



IMPACT ANALYSIS

of the DB Cargo Polska Group on
the economic, social and natural environment

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September 2019

Dear Reader!

I accepted the invitation to cooperate in the project analysis of the DB Cargo Polska Group impact on environment without a moment's hesitation. For me, every attempt to indicate a direction limiting the negative environmental impact is a valuable endeavor. Undoubtedly, railway as a means of transport is close to my world-view and the idea around which I plan my travels. I always try that my peregrinations – those close and those distant – do not generate negative effects for nature.

This is my travel philosophy and it is congruent with the sustainable growth strategy of DB Cargo Polska which, apart from the very responsible impact on economic and social environment, focuses also on conservation of natural resources.

As a railway carrier, the company has a great potential in this respect. It is obvious that railway, especially electrified, is a splendid choice of a means of transport in the light of deteriorating natural environment, already significantly scarred by human activity. It is high time to limit these scars and save what is still left.



photo: Dorota Czoch
source: RTCK

Throughout my travels I discovered many places and many faces of nature. I know that each of my actions does not go without influence on the natural environment, which is why, for several years now, I focus on creating and promoting a new philosophy of traveling and living. Each of my journeys is an appeal that the only mark of our life, activity and travel is the memory, the trace left in our mind, remembered images and knowledge, and not only our feet's imprints – literally and metaphorically – on what is precious and sometimes impossible to recreate!

This is why I support any sign of activity that stresses the significance of natural goods and leans towards building strategy in a responsible and sustainable manner!

I would like to encourage to read this publication and to be inspired by its content, especially in the part devoted to ecology. The treasures of our planet may keep on being discovered by the next generation only if we all share the pro-environment philosophy of thinking and living.

Best regards,

Marek Kamiński



Dear Sirs!

DB Cargo Polska is a young company, with a ten-year history, it nevertheless has rich traditions, great experience and know-how resulting from the ownership structure. We are fully aware of our role on the European rail freight transport map and in the market. We are aware how deep the mark of our activities is, activities which are not only limited to focus on financial results but also on creating the basis for responsible business and leading in the development of the whole rail freight transport branch. This is why DB Cargo Polska is the first company that already in 2017 decided to measure its impact on the environment.

This year's Analysis is the second one and, like in 2017, it measures our impact on economic, social and natural environment. The information we obtain in the course of the Analysis helps us in good, responsible management, in accordance with the principle of sustainable growth in all dimensions.

Conducting the Analysis is a long and complex process. Nevertheless, its result is one of the most important indicators to strengthening our sustainable growth strategy. All business decisions

are analyzed in the context of their impact on the environment where we conduct our operational activities. Maintaining jobs, taking care of the natural environment, developing of local communities and cooperating with business partners are very important to us. The numbers presented in the Analysis are an invaluable guideline for our future path.

The Analysis allows us to understand our role in the social and economic environment even better, both on the national and local level, and learn about our key areas of influence. Such knowledge helps us make better decisions and optimize our activities. The concrete, measurable values presented in the Analysis are the guarantee of understanding the scale of our impact and of potential to build good, long-term dialogue with our stakeholders based on reliable data.

I hope the Analysis will inspire not only DB Cargo Polska but also the whole business environment, which will even more closely focus on responsible growth.

Yours Sincerely,

Steffen Bobsien
CEO, DB Cargo Polska



About DB Cargo Polska



Company development over the past 10 years

DB CARGO - 10 YEARS IN POLAND

DB Cargo Polska has been working towards the status of one of the key rail freight carriers in Poland for 10 years. Today the company employs 2.8 thousand employees, owns over 200 locomotives and the volume of goods it transported in 2018 reached 41 million tons.

The volume of goods transported places DB Cargo Polska Group on the second place among the most dynamic rail freight carriers in Poland. As much as 16.4% of cargo was transported by the trains of the Group. From the point of view of transport performance, DB Cargo Polska occupies 4th place in Poland with market share of 5.4%.¹

Key numbers*:

 Goods transported	48 mil. ton
 Transport performance	3.6 bil. tkms
 Number of employees	2,853 persons
 Number of locomotives	220

* data as of 2018

1 <https://www.utk.gov.pl/pl/raporty-i-analizy/analizy-i-monitoring/statystyka-przewozow-to/14675,Dane-eksploatacyjne-w-2018-r.html>

DB CARGO POLSKA BANKS ON MODERN, ELECTRIC ROLLING STOCK

DB Cargo Polska understands that railway transport may create an impulse for economy development if it is able to tackle challenges such as curbing costs and shortening transport times with simultaneous gradual increase of energy efficiency and decrease of emissions.

Therefore, DB Cargo Polska moves with the times by investing in new locomotives, decreasing the time necessary to reach destinations, increasing the quality of services rendered as well as minimizing its negative influence on the environment.

Currently DB Cargo Polska has new and modernized rolling stock of 40 electric locomotives, 180 diesel locomotives and almost 2000 wagons.

For this reason DB Cargo Polska increases its supply of high quality services which contribute towards improvement of the Polish railway transport in comparison to European systems.

Since 2009, DB Cargo Polska gradually increases the share of electric locomotives in its rolling stock – in 2019 the share reached 20%. This number does not seem particularly extraordinary, nevertheless these electric locomotives perform about 85% of the total transport performance. Diesel locomotives, responsible for the other 15%, are also being gradually substituted by newer, safer models with much lower emissions.

The emission connected with transport performance done by means of both electric and diesel rolling stock reached in 2011 210 thousand tons of CO₂. Currently it is about 80 thousand tons of CO₂ a year. Thanks to the change of its transport performance structure, DB Cargo Polska avoided emitting about 130 thousand tons in 2018. It is the same amount that is emitted from burning 58 thousand tons of coal.

DB CARGO POLSKA – IN A CLOSED CIRCUIT



DB Cargo Polska understands the importance of the natural resources deficit issue. The organization cares that the modernization of rolling stock does not involve negative impact on the environment. Locomotives withdrawn from service are transferred to recycling facilities.

Thanks to good practices, during the last 10 years as much as 37.5 thousand tons of steel from withdrawn wagons went back to circulation. This mass would be enough to produce 2171 new wagons.

DB Cargo Group companies and services offered

**DB Cargo Polska Group comprises 4 companies
of varied activity profiles and service portfolios.**

DB Cargo Polska S.A.
in Zabrze



The company is a supplier of comprehensive logistics solutions. It has experience in solid fuel transport, coal in particular, but also transport of liquid fuel and chemicals (including dangerous materials), steel products, building materials (mainly aggregates, slag and ash), industrial and consumer goods; it also has experience in transport for automotive industry. The company also specializes in intermodal and oversize consignment transport, which require tailor-made solutions.

**DB Cargo Spedkol
Sp. z o.o.**
in Kędzierzyn Koźle



The main activity of DB Cargo Spedkol includes logistics and forwarding services, transport of single wagons, transshipment, transport of chemicals in tank wagons, leasing tank wagons and intermodal transport.

Infra SILESIA S.A.
in Rybnik



The company offers a wide variety of services connected with maintenance and construction of infrastructure both on main lines and the largest sidings in the country.

**DB Port Szczecin
Sp. z o.o.**
in Szczecin



DB Port Szczecin is part of the largest transshipment complex in western Baltic area, with a duty free zone. It is an important transit hub on international transport routes connecting sea routes and railway routes. Over 63 thousand m² of warehouse space, 210 thousand m² of open storage area, transshipment terminal with throughput of 150 TEU and space for 5000 TEU as well as modern equipment allow to handle and store containers, bulk cargo, fertilizers, oversized and dangerous goods.

The future of DB Cargo Polska and the industry

– key trends, challenges and opportunities

The dynamic technologic development is also reflected in railway transport industry. The industry must flexibly adjust to the market trends and challenges which are often dependent upon the shape of the national economy. It also has to tackle the challenges resulting from the internal development of its organizations.

Rail freight transport TRENDS



New technical and technological solutions, digitization of processes, allow **the increase of rolling stock autonomy and automatization and as a result the increase of railway efficiency and safety**

- Train driver automatic warning system (AOM)
- Hybrid locomotives (diesel-electric)
- Solutions for loco driver training support (e.g. virtual reality)



Development of railway infrastructure and intermodal transport.



Train drivers with international licenses – service quality increase.

TRENDS influencing rail freight transport indirectly



Increase in renewable energy use and minimizing natural resources use.



Decrease of hard coal, brown coal, metal ores and other mining products transports.



Construction market development.



Increase of sand and aggregates transports until 2020.



International commerce increase.



New Silk Road initiative – increase of import and export between Europe and Asia.

