environment and technological development.

Comments from Olle Nordell, ecologist for environmental management in Landskrona:

-We conservationists have a long time been looking at Saxtorp's motorway and felt that there are many exciting and rare species that thrive in the sandy area with sparse vegetation and stirred ground surfaces. The inventory has justified our expectations. It is super positive!

-In general, the management of the area is already perfect. Meaning, motorsport that moves in the sand and creates suitable areas for a lot of species that otherwise would find it difficult to claim an environment with dense and high vegetation.

Economy

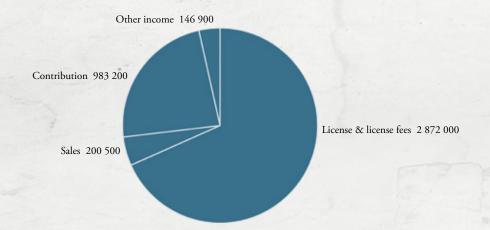
Svemo's Economy

Income	4 202 600 €
Costs	3 788 000 €
Employees'salaries	699 300 €
Balanced profit	2 041 700 €
Payment to public sector	406 100 €

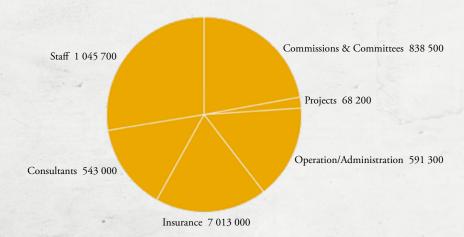
Pensions 78 700 €

Governmental Contribution via Swedish Sports Confederation RF 7 653 000 SEK including RF salary contribution 176 000 SEK

Incomes 2017 (€)



Expenditure 2017 (€)



Economy

Club-built tracks / non-municipal

Half of Sweden's municipalities feel that sports federations in their own municipality are forced to say no to children and young people who want to exercise their sport because of the municipality's lacking access to sports areas. This is according to the Swedish Sports Confederation's annual municipal survey. Yet two out of three municipalities believe that access to sports facilities would increase if the word sport is included in the Planning and Building Act.

The motorcycle and snowmobile sports in Svemo are traditionally "self-supporting" when it comes to sports facilities. The entrepreneurial spirit is huge, and few clubs are waiting for a municipality to build a course for the club. Instead, you buy or rent the land and build it yourself with the help of the members. Today there are about 300 club-owned tracks in Sweden. The municipalities usually have very low running costs for sports facilities when it comes to motorcycle and snowmobile sports. Administration, maintenance, development and a prioritised environmental and safety work is financed by the clubs and Svemo centrally. That way, the benefits for the local community in the area are huge.

Tourism

We are determined about our commitment to engage in international events. This is a prioritised work that requires a long-term perspective and well-working collaboration with the sports and tourism industry. The Swedish government considers that type of collaboration as beneficial for the entire society.

Each year, Svemo organises a dozen World Cups and European Championships, and in addition some major events such as the Gotland Grand National, the world's biggest Enduro competition. The motorcycle and snowmobile sports contribute immensely to the local and national tourist industry in Sweden. A foreign visitor at a motorsports event spends between 1,500 and 2,000 SEK per day.



Vision

Svemo's vision

We divide our sports into:

- Age and level of ambition. By children's sport, we generally mean sports up to the age of twelve. By youth sports we mean sports for teenagers and young adults between 13-25 years. By adult sports we refer to those over 25 years of age.
- In children's sports, we play and let the children learn different sports. The child's comprehensive sports development is the norm for the business. Competition is part of the game and must always be on the children's terms.
- In youth, junior and adult sports, we distinguish between performance-oriented competitions and healthoriented sports.
- In competition sports, the focus is on performance improvement and good competition results. In health-oriented breadth and exercise sports, the focus is on well-being and enjoying sports are norm-giving, whilst level of performance and results are of secondary importance.

Our business idea:

We want to run our sports at all levels so that it develops people positively, both, physically and mentally as well as socially and culturally. We exercise because we want to have fun, feel good and keep developing throughout life.

