



DGB



CLIMATE, ENERGY, MOBILITY

**SHAPING
A JUST
TRANSITION**



Imprint

Publisher:

DGB-Bundesvorstand
Abteilung Struktur-, Industrie- und Dienstleistungspolitik
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Photos cover page:

Soonthorn / Adobe Stock
danchooalex / iStockphoto
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November 2018

The amendment C011 "Climate Energy Mobility – Shaping a Just Transition"
has been approved by the 21st Federal Congress of the
German Trade Union Confederation in May 2018.

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FOREWORD

Dear Readers,

The transformation of the economy has accompanied the work of trade unions since the beginning. At the same time, the trade union movement has always claimed to be in a position to shape structural changes. But this principle also applies on the way to a greenhouse gas-neutral economy. In order to tackle climate change, humanity will have to make significant efforts to reduce greenhouse gas emissions, which will also bring about change - how we do business, how we work and how we live. Jobs, professions, regions, industries and entire economies will change dramatically.

The task for trade unions is to place the interests of working people at the center of the debates about change and structural transformation, giving them orientation and security. Accordingly, the international trade union movement has advocated a proper shaping of climate policy worldwide and in the context of climate negotiations under the headline just transition. This demand was also established in the Paris Climate Agreement. The road to such a just transition must be made concrete in the coming years and implemented by the contracting states. Certainly here there will be no uniform way for every state. The challenges and situations in each country are too different. But it is also true that the strength of the trade union movement - organized solidarity - has a decisive impact on how well the changes are shaped.

From the point of view of the DGB, this means for the debate in Germany and Europe: The discussions about climate protection and the transformation of the energy supply and the transport sector must be conducted more from an employment policy perspective. And they have to get out of the petty black and white thinking. Decision C011 "Shaping a Just Transition" of the 21st Federal Congress of the German Trade Union Confederation is a contribution to this debate and describes trade union requirements for climate, energy and transport policy. These include not only the development of sustainable energy and transport infrastructure, but also a state with the capacity to act, an active structural and industrial policy, access to more affordable energy and mobility and equitable financing of the transformation process.

Decision C011 "Shaping a Just Transition" provides orientation for the trade union debate in the coming years and is also an invite to a collegial discussion on fair ways to good work and more climate protection.

With many greetings



Stefan Körzell

Member of the executive federal board of the DGB



CLIMATE, ENERGY, MOBILITY – SHAPING A JUST TRANSITION

In order to counter climate change, a gradual departure from the burning of fossil fuels is necessary as stipulated in international agreements. The transition to a low-carbon economy calls into question the existing structures of our economic system, particularly as far more than 80 percent of the total primary energy supply stems from fossil fuels.

Economies, regions, industries, companies and employees are already in the middle of the far-reaching change processes required for an energy and mobility transition. The trade unions must ensure that this transition is implemented fairly from the perspective of working people. This is the only way to ensure long-term acceptance of the necessary changes to our economic structure. The trade union concept of “Just Transition” was stipulated in the Paris Agreement.

The German Confederation of Trade Unions, DGB, and its member unions demand that the socially just creation of structural change be given much greater focus in the political debate in future. We want “Just Transition” to be formulated as the guiding principle of German, European and international climate policy. The following aspects in particular should guide political action:

- Good Work, the binding effect of collective agreements and co-determination must be strengthened. This must apply equally to existing and new jobs and sectors.
- An active structural policy must create sustainable and economically viable prospects, in particular by harnessing regional and decentralised potential for structural development and aiming for a positive employment record.
- Ongoing employee qualification as well as increased training and further education must empower employees to drive new ideas forward as innovators.
- The fair distribution of costs and revenues must ensure that the possible negative distribution effects of structural change are limited as far as possible. Consumer groups must not be burdened beyond their own capabilities.
- Security of supply and affordability of energy and mobility must be in line with an ambitious climate policy.

Unions advocate globally for country-specific implementation of Just Transition. They are, together with workers and employees, central agents of the transition process:

- We know the obstacles to creating climate-friendly supply structures.
- We want to embrace opportunities to create and protect high-quality jobs.
- We want to participate in the transition of our energy supply and transportation systems with the objective of Good Work and a higher quality of life.