CHALLENGES facing rail freight transport

In order for rail freight transport market to develop, the following challenges must be faced:

- ✓ Railway infrastructure quality increase and improvement of the process of new investment project realization,
- ✓ Better competitiveness of rail freight transport against road transport,
- ✓ Development of a comprehensive IT system, including logistics centers, supporting intermodal transport development and popularization,
- ✓ Creation of tools to promote rail freight and intermodal transport as well as the resulting advantages,
- ✓ Creation of legal framework concerning intermodal transport,
- ✓ Improvement of intermodal transport image in Poland.



Economic impact

– DB Cargo Group contribution towards **development of the economy**

DB Cargo Group is a globally active company but in each of the countries it operates in it exerts positive influence on local economies. Thanks to investments, expenses on goods and services as well as creating multiple jobs, DB Cargo Polska contributes towards not only the rail freight market development but also development of the whole Polish economy.

Railway infrastructure fees are not the only DB Cargo Polska Group companies contribution towards the Polish economy development. This contribution impacts the Polish economy through many channels – often difficult to measure. Only economic modeling allows better to understand and gauge the scale of DB Cargo Polska Group contribution to the economic development of the country.

DB Cargo Polska group has an input in generating added value, household revenue and creating jobs directly, indirectly and via induction. This input has been calculated using the input-output model.

Three different levels of DB Cargo Polska impact on the Polish economy can be differentiated.

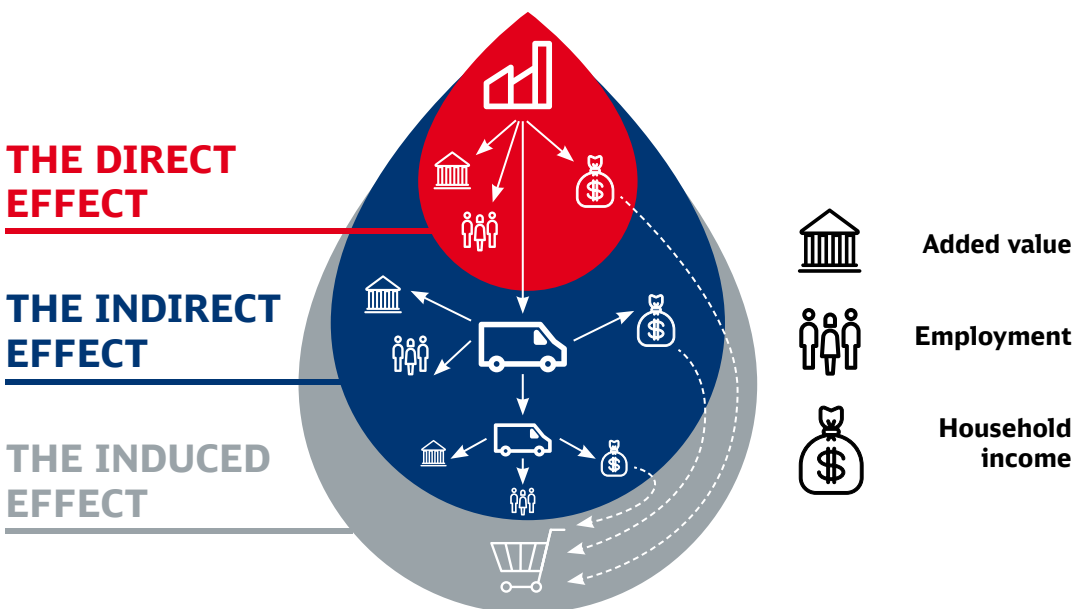
The direct effect defines effects on economy that result from everyday company activities:

- added value created in its services,
- jobs created,
- taxes paid,
- remunerations paid to its employees



Nevertheless the company influence has a further reach than just the direct impact of its activities. Economy is a system of interconnected vessels. Since the DB Cargo Polska Group cooperates with other entities from various markets and sectors such as suppliers and producers, the Group's development translates also into their activities – they can create added value, employ people and pay salaries, and this in turn increase household income. Thus, the companies of the DB Cargo Polska Group generate **indirect effects** in various economy sectors.

Household income, generated by DB Cargo Polska both directly – among their own employees – and indirectly – among employees of their suppliers and subcontractors – support Polish GDP development via private consumption spendings. This effect is yet another impact type, called **the induced effect**.



Key results of economic impact



PLN
974.6
mil.

ADDED VALUE
generated in Poland due
to the Group activity
in 2018



9 704

JOBS CREATED
and maintained in Poland
due to the Group activity
in 2018



PLN
96.9
mil.

HOUSEHOLD INCOME
generated in Poland due
to the Group activity
in 2018



PLN
592.4
mil.

PURCHASE VALUE
of the Group from Polish
suppliers in 2018



PLN
37.2
mil.

VALUE OF TAXES
paid by the Group
in Poland in 2018

Added value

What does it mean that DB Cargo Polska generates added value for the economy?

Added value measures the company's contribution in generating Polish gross domestic product. It is the increase of goods value as a result of a defined production process or service rendition. In accounting context, added value relates to the part of the company's global production left after subtracting indirect use which is the value of goods and services used as resources in the production process. The greater the added value share in the final product, the larger the company's creative input in the production process and share in GDP generation.



Since 2016, DB Cargo Polska Group direct influence has increased by 44%. The added value generated due to the Group activity in Poland has increased by 12%.

Due to connections between various economy branches, DB Cargo Polska generates effects in many sectors. The most strongly supported sectors are transport and warehousing, professional and business services and commerce.

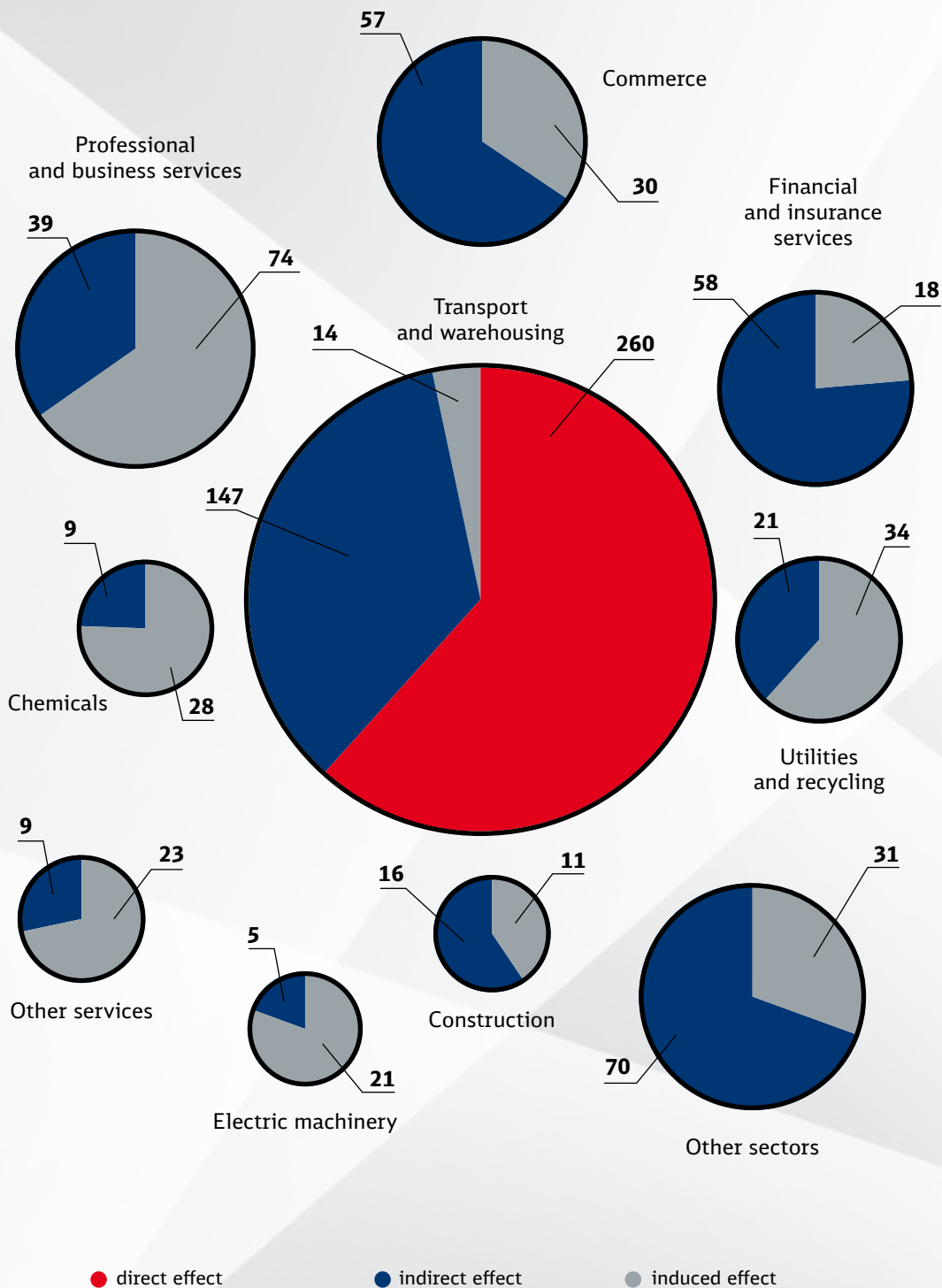
Added value generated in Poland in 2018 due to DB Cargo Polska Group activity

The direct effect	PLN 259.8 mil.	Total effect PLN 974.6 mil.	The TOTAL VALUE of all the effects is equal to 10% of expenditure for railway infrastructure development in Poland planned for 2018 in the National Railway Program.³
The indirect effect	PLN 417.0 mil.		
The induced effect	PLN 297.9 mil.		