Therefore, we want to develop our sports in a way that:

- It is constantly evolving and improving in terms of form and content.
- Everyone who wants to, regardless of ethnic origin, religion, age, gender, nationality, physical and mental conditions, can participate in the federation's activities.
- It provides experiences and creates contact between people from different social groups.
- It gives everyone a friendly and secure social community to be part of.



The Swedish Motorcyclists Association

The Swedish Motorcyclists Association (SMC) is a non-profit organization for everyone who rides a motorcycle.



Maria Krafft, Director of road safety at the Swedish Transport Administration

What is your view on the role of motorcycles and mopeds to increase accessibility, reduce congestion and contribute to citizens' mobility in our larger cities?

-We need to improve the conditions significantly for the vehicles that save space, has a high capacity and meet the sustainability target for climate, environment, safety, noise and overall safety. Powered two-wheelers, PTWs, meet these types of necessities both in terms of size-efficiency, parking and are thus vehicles for the future.

How do you see the role of motorcycles and mopeds in a sustainable transport system?

-PTWs can be an alternative way of transportation if they are used in a sustainable way. We should expect quiet, fossil-free, safe PTWs soon, since the technology is already available. Today's motorcycles and mopeds with combustion engines are not in line with the sustainability targets in the long term, which is why the market for new innovative products is highly interesting.

How can the society support the use of space-efficient vehicles such as bicycles, motorcycles and mopeds instead of driving cars (for example infrastructure, traffic regulation and parking)?

-Cities can set their own rigorous targets for sustainability. For example, street parking is reduced for cars to increase accessibility for public transport, pedestrians and bicycles. In this development, vehicles that are space-efficient, quiet and clean can contribute significantly. The bicycle is already a dominant vehicle in many cities, and it should also be possible to include PTWs.

This is SMC

Motorcycles have been around since the early 1900s. They are mainly used by private individuals for commuting and leisure travels. However, they are also used by the military, police, parking companies, doctors, emergency services and many more.

SMC was founded in 1963 and has approximately 70 000 members. Every third Swedish motorcycle owner is a registered SMC member. The fact that so many motorcyclists support SMC voluntarily is crucial to our activity. Estimations and surveys show that the members of SMC are riding as much as 80 percent of all kilometers ridden on a motorcycle in Sweden. SMC's primary task is to promote and protect the interests of motorcyclists in all matters of interest for the motorcycle society. SMC represents Swedish motorcyclists in all contexts locally, regionally and nationally. 14 people work at SMC's office. SMC also has 400 associated clubs, 21 districts and around 1000 elected representatives.

Many decisions affecting Swedish motorcyclists are made outside Sweden. SMC is therefore actively participating internationally through the Nordic Motorcycling Council, NMR, the Federation of European Motorcyclist's Association, FEMA, the Fédération Internationale de Motocyclisme, FIM and the Federation Internationale de l'Automobile, FIA.

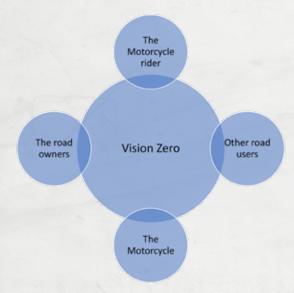
Social benefits

The motorcycle community

The motorcycle community is a fundamental foundation of SMC. The motorcycle culture is characterized partly by the fact that motorcyclists are there for each other, partly by the amount of meetings and activities where the motorcycle is in focus. The motorcycle community bridges over languages and cultures among the international relations of SMC. Contacts are created through online forums, clubs, magazines, the SMC book, the SMC app, advanced training sessions and group trips on motorcycles. There are loads of motorcycle activities every day during the motorcycle season.