Well-qualified employees are a prerequisite for a successful transition process. It is the employees on site who apply and implement new concepts and systems. Therefore, it is important to continue to train them well and to qualify them further. At the same time, a culture of participation and co-determination must be established or strengthened in the companies. Ideas and innovations from the workforce can only emerge in a corporate culture that welcomes commitment. Works councils are key players in implementing climate protection locally. The corresponding co-determination structures and experimental spaces set the stage for employees to accept new ideas.

Particularly in the industrial sector, it has to date not yet been conclusively determined which technologies will be used to achieve the ambitious climate targets. It is therefore essential that innovations and investments are accelerated along the value chains and consistently oriented towards a sustainable economy. The transition process requires a state capable of taking action to create Just Transition with a balanced mix of framework, exertion of influence and public sector investments (including in a climate-neutral infrastructure).

An active employee-oriented industrial policy promotes innovation to strengthen the performance and competitiveness of industrial value creation, rather than driving a dumping race regarding working conditions and environmental standards. To this end, complete value chains are important to also preserve industry's problem-solving competence. Only in this way can industry make its specific contributions to achieving climate targets, for example as a supplier of the energy transition or by providing products for low-carbon mobility. Deindustrialisation, on the other hand, is not a sustainable development model.

Regions whose prosperity largely depends on carbon-intensive products, carbon-intensive production processes or energy supply are facing massive changes. This also applies to regions that are in a good economic position today. Future prospects must now be developed through a preventive regional structural policy in order to avert economic decline for all regions. This must be done following comprehensive strategies linked to the industrial skills of the regions concerned and geared towards the creation of high-quality jobs. For Germany, this also means that financial resources must be made available in addition to the existing funding structures (European Structural Funds, Joint Agreement for the Improvement of Regional Economic Structures).

The DGB and its member unions therefore call for politicians and businesses to

- pursue an ambitious climate protection policy in line with international, European and national targets;
- lineate a trajectory for Just Transition;
- secure employment prospects in structural change through qualification and innovation activities;
- strengthen innovation and technology development along value chains;
- reconcile climate and environmental protection, competitiveness, security of supply, Good Work and social security, affordability and equitable burden sharing;
- create the conditions for an efficient overall energy system consisting of electricity, heating and transport;
- create experimental spaces in which new concepts, systems and innovations can be tested with the participation of the collective agreement parties. Cities, municipalities and companies must seek new forms of cooperation, e.g. in urban mobility partnerships.

1. ADVANCING CLIMATE PROTECTION

In recent years, climate targets have been adopted at international, European and national level:

With the Paris Agreement, humanity has committed itself to limiting the global rise in temperature to below two degrees Celsius.

In Elmau, the G7 states adopted the goal of completely eliminating carbon emissions by the end of the century.

The EU has set itself climate targets for 2030. The EU's objective is to reduce carbon emissions by 40 percent by 2030.

With the Climate Action Plan 2050, the German Federal Government has further specified how its climate targets can be achieved.

The DGB and its member unions support this target structure. In the DGB's opinion, the Climate Action Plan represents a meaningful foundation for discussing the path to a low-carbon economy. The highly controversial debate in 2016 on the German Federal Government's Climate Action Plan 2050 has shown, however, that social negotiation processes on priorities and pathways of dependency are only just beginning. This was particularly evident in the targets stipulated by the Climate Action Plan for reducing carbon emissions in the individual sectors by 2030. The timeframe is constantly shrinking. The more concrete the restructuring processes become, the more conflicts of objectives arise which there are still too few adequate instruments to address. In any case, these conflicts require the broad involvement of all stakeholders as well as technical consultation and the impact assessment of the necessary measures. To this effect, we trade unions will play an objective and constructive role in the work of the planned commission for "Growth, Structural Change and Employment".

The energy transition requires the reform of highly complex systems, as does the mobility transition. This will not succeed without broad social acceptance and without the willingness to rethink one's own behaviour. The DGB therefore sees a great social responsibility in shaping the necessary transition processes.

In this legislative period, the DGB and its member unions expect the German Federal Government to provide governance that will enable broad social participation in and a high degree of transparency for the objectives and measures for achieving the climate targets.

