

Sustainable Mobility - Made in Germany

WWW.GERMAN-SUSTAINABLE-MOBILITY.DE



Preface

Innovation in the transport sector is being driven by a variety of factors, including increasing economic, ecological and social aspirations of citizens worldwide, changing consumption and production patterns, and limited natural resources. The provision of reliable transportation services often cannot keep pace with dynamic economic and demographic trends, particularly in emerging economies and developing countries. Densely inhabited urban areas require adequate connections to world markets, but the need for reliable transportation also reaches far into remote rural areas. Sustainable and affordable transport solutions provide vital access to markets, job opportunities, and education and health services. Within growing cities of developing countries, little space remains for walking and cycling. Although these modes of transport are a healthy, low-cost option for short distances, their integrati-

on into mobility concepts and policies has proven difficult. Motorised transport remains the dominant solution for meeting the short-term demands of individual mobility and goods distribution, despite its reduced energy-efficiency and negative environmental and health effects. A major cause of noise and air pollution and traffic-related accidents, high volumes of cars and trucks worsen the burden of traffic. Facing the peril of climate change, sustainable transport solutions are crucial to serve mobility demands in a socially and economically-friendly manner.

Germany is known worldwide for its outstanding road infrastructure, extensive railway system, inclusive public transport and bike-friendly environment. As global frontrunner in environment-friendly politics and technologies, Germany offers many far-reaching solutions in sustainable mobility and logistics services. The German Partnership for Sustainable Mobility (GPSM), initiated by the Federal German Ministry for Economic Cooperation and Development (BMZ) and the Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) is serving as a guide to sustainable mobility and green logistics solutions from Germany. As a platform for exchanging knowledge, expertise and experiences, GPSM supports the transformation towards sustainability in developing and emerging countries. To strengthen international dialogue, the GPSM serves as a network of information exchange and communication between academia, businesses, civil society and associations that have all gathered invaluable experiences and skills in framing transport transformations.

We invite you to find out more about "Sustainable Mobility – Made in Germany" and contribute your experiences and solutions to our work as a partnership.



Friedrich Kitschelt State Secretary Federal Ministry for Economic Cooperation and Development



Jochen Flasbarth State Secretary Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety

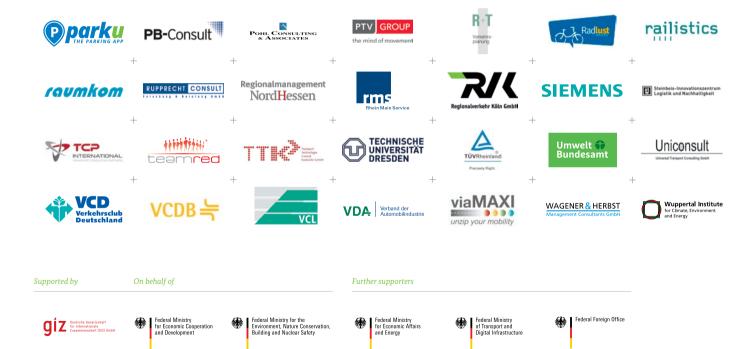
The Friends of the German Partnership for



Find further information: www.german-sustainable-mobility.de/network/

Sustainable Mobility

Please contact us to become a friend of GPSM secretariat@german-sustainable-mobility.de





Increasing challenges - comprehensive solutions

In a rapidly changing world, mobility is key to sustainable development. Increasing economic, ecological and social aspirations of citizens worldwide, changing consumption and production patterns, and limited natural resources are driving innovation in the transport sector. Transport services and infrastructure are no longer seen as simple means of moving people and goods from A to B – but mobility and logistics are increasingly perceived as key agents of change.

A wide range of intractable problems such as polluting emissions, noise, traffic accidents, resource depletion, and inaccessibility of amenities are directly linked to the current transport regimes.

Developing countries and emerging economies are often more affected by these negative impacts than developed countries. In many developing countries, high transport costs and inaccessibility are hampering economic development and trade, air pollution related health problems are increasing, and around 1.3 million people die each year in road traffic accidents – the vast majority of them in developing countries. This negative trend will continue if sustainable transport solutions are not systematically pursued in a comprehensive manner.