Increased safety on PTWs

The Vision Zero concept is based on the fact that all parts of the road transport system must work together to increase road safety, also for motorcyclists. SMC works to prevent accidents but also to minimize the risk of injuries amongst riders and passengers on PTWs if accidents occur. Thus, it is important that the Vision Zero concept includes motorcyclists. The road safety work in SMC includes four parts:



Knowledge and information

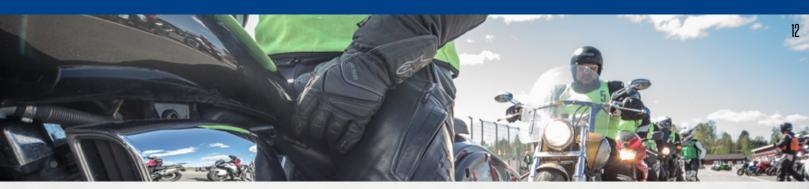
The most important part of the road safety work in SMC is to disseminate information, not only to motorcyclists, but also to the media, authorities, insurance companies, policy makers and others. SMC collects facts, statistics, knowledge, research and are also active participants in research. The results are used as arguments for increased motorcycle safety. For SMC, it is important that all decisions, that have consequences for Swedish motorcyclists, are based on facts and not on prejudice and preconceived opinions.

About 15,000 people can participate in advanced training each year on their own motorcycle in SMC School. The internal annual cost for SMC School is approximately €200 000. SMC is also associated to SVEMO and the Swedish Sports Federation. SMC Sport is SMC's organizer of sporting events. SMC Sport has in a short time become one of Sweden's leading organizers of training and competition on major tracks. This step has also proved to be an efficient way to get the fastest riders away from the roads to the tracks where they get to train and race on their motorcycles at high speed in an orderly way. Therefore, this has become an important part of SMC's road safety work.

Where does SMC appear?

Substantial resources in SMC are allocated for communication. The member magazine MC-Folket has been the main body for spreading information since 1964. SMC's website www.svmc.se is updated daily and is the most content-rich site for facts and statistics related to motorcycles in Sweden. In addition to the website, SMC hosts forums and social media where SMC's messages are displayed millions of times each month. Studies show that information from the motorcycle community is the most trustworthy sender when it comes to form safety awareness among riders.

Social benefits



SMC - one of the world's largest organizers of motorcycle courses

Most accidents are caused by human mistakes, both among the motorcyclists and other road users. The motorcyclists have the major opportunity to prevent both injuries and accidents and to avoid risky situations. However, increased knowledge and awareness is needed.

SMC has arranged training to increase the skills of motorcyclists since 1973. The content of the training has been developed over the years and today SMC is one of the world's largest organizers of advanced trainings for motorcyclists. At the end of the course, regardless of motorcycle and who is the rider of the motorcycle is, all riders drivers believe that the training has given increased skills, that you have become better at dealing with difficult situations, that you have been given resources to focus on the right things and that you have become better at adapting speed according to prevailing traffic situation.

When motorcyclists respond to what has been the most important factor for their own safety, experience gets a high ranking. This is reflected in the high share of fatal accidents with riders on PTWs without a valid license. One third of those who were killed on a motorcycle in Sweden 2011-2018 didn't have a valid driver's license. Riders with a new license and new motorcycle owners are also overrepresented in fatal accidents. Therefore, reaching the new motorcyclists with a safety message is something SMC prioritizes by offering all driver license holders one year's membership for free. Opportunities to practice riding with a private tutor is offered at basic courses throughout the country where specific braking and cornering techniques are trained.

Advocacy

Before a decision is made regarding motorcycles in Sweden, it should be preceded by an investigation, analysis and sometimes also a consultation. It is important that the decision makers understand facts, knowledge, research and studies regarding the issue in question, something that SMC contributes to. SMC responds to referrals, consultations and submits opinions related to motorcycle issues frequently. Through SMC's 70,000 members, we have a unique opportunity to contribute with a user perspective in many different aspects.

All research shows that it is a basic requirement for road safety that all traffic types are included in transport planning locally, regionally and nationally. There is a great improvement potential in Sweden compared to other countries. SMC is an active stakeholder in order to include PTWs in transport plans, safety strategies, guidelines, standards, maintenance and similar issues related to transport plans.

Equality and diversity

The number and proportion of women who take a motorcycle driving license has decreased with 50% over a 15-year period and continues to decline every year. The number of males taking an A-license is constant. For SMC, it is obvious that everyone should be able to take a driver's license and find a motorcycle that attracts and suits the rider. It is not acceptable that women and men have different conditions to pass a driver's license education and riding test. SMC's activities are always open to both women and men, but we also offer special motorcycle courses and meetings, exclusively for women. SMC also offers activities for young motorcyclists.