To this end,

- strategic climate protection planning must contribute to a climate policy that encompasses all sectors. We advocate utilising Germany’s research and industry network with its high innovation potential to achieve climate targets. The balance between innovation, climate protection and employment must not be jeopardised in the process. In particular, scientific knowledge must be gathered continuously and an impact assessment must be carried out with regard to social and economic viability and the achievement of objectives.
- a more integrated management of the energy and mobility transition must take place. A **“transition advisory board” must be established** at federal level which will work on creating an integrated energy and mobility transition across all ministries. The DGB and its member unions see this as an opportunity to combine the various fields of action from industrial, research and labour market policy with legal regulation geared to climate policy requirements.

2. CONCEIVING OF A COMBINED STRATEGY FOR ELECTRICITY, HEATING AND TRANSPORT

The convergence of the various consumption sectors is a characteristic feature of a climate-friendly system. The subsystems electricity, heating and mobility must function together holistically in future. It is crucial not only to advance individual innovations, but also to pursue systemic approaches for the integration of different producers, consumers and storage. Progressive digitalisation can provide the information technology prerequisites for this.

The DGB calls for an **investment plan for modern infrastructure**, focusing equally on the physical transport network, alternative fuel infrastructure and cross-border digital infrastructure. Considerable coordination tasks are required in order to exploit the synergies between the transport, energy and telecommunications infrastructures, and these tasks can only be performed by a state capable of taking action with the necessary resources.

In order to achieve the goal of a low-carbon energy supply, renewable electricity must be used for the heating and transport sectors in future. However, in order to link these sectors intelligently ("sector coupling"), a number of technical, economic and infrastructural conditions must be met. Accordingly, the expansion of renewable energies must be expedited so that the electricity supply draws increasingly on energy sources free of greenhouse gases. Only in this way can greenhouse gas emissions, which have been stagnating for years, be reduced in the heating and transport sectors.

Theoretically, there are various possibilities to shift the use of energy over time, especially in energy-intensive industries (demand-side management). However, industrial energy consumers need appropriate economic incentives and framework conditions tailored to their specific needs so that the potential can actually be exploited. Rendering demand more flexible in the industrial sector should only take place on a voluntary basis.

3. REQUIREMENTS FOR CREATING THE ENERGY TRANSITION

The implementation of the energy transition in Germany and Europe is one of the key fields of action for achieving climate targets. Just under seven years after the second resolution to phase out nuclear energy, it has become clear that Germany's implementation of the energy transition is not going smoothly in all areas and that some of the targets set are not being met: Emissions of greenhouse gases have fallen only marginally and energy efficiency has barely increased. The expansion of the network infrastructure is sluggish, as is the market development of mass storage. The reforms introduced to the Renewable Energy Act have limited the expansion of green electricity, although the demand for climate-neutral electricity will increase sharply as a result of sector coupling.

The incipient structural change in the energy industry has led to a loss of jobs, and at the same time new job creation in the wind industry and along the value chains is stagnating. It also remains to be seen how supply security can be guaranteed in the medium term if a large part of the power generation network is no longer refinanced due to price developments on the electricity market and no new investments are made in guaranteed capacity. Financing the energy transition has also had a clear effect on end consumer prices, which in turn has social and industrial policy repercussions.

Such a profound transition cannot run smoothly at all times and in all fields of action. However, the DGB and its member unions demand that, in future, politicians resolve the existing conflicts of objectives and opposing development tendencies better than they have so far.

- This is why we need **Just Transition**: Germany also needs a fair and just energy transition process. To this end, Germany can draw on the successful tradition of social partnership. Politicians and companies must take action together with trade unions and demand the necessary social participation in order to jointly shape Just Transition.
- We need **investments**: The expansion of renewable energies, the construction of new infrastructures, the increase of operational energy efficiency and the renovation of buildings require massive investments. In particular, the financial state incentives for building renovations must be significantly increased in order to be able to achieve the goals set.
- We need **innovation**: Information technology links between producers and consumers must be advanced. New materials, technologies and processes in energy and storage technology ensure a competitive and secure supply. Innovation also leads to new (cheaper and more efficient) products and technologies that advance the energy transition.
- We need **infrastructure**: Electricity and gas grids, heat networks and power and heat stores, as well as the intelligent linking of infrastructures in Germany and Europe, form the basis for a successful energy transition.