² The multiplier effect was calculated according to the equation: total effect/direct effect. The multiplier shows in what degree added value, employment and remuneration in the whole economy change as a result of changes in these values in DB Cargo Polska companies

³ Report on the National Railway Program until 2023 execution as of 2017

Added value generated in particular sectors in 2018 due to DB Cargo Polska activity (PLN mil.).

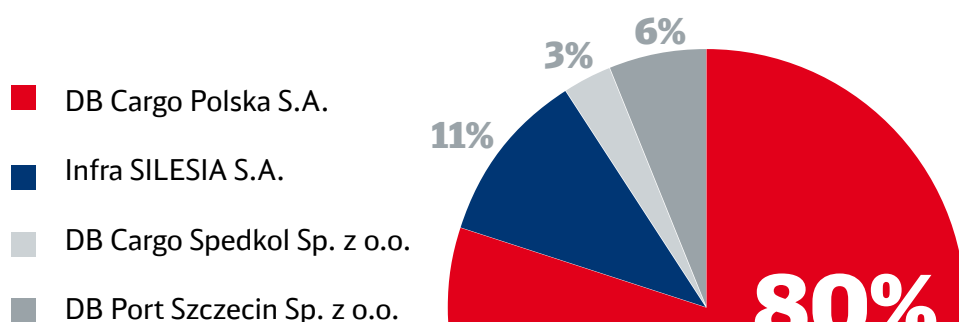


Employment

Creating jobs – both directly (employing own personnel) and indirectly or by induction (generating demand for suppliers' products and services, thanks to which they employ own personnel)
– is a very important category

of DB Cargo Polska Group influence on economic and social environment.
The direct employment in DB Cargo Polska Group at the end of 2018 was 2,853 persons.

DB Cargo Polska Group employment structure in 2018



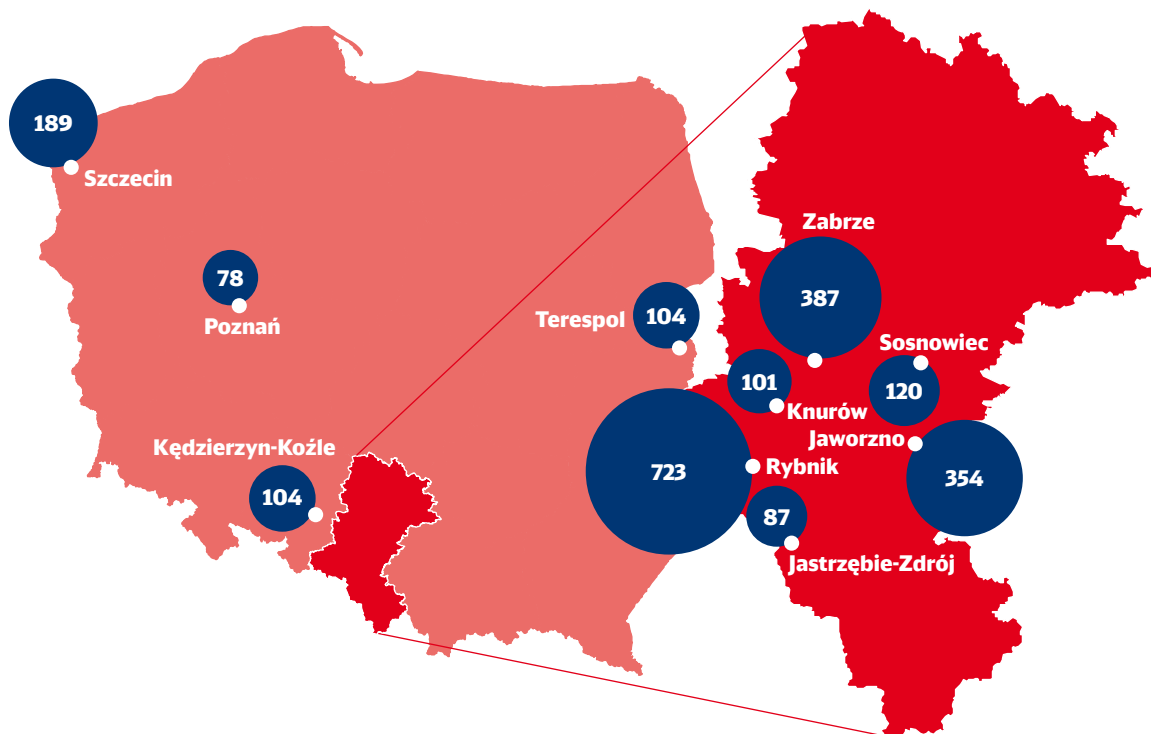
EACH JOB

maintained by
DB Cargo Polska Group
contributes to maintaining
the total of

**3.4 jobs
in Poland**



Employment in DB Cargo Polska Group - 10 largest locations in 2018 (persons)



The situation on the Polish labor market has improved significantly in recent years. Nevertheless, unemployment rate, at the level of 5.8% in 2018, is not geographically homogenous. Statistics shows large differences between eastern and western regions of the country. By appearing in new places on the map, DB Cargo Polska is becoming an important employer especially on a regional scale.

The number of workplaces created by DB Cargo Polska in Terespol municipality would suffice to employ 10% of the working-age population in Małaszewicze, a town in the municipality.

Employment created and maintained in Poland due to the Group activity in 2018

Direct effect	2,853	Total effect 9,704
Indirect effect	3,725	
Induced effect	3,126	

Thanks to DB Cargo Polska activity, numerous workplaces were created not only in sectors connected with transport and warehousing, which are main supporters of the company activity.

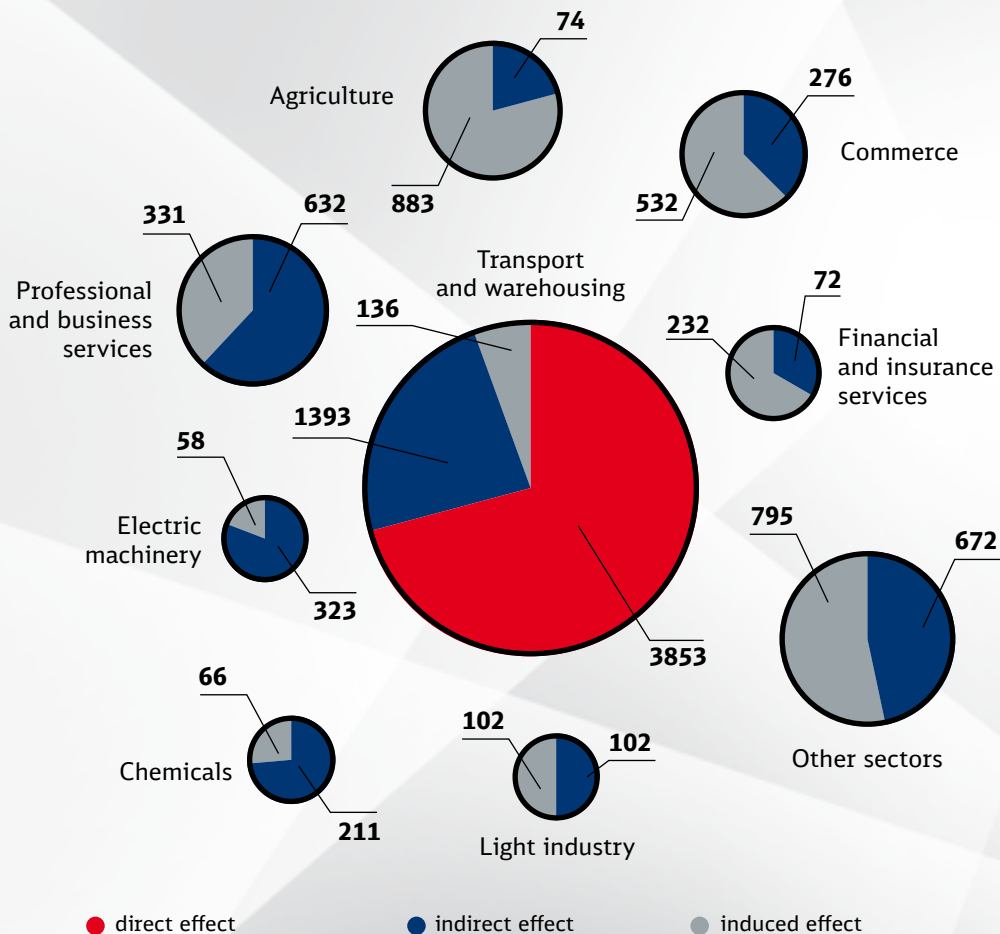
Spending of DB Cargo Polska Group and their suppliers' employees cause that almost 1,000 persons are employed in agriculture, which, intuitively, is not closely connected with company's activity in Poland.