It is possible to conduct theory tests for passenger cars in 14 languages in addition to Swedish being the only available language for A license. SMC works to enable theory tests for motorcycle to be conducted in these languages to further enable foreign-born people to take motorcycle license and become part of the MC-community.

National and international climate targets

The world agreed on a new global climate agreement in Paris 2015, which means that the rise in the global average temperature should stay well below 2 degrees. Only four degrees in the other direction have given ice ages, which displays how sensitive the climate system is. The Swedish goal is no net emissions of greenhouse gases by 2050. The Swedish Parliament has also decided on a fossil free vehicle fleet in 2030. Thus, it is important to follow developments closely.

Motorcycles are smart vehicles

Motorcycles are space-efficient vehicles that contribute to increased accessibility. A standard motorcycle weighs around 200 kilos while a normal car weighs at least one ton. Most trips by car are made with just over one person per car. Motorcycles have numerous advantages in terms of environmental impact:

- Motorcycles have been equipped with exhaust gas purification since 2003
- Motorcycles tear less on the roads compared to cars
- Motorcycles uses less gasoline compared to cars
- · Motorcycles are recycled in almost 100 percent
- · Motorcycles have a more environmentally friendly manufacturing process compared to cars
- Tests conducted by SMC show that traveling by motorcycle takes significantly less time compared to other means of transport in Stockholm
- Motorcycles don't stand still in queues in the same way as other vehicles, which reduces emissions

These are the main reasons why more people choose to commute with motorcycles and mopeds!

Carbon dioxide emissions from motorcycles

Carbon dioxide emissions from road traffic in Sweden in 2018 were 15,45 million tons of carbon dioxide. Of this, motorcycles and mopeds contributed 0.5 percentages (0.080 million tons). All motorcycle traffic in Sweden for one year corresponds to 8 900 persons * who fly round-trip Stockholm-Bangkok. This can be compared to around 300,000 Swedes traveling to Thailand each year.

The riders in the Stockholm region ride most kilometers per motorcycle, 2160 kilometers per year. The reason is probably because most motorcycle owners commute here.

Foreign studies show that if more people choose to ride a motorcycle instead of a car, queues and exhaust emissions would decrease and the parking spaces would suffice. Furthermore, if motorcycles were allowed to use the bus lanes, accessibility is improved, riding time is reduced, and carbon dioxide emissions are reduced further. This was found in London where PTWs are allowed in almost 1000 bus lanes. This measure is something the mayor of London and the supervisory department of London Traffic Assembly want to extend to all bus lanes in all boroughs of London.

The carbon dioxide emissions would decrease by just over 9,000 tones, which corresponds to just over 11,000 people flying round-trip to Bangkok, if 30 percent of the motorists in Stockholm used a motorcycle instead of car.



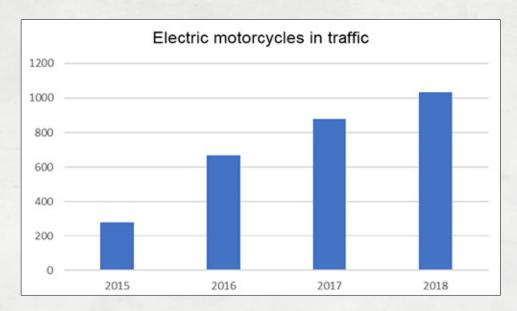
Motorcycles and mopeds can ride in all environmental zones

In spring 2018, the Swedish Government decided to allow the municipalities to introduce three different environmental zones from 1 January 2020. At the same time, the government chose to allow all motorcycles and mopeds to ride in all environmental zones. SMC interprets this as the government sees motorcycles and mopeds as smart, space-efficient and environmentally friendly vehicles that helps to make the air cleaner and the urban environment better in the cities.

^{*} The distance between Arlanda and Bangkok is 8,326 km. One seat on the distance generates a carbon dioxide emission of 4 tons (source: Utsläppsrett.se). The figures for the seat are valid if you apply the Radiative Forcing Index. When calculating aviation's climate impact, the RFI value compensates for the environmental impact that emissions of water vapor and nitrogen oxides have at high altitude.