The DGB and its member unions therefore consider the following measures necessary:

3.1 Advancing the European Energy Union

In future, the energy transition should be increasingly implemented at the European level. The need for this is particularly evident in the reduction of greenhouse gases or the expansion of (network) infrastructures. But neither a purely European nor a purely national control can be promising. The key is that harmonisation should take place through the creation of European primary law and not, as was previously the case, primarily through the workaround of Union State aid law, with which the EU Commission intervenes retroactively in the legislation of the Member States. In this process, Europeanisation must not be equated with an uncritical, singular focus on the domestic market. National regulatory measures and social safeguards remain indispensable.

Moreover, the implementation of the Energy Union should not only be viewed from a narrow energy and climate policy perspective. It offers the opportunity to turn the necessary investments in a climate-friendly energy and mobility system into a lever for Europe's economic recovery. Just Transition must become a mainstay of the Energy Union.

Comprehensive investments in Europe can only be stimulated by ambitious energy and climate targets. In addition, we call for mandatory **targets for security of supply, industrial development, renewable energy and energy efficiency** to be apportioned to all Member States according to their capabilities.

Energy efficiency can make a much greater contribution to preventing climate change. In view of the Paris targets, we call for an EU-wide target to increase **energy efficiency** by 40 percent by 2030. This must take place in consideration of economic developments. Savings targets that ignore the development of an economic power prevent both investment and job creation.

The emissions trading system (ETS) is the central instrument for reducing greenhouse gas emissions in Europe. It will be decisive for any future system to achieve three key objectives: The effective **reduction of greenhouse gases**, the **promotion of investments in innovative technologies** within the ETS sector and the **protection and expansion of industrial value creation in Europe** (target: 20 percent share of industry in GDP).

From the point of view of the DGB and its member unions, it is crucial that comparable carbon prices are also achieved at G20 state level in the medium term. The EU Commission and the German Federal Government are therefore called upon to step up corresponding initiatives.

3.2 Ultimately increasing energy and resource efficiency

Energy efficiency is the best way to reduce greenhouse gases in all sectors. The DGB and its member unions therefore call for an **Energy Efficiency Act** in order to create clarity and planning security for investments and innovations.

In its “Green Paper on Energy Efficiency”, the German Federal Government proposed new instruments to increase energy efficiency. In the planned “White Paper on Energy Efficiency”, these must now be developed in order to significantly increase energy efficiency investments in all sectors.

As it reduces energy and raw material costs, resource efficiency in businesses is a means of securing the future of existing company sites and jobs. Energy and resource efficiency is therefore also the best means of supporting structural change with a view to increased employment and competitiveness for companies. Employees can also make a contribution to operational energy efficiency.

The DGB and its member unions call on politicians and companies to develop a **“strategy for innovation and energy efficiency”** analogous to the “energy efficiency strategy for buildings” together with the trade unions. The involvement of employees, works councils and trade unions must be an integral part of this.

A virtually **climate-neutral building stock** – along with measures in the transport and agriculture sectors – is central to achieving the climate targets. The German Federal Government’s “energy efficiency strategy for buildings” can act as a transparent and fair roadmap. However, it must be reworked to more concretely describe the mix of instruments with which the target is to be achieved.

In any case, the building sector will require massive investments in the coming decades. Particularly if other sectors cannot adequately contribute to the achievement of reduction targets, additional efforts should be encouraged in the building sector. Accordingly, the **energy-efficient renovation of buildings** must be supported with at least five billion euros annually. This can take the form of a direct grant, favourable credit or (socially balanced) tax incentives. In any case, support must be linked – in accordance with the principle of Just Transition – to the work being carried out by qualified employees in good working conditions.

Good specialists are needed to increase the renovation rate. A high-quality renovation of the building stock depends on the employees’ degree of qualification and the quality of the work. Improperly carried out building renovation measures can lead to higher costs, poorer quality of life and lower energy savings. Training regulations and further professional training must therefore be geared to the new requirements in order to qualify employees for new fields of work, for example vocational training for the job of building energy consultant. This also helps to prevent a possible shortage of skilled workers. Standard federal testing rules are necessary in order to create uniform quality standards.

The existing gas, local and district heating infrastructure is essential to achieve a low-carbon heating market. Accordingly, government must invest more heavily in local and district heating concepts, and **roadmaps for the greenhouse gas neutrality of heat networks** must be drawn up.

Fair change must also be created in terms of a Just Transition in the **building sector**.