Sustainable mobility solutions can transform cities into places for healthy living, research and innovation, and efficient production. Green logistics helps improving the efficiency of production and trade whereby reducing the negative footprint of transport. Many mobility problems faced by developing countries and emerging economies today are strongly linked to global challenges such as climate change, eroding natural resources, demographic changes and migration. Reconciling socio-economic development with the protection of our livelihood is the greatest challenge in the 21st century. But there is good news: smart solutions exist. The international exchange of ideas in the field of sustainable mobility and logistics offers a unique opportunity to help solve one of the greatest challenges of our generation. Germany is a world leader in sustainable, innovative and efficient mobility solutions. By gathering German knowledge and expertise, the GPSM makes a valuable contribution to the international dialogue on smart transportation and to sustainable development worldwide.

Sustainable Mobility - Made in Germany

"SUSTAINABLE MOBILITY - MADE IN GERMANY" STANDS FOR SUSTAINABLE, PROVEN, RESOURCE EFFICIENT, INNOVATIVE, TRUSTWORTHY AND FLEXIBLE SOLUTIONS FOR ALL DOMAINS OF MOBILITY AND LOGISTICS SERVICES.

Germany has a long history of successful changes and transformations in the transport sector – including

- the establishment of comprehensive funding schemes
- the re-emergence of walking and cycling as safe and viable modes of transit
- → the reorganization of the public transport sector
- the continuous development of progressive regulations
- the development of efficient propulsion systems
- the integration of different modes of transport, including multimodality in logistics

Academia, businesses, civil society and associations have gathered invaluable experiences and skills in framing these transformations.

The German experience is worth of study. Due to the scarcity of energy resources, the high density of people and enterprises, as well as the compactness of the country, Germany opted early on for energy-efficient, integrated and smart solutions in the transport sector.



Focus Areas

The GPSM covers the entire gamut of sustainable mobility and green logistics.
The following focus areas facilitate access to information, knowledge and expertise:



General Policies for Sustainable Transport

The transport sector's foremost challenge lies in maintaining appropriate infrastructures and services, while also minimizing its negative impacts. A sustainable balance between the needs of societies, businesses and the environment is best achieved through comprehensive institutional planning and sound policies. This covers national regulations and plans (e.g. emission standards for vehicles, national infrastructure plans, among others), regional initiatives (such as regional planning approaches) and local approaches (such as low emissions zones and parking policies).



Transport and Urban Development

Cities play a major role in fostering sustainable mobility solutions. German cities are deploying a broad range of tools and measures to tackle air pollution, to improve access to services and to enhance safety. This includes the continual improvement of public transport, the promotion of walking and cycling, and new concepts for city logistics. City administrations, public transport operators, and planning and design offices possess a rich and diversified body of knowledge reflecting not only their success stories but also lessons learned from setbacks.

Smart Mobility

A high level of flexibility is the hallmark of the German mobility system. Smart mobility – such as carsharing and bikesharing – is a promising new element in the mobility landscape, offering flexible and attractive alternatives to the personal automobile. Shared mobility allows for a more efficient use of vehicles, and can reduce the cost of private car ownership. The number of car sharing operators - both with station-based as well as free-floating concepts - is quickly expanding in many major cities. Smart mobility Germany includes the widespread use of clean and innovative technologies. Electric propulsion in public transport, car and bike sharing systems as well as in public and private vehicle fleets is increasingly contributing to clean air in our cities. Once renewable sources are used, the transport sector can make its contribution to climate protection.

Public Transport

Movina a vast number of daily commuters between their homes and work places requires reliable public transport systems. In Germany, an average of 30 million passengers use public transport per day, and the numbers are growing. In the period from 2004 to 2013 the total number of passengers increased by 9.6% - almost 1 billion - to the current number of 10.9 billion yearly public transport riders. This is particularly impressive, considering the fact that the German population declined from 82.5 to 80.5 million during this same period. Our integrated networks of long-distance and regional trains, as well as trams and busses are backbones of mobility in our cities. A well-established system of institutions, regulations and funding provide a reliable structure for one of the world's best public transport systems.