Premium for electric motorcycles

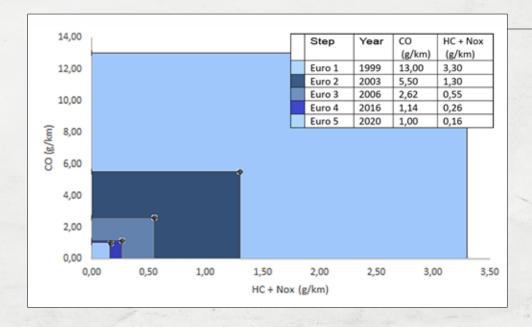
In 2018, the government awarded €35 million annually 2018-2020 among those who bought an electric bicycle, electric scooter and electric motorcycle. The aim was to get more people to commute with climate friendly vehicles. The government believed that the use of global resources and climate emissions would decrease, if more people use a light electric vehicle instead of a car. The new registration of electric motorcycles was faster compared to electric cars in 2018. The increase of electric motorcycles in traffic was 73 percent 2015 - 2018.



Source: Vägtrafikregistret

Reduced emissions from motorcycles

Exhaust emissions were introduced for motorcycles in 1999. Due to stricter requirements from Euro 1 to Euro 3, emissions of carbon monoxide and hydrocarbons have decreased by 94 percent and emissions of nitrogen oxides has decreased by 50 percent. From 2016, additional requirements are applied to all motorcycles through Euro 4. In 2020, emission levels will be reduced again through Euro 5, which corresponds to Euro 6 for cars. SMC welcomes this development.



CO: Carbon monoxide HC: Hydrocarbon Nox: Nitrogen oxide

Fossil-free motorcycles

The development of new fossil-free technology is fast. The European electric motorcycle market grew from 4,121 units in 2017 to 7,478 units in 2018 (+81.5%). However, it remains at niche levels. Only 0.75% of all 1,004,063 motorcycles newly registered in Europe in 2018 were electric. The motorcycle manufacturers are steps behind the car manufacturers in terms of fossil-free vehicles. There are several alternative available today to internal combustion engine in motorcycles powered by electricity, for example KTM, Energica and Zero.

All major motorcycle manufacturers have presented self-riding concept motorcycles. It is impossible to predict what is on the European market in ten years given the technological development that is taking place among the established motorcycle producers and new companies in this innovative market.

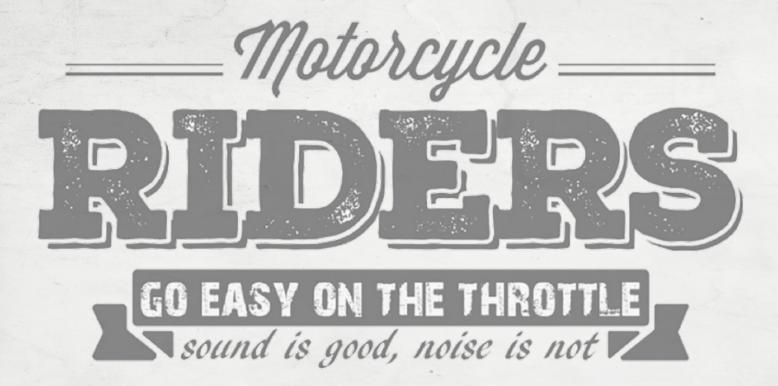
Charging

The electric motor is superior to the combustion engine in energy efficiency. The major disadvantage today is the limited reach, the lack of charging spots and the lack of a uniform payment system. One prerequisite for choosing an electric vehicle is the need for charging stations all over the country. According to the database upload.nu there are 3 492 registered charging places and 15 866 outlets in Sweden. Although it is stated in all contexts that the charging stations are intended for electric cars, they obviously also work for motorcycles that have the same charging standard.

Sound or noise?

Many people have opinions about the sound of motorcycles. Some even sees it as a health risk. The sound from a motorcycle with original system is within the current noise limit. These systems are installed on the vehicle when it is type-approved. The undesired noise occurs when the owners switch to a replacement system where the sound is considerably higher.