9.7 thousand workplaces

were created and are maintained in Poland due to DB Cargo Group's activity.

It is more than **55%** of all loco drivers in the whole Poland in 2018.⁴

Jobs created and maintained in particular sectors in 2018 due to DB Cargo Polska activity



⁴ <https://utk.gov.pl/pl/aktualnosci/14458,Swieto-prawie-175-tysiaca-maszynistow.html>

Household income

The condition on the labor market dictates to a large extent the economic situation of households. Increase of employment and remuneration influences the quality of life of those employed and their families. From macroeconomic standpoint, growth periods foster increased consumption which in turn feeds state budget.

In 2018 DB Cargo Polska Group paid remuneration in the gross amount of PLN 192.7 mil. The indirect effect, income of households of DB Cargo Polska suppliers', subcontractors' and connected entities' employees, amounted in 2018 to PLN 96 mil.

The induced effect – remuneration paid to employees in other companies benefitting from consumption and investment spendings of DB Cargo Polska Group's and its suppliers' employees – constitutes additional PLN 60 mil. of economy inflow.



Household income generated in Poland due to the Group's activity in 2018

Direct effect	PLN 140.4 mil.	Total effect PLN 296.9 mil.
Indirect effect	PLN 96.0 mil.	
Induced effect	PLN 60.5 mil.	

This amount is equal to yearly spendings of over 6.6 thousand three-person families in Poland.

This amount is also equal to yearly spendings on leisure and culture of over 92 thousand of three-person families in Poland.⁵

Each PLN

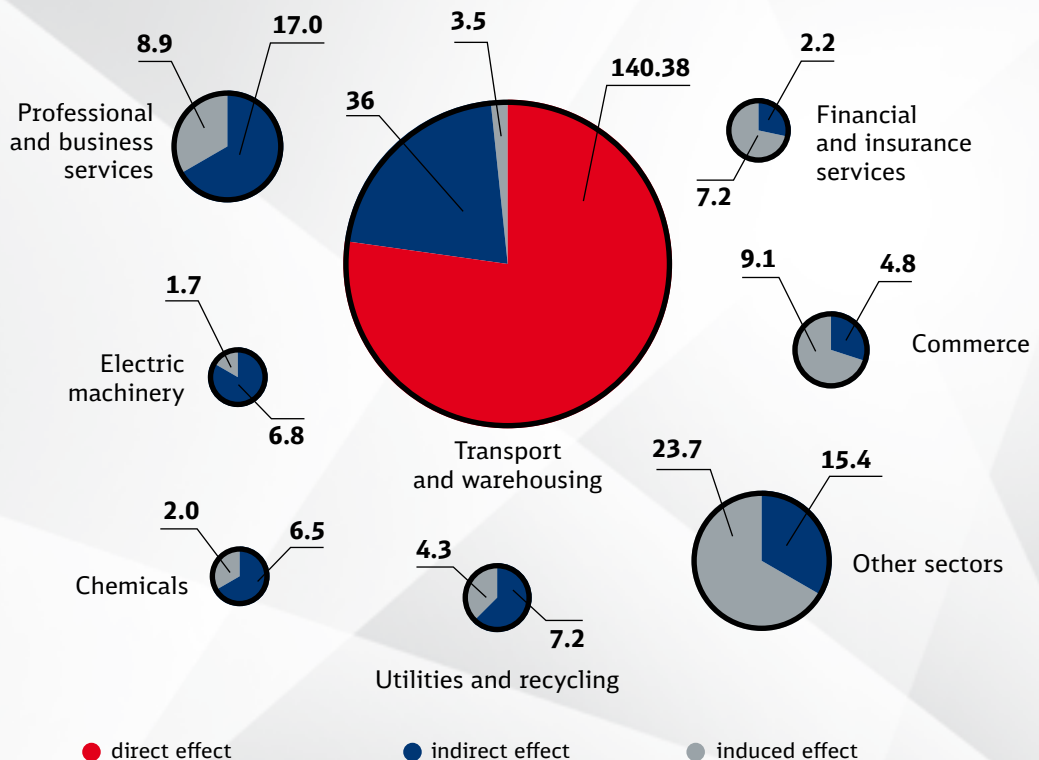
of the household income generated by DB Cargo Polska contributes to generating a total of

PLN 2.12

of Polish household income.



Household income generated in particular sectors in 2018 due to DB Cargo Polska Group activity (PLN mil.)



TOTAL EFFECTS IN SELECTED SECTORS



TRANSPORT AND WAREHOUSING

Added value: PLN 421 mil.
Employment: 4,384 workplaces
Remunerations: PLN 180 mil.



PROFESSIONAL AND BUSINESS SERVICES

Added value: PLN 112 mil.
Employment: 963 workplaces
Remunerations: PLN 26 mil.



COMMERCE

Added value: PLN 88 mil.
Employment: 799 workplaces
Remunerations: PLN 13 mil.



FINANCIAL, INSURANCE AND REAL ESTATE SERVICES

Added value: PLN 76 mil.
Employment: 304 workplaces
Remunerations: PLN 9.5 mil.



UTILITIES AND RECYCLING

Added value: PLN 55 mil.
Employment: 227 workplaces
Remunerations: PLN 11.5 mil.

Taxes

– contribution to the state and local budgets

Taxes are one of the forms of a company's impact on the Polish economy. They can be put into one of two categories: first, the taxes which DB Polska Group pays directly to the state budget on the central level, and second, the taxes going to local municipalities where the Group operates.


Part of the taxes is paid by DB Cargo Polska Group directly to particular local government units – voivodships, districts and municipalities – or distributed to

them from the central level. This money is especially important in the smaller municipalities, where the company is often one of the most important tax payers.

Altogether, almost 40% of all the taxes paid by DB Cargo Polska Group goes directly to local government units; this amounted to PLN 13.7 mil. in 2018.

The largest share in these taxes are personal income tax and real estate tax.

⁶ http://twojbudzet.um.warszawa.pl/ile_kosztuje_miasto_wiecej



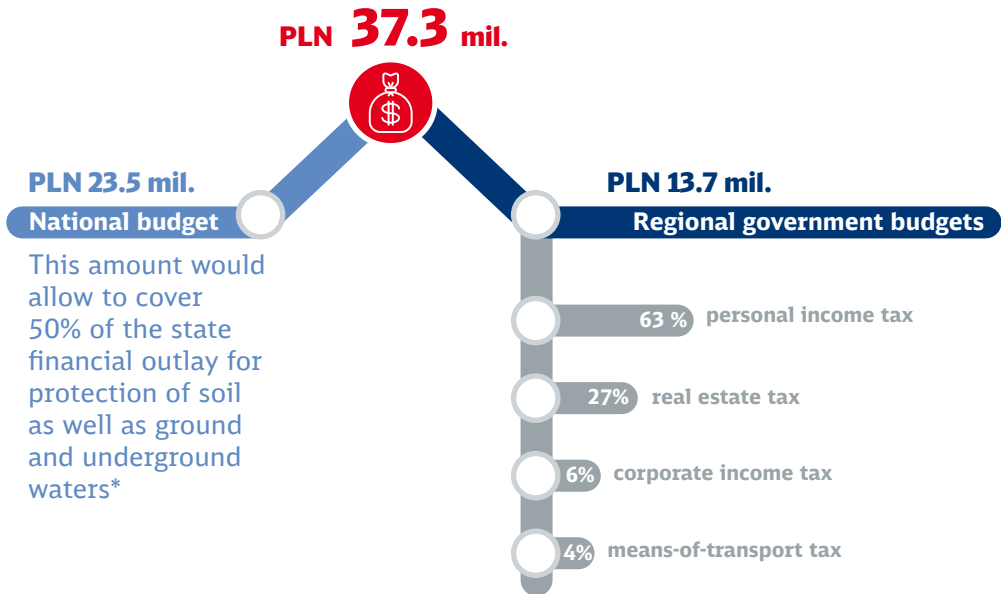
Last year,
the total amount paid
to the central
and local governments
amounted to

PLN 37.3 mil.

This amount would
suffice to build
149 playgrounds.

This amount
would suffice to build
over
**9.3 thousand
green parking
spaces.⁶**

State and local taxes paid by DB Cargo Group in 2018⁷



*Financial outlay for environment protection incurred in 2017, "Ochrona Środowiska", GUS 2018

The most taxes go to the cities of Rybnik, Jaworzno, Zabrze and Szczecin. In total, DB Cargo Polska has impact on local budgets of as many as 44 Polish municipalities.