Safety

Germany managed to stop and reverse the trend of increasing accident figures – in fact the number of road traffic deaths has been cut from more than 19,000 in 1970 to 3,338 in 2013. 100 cities in Germany with a population of more than 50,000 have achieved zero traffic fatalities in at least one of the past four years - in fact, four cities have had no traffic fatalities since 2009. Four larger cities with a population over 200,000 have achieved "vision zero" in one of the recent years. A broad range of public and private actors is actively joining forces to educate drivers, to review and audit existing and new infrastructure in respect to safety, while also improving emergency response systems.

Cycling

Cyclina enjoys areat prominence in German cities. In our top-league cities such as Münster, almost every second trip is done by bike. Large cities like Frankfurt and Berlin have doubled or tripled their cycling shares in the past 15 years. The bicycle has become a symbol of a healthy and modern lifestyle, and is a crucial part of any urban transport strategy. We put substantial efforts in providing both high-quality infrastructure and in developing modern concepts to improve the cycling experience. Bike sharing, central bike parking and service centres, and electric propulsion systems have become very popular in recent years. Today more than 1.5 million e-bikes and pedelecs are roaming German roads.

Logistics

According the World Bank LPI Index, Germany ranks No 1 globally in terms of logistics. Multimodality, i.e. the provision of reliable transport options by road, rail, air and waterways as well as appropriate interconnectivity between these systems is a key factor for success. Further, German freight service provider's perfected warehousing, lean procedures and a high degree of IT-integration are contributing to a high level of efficiency in terms of operations, energy consumption and environmental impact.



Infrastructure

Well-developed transport infrastructure is the basis for the interconnectedness of cities and regions. Passenger transport and logistics operators are able to realise high operational efficiency because of Germany's well-maintained roads, railways, airports and waterways. Infrastructure development is embedded in integrated planning frameworks and mobility strategies, which are suited to realise the sustainability potential of all transport modes. The design and construction of infrastructure is guided by up-to-date norms, which undergo constant revision based on extensive research and consultation between partners.

Clean Air

According to an actual estimate, released in March 2014 by the World Health Organization (WHO), about 3.7 million premature deaths were caused by outdoor air pollution worldwide in 2012. If also health effects of indoor air pollution are taken into account, the pollution of air is the largest single environmental health risk on a global scale. Even though air pollution has its largest impact on human health in lowand middle income countries, particularly in South-East Asia, it is also a major health risk in industrialized regions.

Technology

The transport sector still possesses enormous potential to increase its energy efficiency, to improve safety, and to reduce the environmental and social impact. Academia and research institutes as well as the private sector are actively working to advance technologies and to maintain the position as leading provider of transport technologies. For example, the Federal Government is actively promoting the electric forms of transportation as a clean mobility solution. Intelligent Transport Systems are facilitating the flow of passengers and goods in cities and help to reduce emissions.

\rightarrow According to the World Bank LPI Index, Germany ranks No.1 globally in terms of logistics.







The German Partnership for Sustainable Mobility (GPSM)

The German Partnership for Sustainable Mobility (GPSM) is serving as a guide for sustainable mobility and green logistics solutions from Germany. As a platform for exchanging knowledge, expertise and experiences, GPSM supports the transformation towards sustainability in developing and emerging countries. It serves as a network of information from academia, businesses, civil society and associations.

The GPSM supports the implementation of sustainable mobility and green logistics solutions in a comprehensive manner. In cooperation with various stakeholders from economic scientific and societal backgrounds, the broad range of possible concepts, measures and technologies in the transport sector can be explored and prepared for implementation.

The GPSM is a reliable and inspiring network that offers access to expert knowledge, as well as networking formats. The GPSM is comprised of many reputable stakeholders in Germany.