The noise issue is always on the agenda in the EU. There is a risk that legislation can become even more stringent on new motorcycles. However, this does not solve the problem since it is the illegal exchange systems that are the problem. In this case the responsibility lies primarily with all of us who rides a motorcycle by riding a motorcycle with legal silencers and riding in a way that doesn't cause unwanted noise.



Electric riders



A reborn electric rider

Jerker is 55 years old and works with environmental issues at a research institute in Stockholm. When he decided to start riding motorcycle again in 2017, there was no alternative for him beside an electric bike. He booked a test ride after seeing the Zero S at the motorcycle show and bought the bike after the ride.

How do you use your electric motorcycle?

-I commute to and from work every day during the motorcycle season. I use it for all kinds of shorter tours, errands and excursions in the immediate area. Riding a motorcycle in Stockholm is a huge advantage. You can pass the queues, motorcycles are exempted from congestion tax and the parking fees are lower.

Are you happy with the range?

-I only charge the motorcycle at home. If I ride at a legal speed, the range is about 200 kilometers. In higher speed the distance is shorter. I don't have a quick charger for my motorcycle, since it's enough to charge it at home. My longest journey so far was about 150 kilometers to our summer house. I'm not a touring motorcyclist.

What are the pros and cons of an electric motorcycle?

-The purchase cost is high but it is cheaper to ride and own. Service costs are significantly lower compared to standard motorcycles. Riding an electric motorcycle is a wonderful nature experience, you are not disturbed by the noise from the engine. However, I have found that other road users do not notice me when I get on my Zero. I must be extra careful. The maximum load weight is 167 kg, which means that two full-grown people with protective gear can't ride on the motorcycle.



Three electric bikes in the garage

After 35 years on gasoline motorcycles, Gert switched to electric motorcycles in 2015. Now he owns three electric motorcycles, two are Energica, which he also imports to Sweden. Gert drove 8000 kilometers on the two bikes during last season and rides mainly on leisure excursions on small curvy roads.

Difference between electricity and gasoline?

-The main differences is that the electric motorcycle has no gears and the instant torque. You get a huge impact, an exciting technology and a modern concept. The disadvantage is the range. My bikes will reach a maximum of 200 kilometers on one charge during eco-riding. With active riding I can go 100-120 kilometers before I need to recharge. I always stretch my legs and take a cup of coffee during the quick charge which takes maximum 30 minutes. One basic rule of having an electric bike is that you charge every time you stop to have more charge when you drive off compared to when you came.

How far have you been riding?

-My longest trip so far is 350 kilometers to our summer house. I charged the motorcycle three times during that ride. Through upload.nu I can find all charging places in Sweden via GPS. I can easily go from Lund to Stockholm or Gothenburg, where there are charging stations along the route.

Economy?

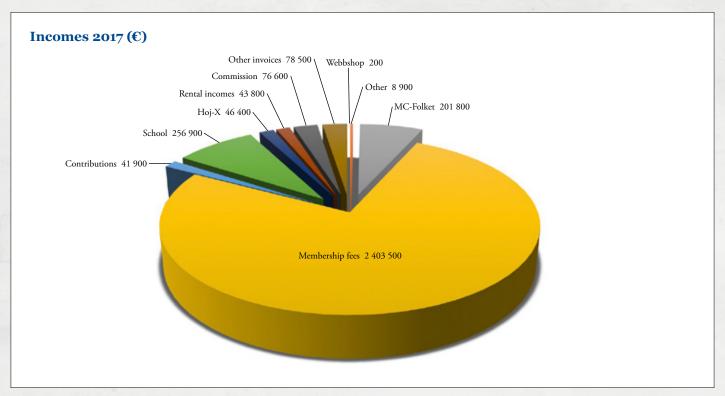
-The bikes are cheap to own since both service and charging cost less compared to gasoline-powered motorcycles. However, they are more expensive to buy. Here, the Government's contribution of €1000 was very welcome!