Selected taxes paid by DB Cargo Polska Group in 2018⁸

RYBNIK	PLN 1.3 mil. real estate tax	In Rybnik, the amount of real estate tax paid corresponded with 30% of the city's budget for thermomodernisation of public utility facilities.
ZABRZE	PLN 1.2 mil. corporate income tax	In Zabrze, the amount of corporate income tax paid could cover 60% of the city's subsidies for culture centers in 2018.
JAWORZNO	PLN 1.1 mil. personal income tax	Money paid by the Group as personal income tax in Jaworzno would allow coverage of 76% of the cost of public safety and fire protection in 2018.
SZCZECIN	PLN 588 thous. means-of-transport tax	The city of Szczecin could cover its whole cost of informational and educational activities aimed at increasing waste management awareness with the money paid by DB Port Szczecin as means-of-transport tax. The city of Szczecin could also cover 81% of the cost of public quay maintenance with the money paid by as means-of-transport tax.

⁷ The date on income of local government units show approximate municipality income calculated on the basis of DB Cargo Polska data and share of LGU in tax income, in accordance with the Ministry of Finance information

⁸ Comparison on the basis of data from planned city budgets for 2018

International commerce

Transport service market stimulates global supply chain development. Its functioning determines effectiveness and efficiency of the whole country's economy as well as cooperation between countries. This in turn leads to increased international commerce, financial flow and information development, increase of innovativeness and bilateral country development.

In Poland, rail freight transport plays a more important role in import than in export. This results from the structure of imported and exported goods. Due to the strongly productional character of the national economy, raw materials and semi-finished products are mainly imported to Poland whilst finished products with a high share of added value are exported.

In 2018, the transport performance done by DB Cargo Polska as export amounted to 23% of the total transport performance. The volume of exported goods reached almost 2.1 mil. tons. It is as though DB Cargo Polska trains were responsible for transport of about 30% of the Polish coal, briquette and solid fuels export.⁹



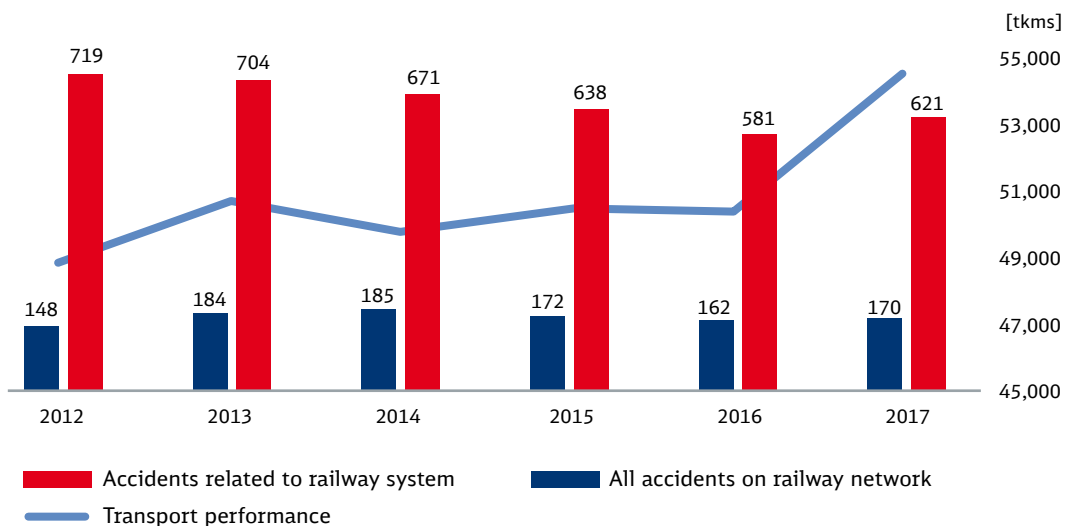


Rail traffic **safety**

Polish railway transport ranks second in Europe as far as transport performance is concerned.¹⁰ The increase of railway transport is followed by the increase in railway safety. The number of accidents on railway infra-

structure has been decreasing over the past few years, influenced both by investments in railway development and increased consciousness of the society and industry in this respect.

Accidents on railway network vs. transport performance in Poland over the years¹¹



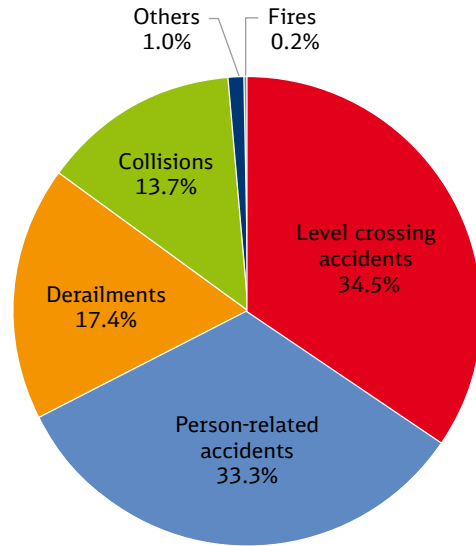
¹⁰ Eurostat

¹¹ UTK, „Sprawozdanie ze stanu bezpieczeństwa ruchu kolejowego w 2017 roku”, Warszawa 2018

The increase of the number of accidents in 2017 was caused mainly by phenomena on which the railway system has a limited influence. These were accidents with involvement of third persons as well as connected with weather conditions.

Railway transport is much safer than road transport mainly due to technical conditions but also due to traffic organization. Additionally, its safety is better systematized and regulated compared to road transport, which can be seen in statistics comparing transport performance. Comparing the number of people injured with transport performance in 2017, DB Cargo Polska result was 90% lower than the result of road transport in Poland.

Railway network incident structure in 2017, by type of incident¹²



RAILWAY TRANSPORT



1.03

Average number of people injured per 1 bil. tkm in 2017 for national road transport and for DB Cargo Polska¹³

ROAD TRANSPORT



11.52

-91.06%

¹² UTK, „Sprawozdanie ze stanu bezpieczeństwa ruchu kolejowego w 2017 roku”, Warszawa 2018
¹³ Source: own analysis on the basis of Eurostat, DB Cargo Polska, KGP

DB Cargo Polska aims at complete elimination of all accidents on railway network through the activities it undertakes.

New initiatives are being implemented in the companies of DB Cargo Polska that contribute to the improvement of railway traffic safety. The following were completed in 2018:

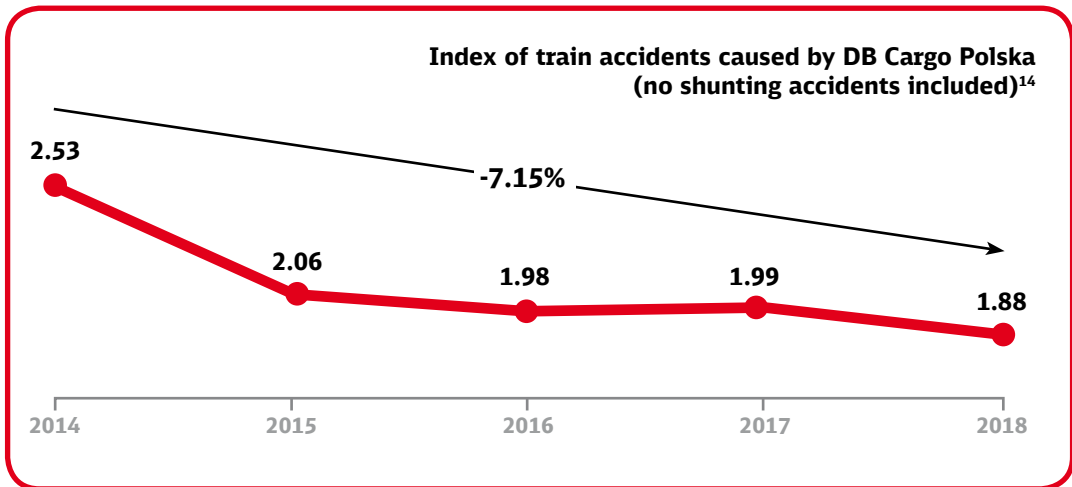
- **Production of training videos, instructional to the employees participating in transport process.** The videos demonstrate safe approach towards discharging work duties and were prepared for employees on positions connected to railway traffic safety as well as employees driving railway vehicles.
- **Recurring trainings for managerial staff.** The trainings concerned the correct manner of work at conducting railway traffic and the appropriate course of action in case of a railway network incident.
- **Anti-failure meetings,** recurring meetings devoted to railway safety. These meetings are attended by the company representatives and state representatives connected to the issue of railway safety.