- For example, social compatibility must be taken into account when **allocating the renovation costs to tenants**. Building renovations must not be used as a lever to displace low-income population groups. The state, the landlords and the tenants should each bear one third of the costs for the energy-efficient renovation of existing residential properties.
- More attention should be paid to the **concept of neighbourhood refurbishment**, with which entire districts can be successively renovated. In addition to the goal of energy-efficient renovation, this can also include developments such as demographic change and alterations to create accessibility.
- **Regulatory requirements** for energy efficiency standards in existing buildings should be gradually extended over a longer period of time. The aim is to prevent social hardship. Early, unbureaucratic promotion and information (e.g. through individual renovation schedules for each building) create planning security.

3.3 Efficient and dynamic expansion of renewable energies

The expansion of renewable energies must be pursued vigorously. The framework conditions must be updated in such a way that investments in renewable energies can be made dynamically and efficiently. The German Federal Government has already resolved to switch from the previous system of feed-in tariffs to tenders. At the same time, the expansion of networks and storage must be accelerated and coordinated with the expansion of renewable energies.

Increased demand for renewable electricity must be taken into account, particularly with regard to sector coupling. Here, too, corresponding investments in infrastructure and renewable energy plants are needed. The current **renewable energy expansion targets** must be reviewed and adapted with a view to sector coupling and regulatory barriers to new applications in this area must also be removed.

In order to strengthen **investments in renewable energies** in the electricity sector, tenders should include annual minimum expansion targets for renewable energies. If a project awarded a call for tender is not realised, the same contract must again be put to tender.

A fair structural change in energy supply means that good jobs are created in new sectors. However, the framework conditions for the renewable energy sectors must still be brought in line with the principle of Just Transition. The competitive pressure arising from the competitive promotion of renewable energies

must not be at the expense of employees. In tenders for renewable energies, the bid amount must not be the only decisive factor for the award. In addition, social and ecological criteria (e.g. collective wage agreements, training quota, Good Work) must be formulated as a prerequisite for participation in tenders. France and Denmark already have similar prequalification rules.

3.4 Electricity market must guarantee security of supply

As long as there are not enough available alternatives, **flexible and efficient conventional power plants** based on gas and coal must be maintained for a secure electricity supply. Nevertheless, thermal energy supply is subject to a far-reaching structural change. Structural change must be made socially acceptable. The employees concerned need positive career prospects. This will be the task of the follow-up processes to the Climate Action Plan 2050.

In the current electricity market, conventional power plants and storage facilities cannot refinance themselves sufficiently. The "Energy Only Market 2.0" planned by the German Federal Government will not meet this requirement in the foreseeable future. It is therefore important to ensure the cost-effective operation of the necessary conventional power plants. Otherwise, the private owners would take their power plants off the market unscheduled and continue to hold back investments. This endangers the security of supply.

The DGB and its member unions therefore call for the **creation of a capacity market**. Such a market should allow the participation of any form of secured capacity (power plants and storage facilities) as well as load management. This is the only way to stimulate new investments and innovations in the power generation network. In particular, incentives for investment in efficient and flexible **combined heat and power** in the public and industrial sectors must be provided.

Electricity-controlled gas-fired combined heat and power (CHP) that is beneficial to the system should continue to be reliably promoted even after the expiration of support under the CHP Act in 2022. A guaranteed **feed-in tariff for CHP electricity** is suitable for this purpose. Here, attention should be paid to the combination with heat from renewable energies. In the long term, the **transition from fossil energy sources** to gas obtained by electrolysis from wind and solar power (e.g. "power-to-gas") should be aimed at. The **payment of so-called avoided grid fees** for CHP electricity should be maintained on a permanent basis.

3.5 Rapid expansion of the energy infrastructure

The infrastructure of transmission systems and distribution networks must be expanded and modernised. In this process, digitalisation allows for the intelligent networking of infrastructures and synchronisation of supply and demand.

The **expansion of the electricity transmission grid** must be accelerated in accordance with the network development plan. The expansion and **digitalisation of distribution networks** (“smart grids”) must be advanced cost-effectively with innovative technology in line with their paramount importance for the supply of decentralised renewable energies.