The GPSM is part of Germany's aspiration to be a trailblazer in progressive climate policy, and in follow up to the Rio+20 process, to lead other international forums on sustainable development as well as in European integration.

Integrity and respect are core parts of our partnership values and mission. The transferability of concepts and ideas hinges upon respecting local and regional diversity, skillsets and experiences, as well as acknowledging their unique constraints.



What we offer

- → "Sustainable Mobility Made in Germany"
- → Mobility and logistics knowledge, concepts, expertise, and products made in Germany
- → Information tailored for planners and decision-makers worldwide
- → Access to notable experts in Germany
- → Information on financing options
- → Networking and professional connections

Who is initiating the Partnership?

The German Partnership for Sustainable Mobility is an initiative by the Federal German Ministry for Economic Cooperation and Development (BMZ) and the Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB).



Publications

- Clean Air Made in Germany
 www.german-sustainable-mobility.de/?p=6383
 Discover Berlin by Urban Transport
 www.german-sustainable-mobility.de/?p=6623
- → A comprehensive approach for road safety The example of Germany www.german-sustainable-mobility.de/?p=7088
- → Consulting in Sustainable Mobility Made in Germany www.german-sustainable-mobility.de/?p=7083
- → Sustainable Logistics Concept and Case Studies from Germany www.german-sustainable-mobility.de/?p=7092



News

→ Get recent news of "Sustainable Mobility – Made in Germany" and the latest developments of the partnership.

www.german-sustainable-mobility.de/news

- → Become a friend of the German Partnership for Sustainable Mobility, a vibrant network for sustainable mobility, to get updates and news on upcoming events and further steps of the initiative.
 - $\textbf{Contact:} \ \underline{secretariat@german-sustainable-mobility.de}$
- → Follow us on Twitter or Facebook to get the latest updates on developments of "Sustainable Mobility – Made in Germany" www.twitter.com/GermanMobility www.facebook.com/germansustainablemobility

Find a Job in Sustainable Mobility

Searching for a new challenge in Sustainable Transport?

Find job offers by the friends of the German Partnership for Sustainable Mobility online at:

www.german-sustainable-mobility.de/jobs/





Photocredits:

© shutterstock, fotolia, Flickr (kaffeeeinstein, pg. 20, pg. 18, CC BY-SA 2.0; Sascha Kohlmann, pg. 18, CC BY-SA 2.0; Tobias Mandt, pg. 18, CC BY 2.0; Tim Godber, pg. 22, CC BY-SA 2.0, https://creativecommons.org/licenses/), GIZ / Paul Fremer pg. 9.

Disclaimer:

The German Partnership for Sustainable Mobility (GPSM), supported by GIZ, is an initiative on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ) and the Federal Ministry for the Environment; Nature Conservation, Building and Nuclear Safety (BMUB).

The information in this publication has been carefully researched and diligently compiled. Nevertheless, GIZ refuses any liability or does not give any guarantee for the validity, accuracy and completeness of the information provided. GIZ assumes no legal liabilities for damages, material or immaterial in kind, caused by the use or non-use of provided information or the use of erroneous or incomplete information, with the exception of proven intentional or grossly negligent conduct on the side of GIZ.

GIZ reserves the right to modify, append, delete parts or the content. This publication contains third-party content. The published information is not under the control of GIZ and GIZ is not responsible for the contents of any promoted site. The placement and listing of companies, academia or other stakeholders (or their logos, contact details or other information) in this publication does not mean any endorsement by GIZ or other partners. Users are encouraged to exercise due-diligence in respect to information, offers and proposals.

WWW.GERMAN-SUSTAINABLE-MOBILITY.DE

IMPRINT

German Partnership for Sustainable Mobility (GPSM)

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH Registered offices Bonn and Eschborn, Germany Dag-Hammarskjöld-Weg 1–5 · 65760 Eschborn

Telephone: +49 61 96 79-2636 Telefax: +49 61 96 79-802636

E-Mail: contact@german-sustainable-mobility.de

Supported by



On behalf of