Furthermore, as part of the professional development process, all loco drivers participate in periodic instruction meetings concerning:

- Basic regulations and instructions regulating loco driver's work, including recent changes.
- Recent railway incidents, where causes, effects and countermeasures are discussed.
- Issues relating to a loco driver's duties, among others: behavior in railway traffic in standard and extraordinary circumstances, work discipline rules, work safety and topics from the scope of safety management system.

In 2018, 1,094 periodic instruction meetings took place.





In recent years the index of train accidents caused by DB Cargo Polska has been decreasing. The effects of the implemented preventive steps lead to the record-low index for DB Cargo Polska Group in 2018.

Award in a competition

“Safety Culture in Railway Transport”

In 2018, Infra SILESIA, a DB Cargo Polska company, was awarded in a competition organized by Railway Transport Office in category “Technical solution” for a three-dimensional model of the area of siding in Rybnik and railway station in Sosnowiec. State of the art technology was used to create the model: georadars, 3D scanners and drones equipped with cameras for orthophotomap creation.

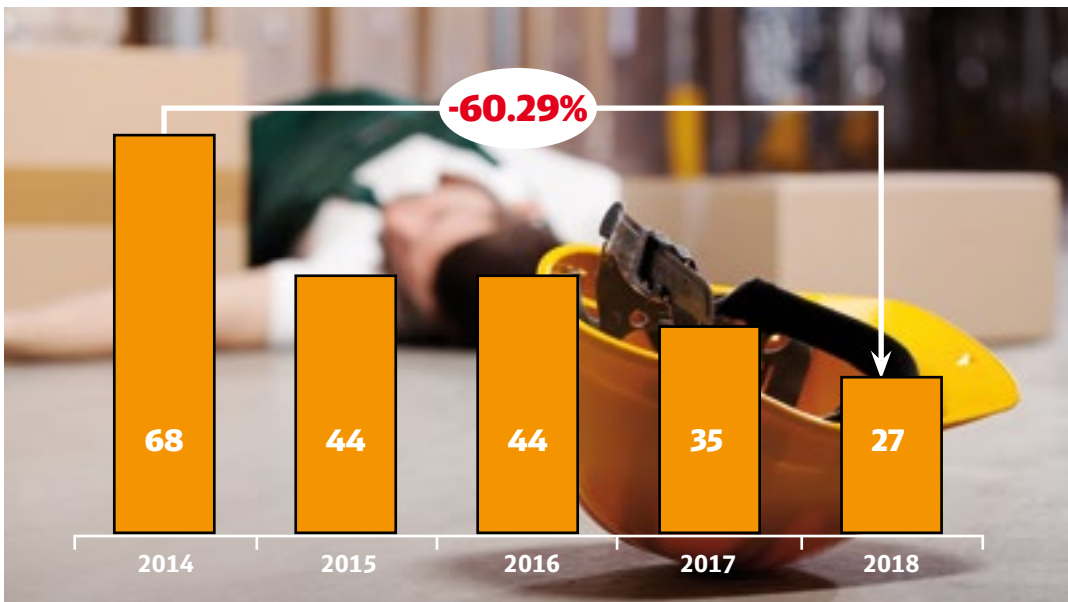
This innovative solution is aimed at increasing safety of construction works conducted on infrastructure by fast and accurate technical infrastructure identification.

¹⁴ Railway vehicles perform train or shunting work. Train work is any movement of railway rolling stock which is an entry to, transfer to or exit out of a station. Shunting is any maneuver of rolling stock within a station, for instance transfer from one track to another or changing the position of the locomotive in relation to the wagons. Train accidents are those that take place during train work, shunting accidents are those that take place during shunting work.

Work based on the highest safety standards

H&S standards and safety culture are a high priority issue in DB Cargo Polska Group. For this reason, DB Cargo Polska Group is undergoing transformation towards proactive threat identification and prevention of incidents for example by early reaction to dangerous circumstances and behaviors or incidents with accident potential.

Number of workplace accidents in DB Cargo Polska Group



ACTIONS TAKEN IN ORDER TO INCREASE WORKPLACE SAFETY

Each year, DB Cargo Polska introduces new initiatives aimed at increasing workplace safety level in the Group and its subsidiaries.

In 2018 the following initiatives were among the most important steps undertaken by the Group in regards to health and safety improvement:

- Working condition overview;
- “Incident lessons learnt” (learning on the basis of current incidents);
- “Safety moment”;
- H&S audit system improvement;
- Trainings on “Analysis of root causes of incidents and undesirable situations”;
- Workplace accident analysis;
- Road traffic safety;
- Purchase of work clothes, individual protection gear and cleaning supplies.

The cost of supplying DB Cargo Polska Group employees with work clothes, individual protection gear and cleaning supplies amounted to **PLN 3.79 mil.**

in 2018, which on average amounts to

PLN 1.3 thousand

per employee. This amount is almost three times as high as the country average. Average expense on health and safety in companies is PLN 461 and in transport and warehousing industry: PLN 443 per employee per year.¹⁵

H&S TRAININGS

2018 also witnessed significant changes in H&S trainings for DB Cargo Polska employees. Currently, the training materials consist of practical information and allow better to understand the activities the Group is undertaking to ensure safe workplace conditions and they stress the employee’s role in these activities.

In 2018, within the framework of H&S:

- **60 periodic trainings** for employees were conducted;
- **Over 1,100 employees** were trained;
- **The employees spent the total of 13,439 hours** on trainings.

The direct expenses on H&S trainings in DB Cargo Polska Group in 2018 amounted to **PLN 35.5 thousand**. If this amount were to be increased by the cost of work corresponding to the working time spent on the trainings by the participants, this amount would reach almost **PLN 450 thousand**.

UPDATE OF SAFETY MANAGEMENT RELATED PROCESSES

After analyzing the existing H&S processes, a decision has been made to remodel and develop several new ones which, after implementation, will encompass the most important safety management elements in the Group and will influence directly the working conditions, danger identification, undesirable incident reactions as well as employees' lives and health.

The points of focus in the new processes are: effective communication to and with employees, engaging various functions in current H&S issues such as audits, determining circumstances and causes of undesirable incidents, reporting dangerous situations and reaction to such reports.

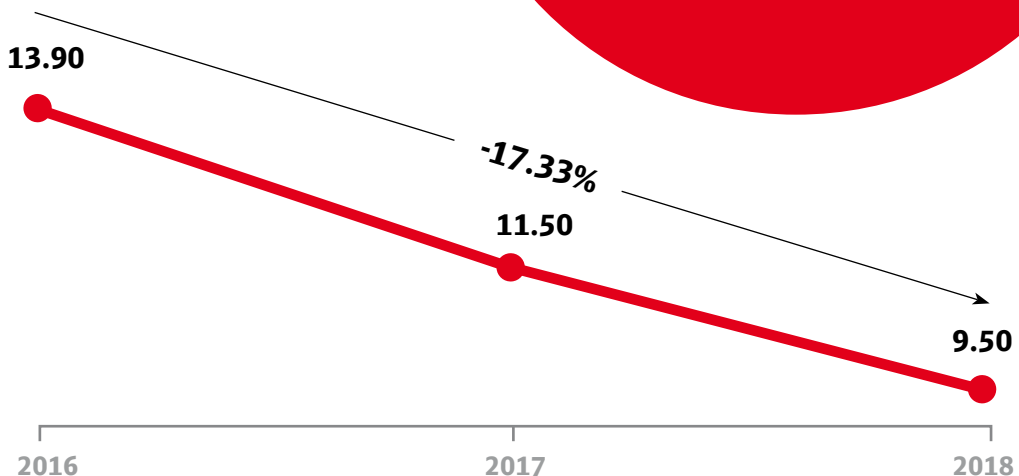


DB Cargo Polska Group activities bring quantifiable results.

Already in 2018 the accident rate was lower than plan for 2020.

The number of casualties in workplace accident dropped since 2016 by

almost 40%.



Accident rate in DB Cargo Polska Group in recent years.

Employment structure



For some time now the country's labor market has been referred to as "employee's market". This is rooted in the current demographic trend, where the number of people in production age is decreasing but also in the changing expectations of young people towards their work. Young employees change jobs more often and rotation in companies increases. Simultaneously, on the railway market employers are forced to compete for the best employees. In the situation when new specialists are scarce, keeping each of them is key from the point of view of the organization.

In addition to labor market strain, DB Cargo Polska Group had to face internal challenges in 2018, such as significant number of earlier retirements of the most experienced employees and change of the number of sidings serviced. DB Cargo Polska Group is aware that it is the people who contribute to the company's development every day and are its most important resource, that build the company's success. For this reason, the company takes numerous actions to limit employee rotation. The actions bring measurable effects and despite unfavorable circumstances keep the rotation index on a low level.