The legislator has a special responsibility for determining the **grid fees for electricity and gas**. The regulation of grid fees must be readjusted in order to create incentives for grid operators to make sufficient investments. Accordingly, the efficiency comparison must be adjusted to determine the revenue cap in incentive regulation.

The **expansion of heat networks** must continue to be promoted in areas where it would also be efficient for a building stock more climate-friendly in the long term. The existing gas networks and storage facilities represent an available infrastructure that can well supplement an electricity supply from renewable energies. In the long term, the gas infrastructure must be completely converted to synthetically produced gas from renewable electricity.

At the same time, **storage capacities** that can store energy not only in the short but also in the long term (seasonally) must be expanded. To this end, we need increased investment in all areas of available storage technologies. Batteries, hydrogen and fuel cell technologies, power-to-x technologies and heat storage in the context of CHP and solar thermal energy are key technologies in this regard and must be promoted. Energy policy objectives should therefore be supplemented by targets for the expansion of energy storage capacities.

3.6 Implementing fair financing

Just Transition also means that the well-to-do shoulder a greater percentage of the financing than those with less resources. To keep the energy transition affordable for all consumer groups in the long term, comprehensive steps towards **financing the energy transition from tax revenues** are needed.

Financing via allocations and duties places a relatively heavy burden on energy-intensive companies and low-income households. Both the EEG levy and the grid fees, which are expected to rise in future, raise distribution issues that distract from the actual important task of restructuring the energy supply.

An energy transition financed to a greater degree from regional budgets is fairer. In the progressive income tax system as provided for in the **tax policy cornerstones of the DGB and its member unions**, the well-to-do bear a larger part of the restructuring costs. The **electricity tax** should be abolished as a first step on the way to budget financing, as it provides the wrong incentives in view of the increasing share of renewable energies in the electricity mix as well as sector coupling. The associated loss of revenue must not be misused as a justification for reducing social or pension benefits; corresponding counter-financing must be provided. Furthermore, an **energy transition fund** financed from regional budgets should be created. This fund should primarily refinance the portion of EEG levy costs necessary for technology development in renewable energies.

A **reduction in the electricity price** would also provide the necessary incentives to use environmentally friendly electricity in other consumption sectors and thus give an important impetus for investments in sector coupling.

4. REQUIREMENTS FOR CREATING THE MOBILITY TRANSITION

An energy transition cannot be successful without a mobility transition. But a **socio-ecological mobility transition** is also necessary in view of traffic growth, urbanisation, ageing and scarcity of resources. Mobility currently accounts for almost 20 percent of Germany's greenhouse gas emissions. There is no doubt that the target of completely reducing mobility-related carbon emissions by 2050 without causing social or economic disruption is even more ambitious than in other sectors. Despite 25 years of climate debate, the carbon balance in transport has not improved, as efficiency gains have been more than offset by the increase in traffic volume.

Mobility transition represents a watershed for two complex systems. On the one hand, it is necessary to develop resilient concepts for low-carbon propulsion technologies which also include the associated infrastructure issues. This includes much more than the provision of charging stations for electric vehicles – energy generation, distribution and storage must also be addressed.

On the mobility side, the **efficiency of the transport system** must be drastically increased without sacrificing affordable individual mobility. This is particularly problematic in agglomerations where mobility loads are already particularly high, where competition for space is forcing increasing commuter flows and where public transport systems are often overloaded at peak times.

From the point of view of the EU Commission, Europe must play a leading role in creating change at a global level driven by digitalisation, automation and alternative energy sources. However, a suitable **innovation and investment policy at European level** is still lacking. The necessary comprehensive restructuring of the transport system will not succeed solely through the carbon regulation of vehicle drives and reliance on market-based incentives.

More sustainable traffic management as demand continues to rise, changing consumer behaviour and maintaining the employment and competitiveness of the European mobility sector in the context of the transition to a low carbon economy, increasing automation and new utilisation concepts all pose important challenges. Digital business models, i.e. online platforms, cooperative services and smartphone apps that offer traffic data in real time are gaining in importance. These trends are directly linked to changes in employment. In the transport sector, jobs associated with conventional drive concepts are coming under considerable pressure, both in terms of the available number and qualification requirements. And the "brave new world" of digital technologies in the transport sector is also often characterised by precarious work, poor pay and deskilling.