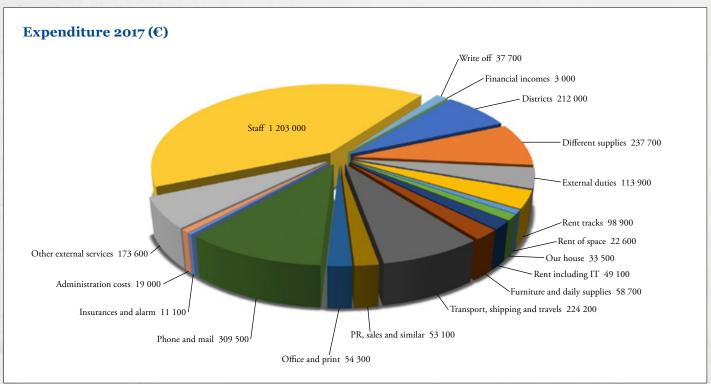
Economy

SMC economy

The annual turnover of SMC is almost €3 million. The main incomes are membership fees, advertisements and participation fees in SMC School courses fees. The largest expenditure are salaries, postage and transports.

Distribution of income and expenditure





Conclusion and vision

The motorcycle industry in Sweden and Europe

SMC estimates that there are around 2,500 people in Sweden are working in the motorcycle industry. You will find them at traffic schools, motorcycle dealers, motorcycle manufacturers, magazines, organizations, driver examiners, motorcyclists, parking guards, insurance companies, events, the army and in the emergency field. Throughout Europe, there are around 300,000 people working in the motorcycle industry.

Motorcycles contributes to society

Every year, Swedish motorcycle owners pay €26 million in vehicle tax, fuel tax and VAT. In addition, they pay approximately €9 million in traffic insurance tax, i.e. a total of €35 million. In a survey made by Demoskop, the SMC members also responded that each one spend an additional €1200 per year on goods and services related to their motorcycle ownership. In total it is about one hundred million Euros. The Swedish government also get taxes from employees in the industry and VAT on vehicles, protective equipment, education, hotels, food, coffee and so on. For SMC it is obvious that the taxes that motorcyclists pay, should be invested in infrastructure measures to increase motorcycle safety.

Major events such as Hojrock in Västervik, the Custom Bike Show in Norrtälje and Mälaren Runt attract thousands of motorcyclists and spectators. Each person generates hundreds of Euros for the tourism industry. Added to this there are hundreds of local motorcycle events across Sweden every year and an increasing number of motorcycle tourists.

The road safety work of SMC saves lives and money

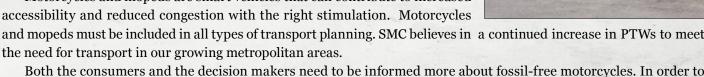
The number of motorcycles on Swedish roads has been doubled in the last 20 years. At the same time, the number of people killed and seriously injured has almost halved. Each death in traffic is estimated to cost about €4 million and each

seriously injured €1,1 million. The reasons for the reduced accidents are many: safer motorcyclists, safer vehicles, better personal protective equipment and other factors that are covered by the road safety work that is carried out voluntarily in SMC and without any contributions beside the membership fees. Therefore, the society saves large sums on the safety work that takes place within SMC every year such as; information, campaigns, advanced training, education, practice riding and much more.

SMC's vision

SMC wants to see a future where the new registration of fossil-free motorcycles increases. At the same time motorcycles with internal combustion engines must continue to live in some way, perhaps through the development of alternative fuels. Today's motorcycles are becoming increasingly cleaner and have an obvious place in tomorrow's transport system. Our historic vehicles must also be allowed to remain. Sweden has a world-unique engine culture and technical expertise. The ability to repair, recycle or recreate old items are skills that must be preserved and passed on to future generations.

Motorcycles and mopeds are smart vehicles that can contribute to increased accessibility and reduced congestion with the right stimulation. Motorcycles and mopeds must be included in all types of transport planning. SMC believes in a continued increase in PTWs to meet



stimulate the purchase of electric motorcycles, a "super-motorcycle bonus" corresponding to the car should be introduced. It must be obvious and made clear that motorcycles can use all charging stations and are included in the plans of charging infrastructure.

SMC's ambition is to explain how we, as motorcycle owners, can reduce the environmental impact, by for example reduce the speed and minimize modifications that leads to increased exhaust emissions and noise.





17

Sveriges MotorCyklister