- **DB Cargo Polska Group employed 2,853 people in 2018**
- **DB Cargo Polska Group guarantees safe and stable employment. 92% of employees have employment contracts for unlimited period of time and 74% of staff have been working in the Group over 5 years. In comparison, the average level in Poland is 60.7% employees with contracts for unlimited period of time and 59.7% of staff working longer than 5 years.¹⁶**
- **The rotation index in DB Cargo Polska Group in 2018 was 14.5% and was 5.5 pp lower than average rotation in Poland in Q4 2018.¹⁷**

All the Group companies are employers who provide equal opportunities and reject discrimination on the basis of sex, age or other issues.

DB Cargo Polska was the first railway company which signed the Diversity Card (Karta Różnorodności) – a pledge concerning a ban on discrimination and promotion of diversity and equality in the workplace.

¹⁶ "Wskaźniki Jakości Pracy", GUS, 2017

¹⁷ "Monitor Rynku Pracy", Randstad

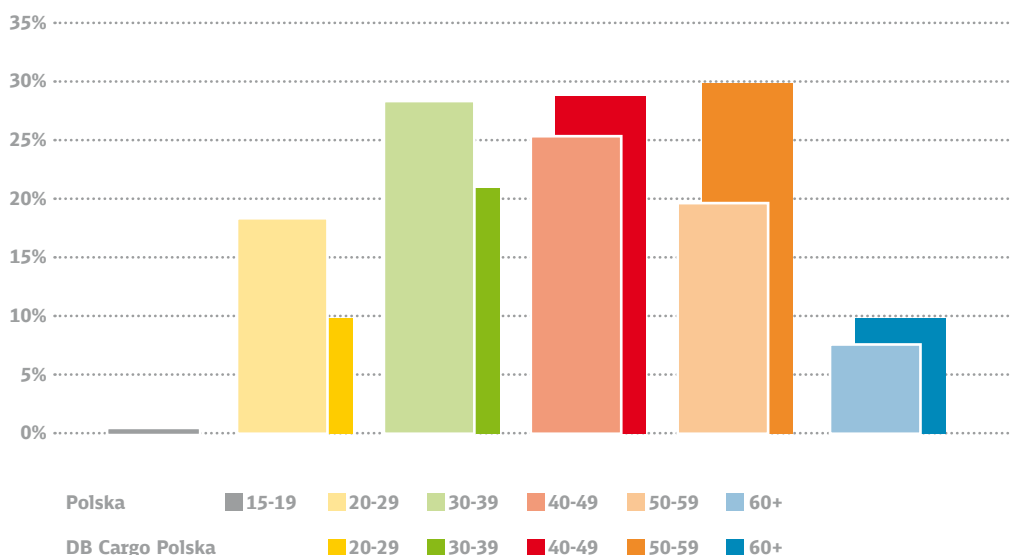
ADVANTAGEOUS AGE

One of the toughest challenges of the current labor market concerns demographic changes. Forecasts indicate that production-age populace will decrease in the next years.

DB Cargo Polska Group realizes how important in this context activating elder people is and what a value a multi-generational team is, where experience and knowledge are naturally exchanged. This fact is reflected in

the employment age structure. It is different from the age structure in Poland – DB Cargo Polska Group exhibits a higher share of elder employees, especially 50 to 59 age group who, as mentors, may share their skills with younger employees and the industry and social skills accrued by the elder employees constitute a unique human resource.

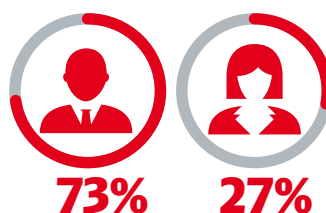
Comparison of employment structure by age in Poland¹⁸ and DB Cargo Polska in 2018



MALE INDUSTRY IN FEMALE HANDS

Taking gender into consideration, employment structure on managerial positions in DB Cargo Polska is congruent with European Union average.¹⁹ Despite the male specificity of the industry, women constitute 27% of managerial staff in DB Cargo Polska’s companies.

Employment structure on managerial positions in DB Cargo Polska companies by gender in 2018



¹⁸ "Rynek Pracy w 2017", GUS, 2018; data as of 2017
¹⁹ "Polski Biznes Silny Kobietami", Grant Thornton, 2018

DB Cargo Polska Group activities **for the employees**

Satisfaction of employees, who are the safeguard of customer satisfaction and business success, is paramount for DB Cargo Polska Group. Apart from stable employment and numerous trainings, the staff has also access to attractive non-monetary benefits.

DB Cargo Polska supports employees on three levels:

- **Employee development**
- **Employee care**
- **Work-life balance support**

► **Employee development**

DB Cargo Polska takes care of their employees assuming people are the most precious resource. Their knowledge, skills and experience are the most important factor for company development. Via a wide portfolio of trainings, DB Cargo Polska wants to prepare employees for safe and efficient work and it provides the possibility to improve qualifications in many areas. The trainings are organized by both external companies and internal specialists.

WHY ARE EMPLOYEE TRAININGS SO IMPORTANT?

- Talent development inside the organization;
- Internal communication improvement resulting in better work atmosphere and lower conflict frequency;
- Employee motivation, engagement and loyalty increase;
- Service quality and customer service improvement.

According to the World Bank methodology, return on investment in trainings in DB Cargo Group in 2018 amounted to

PLN 264.2
thousand.²⁰

Expenses on employee qualification improvement have been increasing steadily. In 2018 they **increased by 41%** in comparison to the previous year and amounted to **over PLN 3 mil.** This means that the company devoted on **average PLN 1,077** for training per employee in 2018. This is 74% more than the average in Poland.²¹

²⁰ Roku Almeida, P. Carneiro, "The Return to Firm Investment in Human Capital", 2008, average training ROI amounts to 8.6%

²¹ "Monitoring Branżowy, Rynek Usług Szkoleniowych" PKO Bank Polski 2016; data as of 2015 were forecasted assuming yearly training expense increase at 11.2% yoy

LOCO DRIVER TRAINING

Railway Transport Office predicts that in the next years locomotive driver will be one of the professions in demand.

DB Cargo Polska has already started counteracting the potential generation gap.

DB Cargo Polska Group training program assumes the loco driver candidate will get authorization in joint categories encompassing driving shunting locomotives, other locomotives used in shunting work and cargo transport.

The profession of loco driver is associated with high social prestige. This results among others from the complex and demanding training program, consisting of 3 parts and requiring as much as 2,280 hours. Additionally, medical and psychological examinations are required. High training quality is tested with examinations conducted by authorized bodies.

In 2019, DB Cargo Polska Group will be one of the first freight carriers to train staff with the use of modern equipment: locomotive simulator installed in a trailer. This solution will allow DB Cargo Polska Group to conduct trainings at any location.

Apart from basic trainings leading up to receiving authorization in railway professions, in 2018 DB Cargo Polska Group started "International Loco Driver" program, thanks to which exchanging traction team is no longer necessary when crossing the Polish-German border and loco drivers can work in both countries. The program gives a chance to the current employees to work in new conditions, improve their qualifications and German language proficiency.



EUROTRAIL PROGRAM

Yet another initiative of DB Cargo Group is euroTRAIL program, allowing professional development opportunities in international environment and gaining experience in conducting projects important for the whole organization.


Participation in euroTRAIL allows to work in various departments chosen by the trainee after consultation with the Tutor. It allows to "walk in somebody else's shoes". The program gives the opportunity to gain valuable skills resulting from working on tasks and solving problems in many departments. During the program, the participant becomes part of the so called "Vintage", which is a group of people from all DB Cargo companies in Europe. Undoubtedly, one of the program's advantages is the possibility to go abroad.

Agnieszka Sekuła



EMPLOYEE DEVELOPMENT PLAN

DB Cargo Polska Group pays a lot of attention to the possibility for self-realization, obtaining new skills and building the conviction among the employees that they influence the company development. DB Cargo Polska appreciates knowledge and engagement of the employees who want to develop continuously.



JACEK BABIUCH
Director of Operations

- Since 2018 ● Director of Operations
- 2015 - 2018 ● Head Engineer
- 2014 - 2015 ● Acting Head Engineer
- 2013 - 2014 ● Department Manager
- 2007 - 2012 ● Shift Manager, deputy Department Manager
- 2002 - 2006 ● Shift Manager
- 2002 ● Dispatcher
- 2002 ● Clerk



ANNA SOJKA
Director of Human Resources Management

- 2019 ● Director of Human Resources Management
- 2013-2019 ● Professional Development Coordinator
- 2009-2013 ● Communications specialist



PAWEŁ WIECHOCZEK
Director of Service Design

- Since 2018 ● Director of Service Design
- 2015 - 2018 ● Service Design, Production Concepts and Calculations Manager
- 2015 ● Planning Department Coordinator
- 2013 - 2015 ● EuroTRAIL trainee
- 2011 - 2013 ● Senior Specialist
- 2009 - 2010 ● Senior Shunter, Maintenance Smith
- 2007 - 2010 ● Shunter, Senior Shunter, Maintenance Smith



OLGA NOWAK
DB Port Szczecin Management Board Member

- 2019 ● DB Port Szczecin Management Board Member
- 2015 - 2019 ● Management Board Proxy for Business Excellence
- 2011 - 2014 ● Management and Development Director
- 2010 - 2011 ● Project Manager

► Employee care

DB Cargo Polska Group care for employees exceeds the framework of collective labor agreement. According to the company guaranteeing life stability is connected to providing medical care and financial security.