Restructuring the transport system towards an **integrated mobility concept** is essential. In future, it will be even more strongly characterised by the diversity of different modes of transport (from pedestrians to motorised private transport to public transport) and different usage concepts (from vehicle ownership and sharing concepts to "mobility on demand"). The focus must therefore be on **networking modes of transport and cross-modal innovations**. For example, innovative car sharing concepts for flexible transport solutions could be a first step in for the craft trade sector.

Even if all technological potentials are exploited for a more climate-friendly traffic management, the shift to low-carbon carriers is an important step on the way to carbon-free traffic by 2050. For this reason, the increase of public investments, for example in the expansion of the **rail network, waterways or public transport infrastructure**, has a high priority.

4.1 Infrastructure

An intact transport infrastructure is a central factor for mobility and inclusive growth. Modern transport routes are of crucial importance for employment and quality of life. As an export-oriented economy and transit country in the heart of Europe, Germany in particular is dependent on intact roads, railways and waterways. But Germany's transport infrastructure is ailing. This results in additional costs due to delays and misallocations and is increasingly becoming a risk for the economy and society.

The **investment backlog in transport infrastructure must be reduced**. The investments must be financed from the budget and the HGV toll and must be increased – and they must primarily flow into infrastructure maintenance and elimination of bottlenecks. The infrastructure of non-federal railways must also be promoted. The establishment of the "Infrastrukturgesellschaft Verkehr" (transport infrastructure company) is supposed to reduce the structural implementation deficits that have arisen, but the greater efficiency of such a central structure has not yet been proven. In addition, it effectively makes possible public-private partnerships and privatisations. These can lead to price increases and loss of quality so that public offers are no longer open to all. This must be prevented.

4.2 Innovation

The benefits of digitalisation, automation and intelligent mobility services are significant for more efficient transport and logistics chains, reduced administrative expenses for businesses and for easy switching between public and private transport. The networking of digital information in real time should increase the efficiency of transport networks and thus make mobility more climate-friendly: **Digital networking** can facilitate the combined use of different modes of transport for the carriage of goods and passengers, increase vehicle occupancy, promote an environmentally friendly choice of transport or minimise search traffic. From the perspective of Just Transition, social legislation can thus also be better enforced. However, in the absence of regulation and standardised platforms, digitalisation can also create new usage competition and strengthen social selection regarding access to mobility.

Against the backdrop of global competition, everything must be done to ensure that Germany becomes a trendsetter for sustainable innovations and creates long-term prospects for **technological leadership**, especially in the automotive industry. All efficiency potentials in vehicle technology must be exploited. At the same time, considerable investments must be made in the development of alternative drive systems and, in particular, in electro-mobility.

Research programmes are an important instrument to support industrial policy. A great proportion of the government funding to be increased must also be allocated to the rail sector, where a functioning electro-mobility system has existed for a very long time, in order to make even greater use of its potential. The accelerated **provision of infrastructure for alternative fuels**, in particular charging stations for electric vehicles, is a prerequisite for a broad market entry of electro-mobility.

Although the conversion of products, technologies and value chains to **climate-friendly drive concepts** can have serious effects on employment, it is not free of contradictions. In today's electricity mix, electric vehicles are no more climate-friendly than diesel or gasoline engines because the provision of the necessary amount of green electricity is not assured. In view of their limited peak load capacity, distribution networks cannot cope with this order of magnitude across the board without large additional investments. Battery cell production also consumes enormous amounts of energy and critical raw materials while lacking adequate recycling processes. In addition, the quota of 30 percent of electric vehicles by 2030 discussed by the EU Commission would endanger tens of thousands of jobs in the powertrain sector in Germany alone.

Energy storage is also a key challenge in the transport sector. Although research funding was available at an early stage at EU level, the industry has not yet succeeded in creating a complete value chain. An integrated **European "battery eco-system"** to promote electric mobility and energy storage is a promising project in terms of innovation policy. In view of scarce resources, the recycling of batteries could form the basis for a new recycling economy business model in the automotive industry.

Heavy utility vehicles, ships and aircraft, which are currently difficult to electrify, account for approximately a third of transport services and greenhouse gas emissions. As a supplement to electrification, **renewably generated synthetic fuels** – i.e. a form of sector coupling – can also make a contribution to achieving climate targets in the transport sector in the medium to long term.

4.3 Public sector investments

The **potential of digitalisation and electromobility** must be exploited **across all modes of transport**. Public investments should therefore have a strong focus on intermodal networking, electrification of railways, a comprehensive charging infrastructure and battery research. In addition to monetary incentives – e.g. the possibility of setting off commercially purchased, electrically powered vehicles against taxable income – a comprehensive **public procurement programme** for low-emission and zero-emission vehicles should be launched.

The **awarding of public contracts** is an important lever for driving market development forward. However, in order to seize the great opportunity to equip public transport vehicles with low-emission alternatives and thus create lead markets, local procurement agencies must be provided with considerably more financial resources. At present, an electric bus still costs several times as much

as a bus running on diesel. In addition, there are the expenses for setting up a parallel charging infrastructure.

In **public transport**, public investments in materials, infrastructure and attractive urban traffic concepts must be ramped up, earmarked for public transport beyond 2019 and adapted annually to passenger growth.

4.4 Just Transition in the mobility sector

A fundamental part of a successful Just Transition is the **maintenance of complete value-added processes** in vehicle construction in Germany. Low-cost strategies are not forward-thinking. Germany's diversified high-quality production is closely linked to the systems of **co-determination and collective agreements**, especially in structural and operational change processes. Low-cost strategies, relocations and outsourcing, on the other hand, are short-term in nature, endangering value chains and threatening Germany as a location for technology, production and development.

The internal need for change is immense for all vehicle manufacturers – whether in passenger car, utility vehicle, railway, airplane or ship production. This requires not only a high level of innovation and willingness to invest, but also the ability to introduce and finance innovative **concepts for personnel development**. These must ensure that employees can acquire the necessary qualifications and maintain their employment prospects. Labour market policy must also contribute to this.

Industry needs an industrial policy concept that ensures the long-term preservation and expansion of industrial value chains, innovation potential and jobs in Germany as a research, development and production location. At the same time, technological competence, industrial system capability and the associated jobs must be politically anchored at a European level. Transparent, secure and robust approval procedures are an important framework condition for this, as is protection against unfair competition through wage, social or carbon dumping. **Key structural policy objectives of the German Federal Government** for the transport industry in favour of employment and locations are needed. **Industry-specific funding programmes and public contracts** derived from these objectives are necessary to support the future viability of the high-tech sectors of the automotive, rail, aviation and shipbuilding industries in Germany. The German market is also the reference market for the local transport industry.

Neither a Just Transition nor a sustainable reduction in carbon emissions from the transport sector can succeed if, in future, **intermodal distortions of competition** continue to put at a disadvantage precisely those modes of transport that stand for public services of general interest and climate compatibility. A VAT reduction for long-distance rail passenger transport, a reduction in the electricity tax for traction current or the abolition of the electricity tax, modernisation premiums for particularly quiet freight wagons, a long-distance bus toll and comparable passenger rights for all modes of transport could reduce distortions of competition to the detriment of the railways. The division of an integrated

rail company such as Deutsche Bahn, on the other hand, must be rejected as its separation from the infrastructure would cause great damage to the reliability, safety and innovative capacity of the entire rail system. The DGB and its member unions will resolutely oppose a politically intended asset stripping of Deutsche Bahn.

The Just Transition to a climate-friendly transport system cannot be shaped solely by ecological requirements. For the DGB and its member unions, fair structural development in all areas of transport also includes:

- **fair conditions of competition** to replace environmental, wage and social dumping and a tendering practice based on the lowest rather than the most economical bid with competition for the quality of services and products. The independent commercial transport sector must also comply with all the social and qualitative requirements laid down by the municipalities;
- tender procedures, transport and trade agreements that ensure the **anchoring of social standards and ILO core labour standards**, so that quality competition has priority over price competition;
- the greatest **efforts in the training and qualification of employees** in order to quickly impart the new skills and secure the opportunities of digitalisation in a networked transport industry. This is the only way to keep the know-how in Germany;
- mandatory **legislation on driving and rest times** for drivers and adequate staffing and technological resources for the supervisory bodies. Digital recording devices must be mandatory nationwide by 2020, and immediately for new vehicles;
- the creation of legal prerequisites for a fair and equitable **transfer of rail and bus personnel**, which must be mandatory and implemented nationwide, to protect employment and social standards in award decisions in the whole of public transport.



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