- **In 2018, DB Cargo Polska Group spent PLN 1.35 mil. for private medical care used by 976 employees. This means PLN 1,383 for medical care per employee. In comparison, the average value of all extra-salary bonuses in Polish companies is PLN 948.²²**
- **All employees who retired in 2018 received the total of PLN 1.94 mil. in retirement packages. DB Cargo Polska Group pays its employees retirement packages three times higher than those stipulated in the Labor Code.²³**

► Work-life balance support

Activities aimed at helping to maintain balance between work and private life are firmly within the framework of socially responsible principles of company operations. They enhance employees' effectiveness and motivation and positively influence health and safety of the staff.

- **In 2018, as every year, DB Cargo Polska Group provided its employees with holiday allowance in the amount of PLN 1.69 mil. used by 2,659 persons. Thus, the average allowance was PLN 636 per employee.**
- **Employees' children can also count on DB Cargo Polska Group financial support. In 2018, 333 children's holidays in various forms were financially supported with PLN 359 thousand which amounts to PLN 1,078 on average per child.**
- **In comparison, average benefits paid from a company's social benefit fund (like holiday allowance or children's holiday support) in Poland is PLN 481.²⁴**

GLOBAL CHALLENGE

In order to promote healthy lifestyle and physical activities among the employees, the second edition of the 100-day competition, Global Challenge, took place in summer 2018; in this event, the employees are challenged to improve their health and sports achievements.

During this edition the employees:

- **Took 282,024,993 steps,**
- **Walked, ran and biked over 180,000 km,**
- **Lost over 180 kg weight.**

²² "Rynek pracownika a świadczenia pozapłacowe", Gazeta Finansowa Mar. 16-22, 2018

²³ Labor Code, 2018

²⁴ "Koszty pracy w Gospodarce Narodowej w 2016", GUS 2017 /Data calculated on the basis of average company costs connected with company benefit funds for current remuneration in the sector of companies/



Employee Opinion Survey

In 2018, yet another edition of Employee Opinion Survey was conducted in DB Group. Participation in the survey, which grows more and more popular, reached 68% in DB Cargo Polska Group and was 7 pp higher than in the previous edition in 2016.

Thanks to the survey, organizational culture based in trust and allowing the employees to use their full potential can be further developed. On the basis of the answers in the Survey, DB Cargo Polska Group implements measures which develop employees and improve their satisfaction as well as exact real changes with significant positive influence on employees.

The results of the 2016 Survey gave rise to over 260 measures enhancing the organization submitted by the employees.

2018 EMPLOYEE OPINION SURVEY RESULTS

72% participants think that the department they work in has a significant contribution towards DB Cargo Polska Group activity.

73% participants think that the team they work in delivers the best possible products/services.

77% participants think that their team/department focuses on external and internal customers' needs.

72% participants think that the atmosphere in their team/department is good.

76% participants think that when they require support, they can depend on their colleagues.

74% participants think that they can maintain appropriate work-life balance.

82% participants think that their scope of duties is adequate to their knowledge and skills.



Employee voluntary work program

DB Cargo companies in Poland see the influence of everyday activities and decisions made in the organization on the social environment. For this reason the company approaches its role in the market holistically, in accordance with sustainable growth principles. DB Cargo Polska Group intends that every employee is aware that business activity does not only mean maximizing financial gain but also broadly understood activities for the society, natural environment and national

economy development. Building social capital is especially important for DB Cargo companies in Poland. The most important element of these activities in the organization is the employee voluntary work program, "Kolej na Pomaganie" and engaging people who take care of local communities' development, help the needy and support entities which maintain social balance in local communities providing opportunities to all who need them.



The employee voluntary work program "Kolej na Pomaganie" is being realized since 2014. It has been named an exemplary practice three time in the report "Odpowiedzialny Biznes w Polsce" (Responsible Business in Poland), published regularly by Responsible Business Forum.

By this token, DB Cargo Polska is one of the 229²⁵ companies setting standards for responsible business in Poland.

- Since 2014, employees of DB Cargo Polska companies have completed **47 voluntary work initiatives** of very broad scope of influence on local communities.
- The total value of donations to the voluntary work program exceeded **PLN 78 thousand**. Additionally, PLN 10 thousand was donated in kind within the framework of the social program "Exchange the mobile for a board game", in which employees spent time with wards of social help centers' organizing board game tournaments.
- **450 employees** have taken part in the program until now, which comprises 15% of all employed.
- In 2018, employees devoted about 190 hours for the program, which make is **23 work days** of one employee.

²⁵ Number of companies submitted to the Responsible Business Forum report "Odpowiedzialny Biznes w Polsce. Dobre Praktyki" in 2018

All who decide to spend their time and energy to help others can count on the company for support, both organizational and financial. The employer supports financing of voluntary initiatives within the framework of organized contests but also ad hoc voluntary activities. It also gives all the necessary organizational support, promoting the initiatives, engaging other employees and helping in planning and realization of the initiatives, also on company's grounds (for instance fund-raisers, charitable activities).

The program "Exchange the mobile for a board game" has been holding a special place in voluntary work activities since 2018. It is fully financed and organized by the company and realized by volunteers. Its main aim is to counteract smartphone addition in children and teenagers, especially among poorer social groups.

In 2018, DB Cargo Polska Group defined corporate values. Workshops and discussions allowed to narrow down the scope to three: Employee, Customer, Openness. The values clearly indicate the areas of highest priority in developing corporate culture, pointing out directions of development of the whole organization and principles guiding the company in everyday activities in all dimensions, starting with business through operations to employee relations.





Pioneer of ecology

For DB Cargo Group, development in the ecological aspect depends not only on financial results, but also the manner of the company's activities. One of the values is care for the natural environment. The Group takes a wide variety of steps aiming at minimizing adverse environmental effects. Limiting fume and greenhouse gases emission, reducing electricity demand in buildings, curbing vibration and noise as well as waste recycling are among the most important initiatives.

Since 2015, DB Cargo Polska has the “COMPANY CLOSE TO THE ENVIRONMENT” certificate, thus confirming the realization of an effective and efficient ecological strategy.



Firma Bliska
Środowisku

Fuel consumption and emission generated by rolling stock

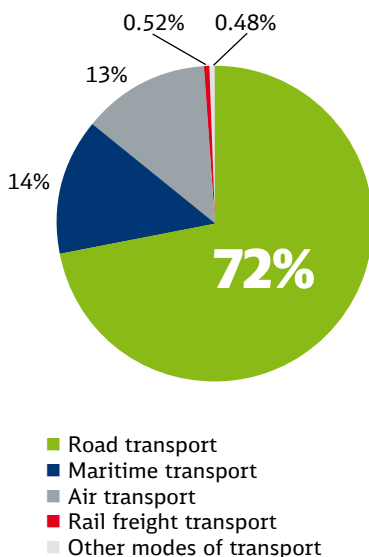
In DB Cargo Polska Group, the environmental impact is connected, among others, with its basic activity i.e. rail freight transport. Rail freight transport has one of the lowest shares in greenhouse gases emission connected to transport in general, nevertheless in absolute numbers it still constitutes a source of pollution to be, at least partially, limited.

The total CO₂ emission in Poland in 2016 was 398 mil. ton²⁶, out of which 21.7% was caused by transport.²⁷ Rail freight transport

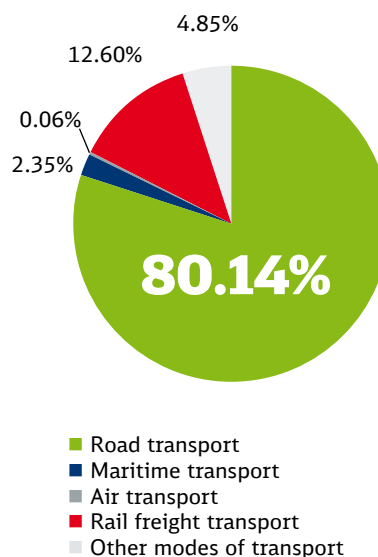
is responsible for only 0.52% emission from all transport means²⁸, which translates into emission of ca. 452 thousand tons of CO₂ a year. The main source of greenhouse gasses emission in transport sector is road transport, dominant in this respect both in Poland and Europe.

Rail freight transport low emission, at the level of 0.52% of all transport emissions, is an important issue taking into consideration the 13% share in total transport performance.

Share of emissions from particular modes of transport in total emissions resulting from transport in Europe in 2016²⁹



Share of transport performance in tonkilometers by modes of transport in Poland in 2017³⁰



²⁶ European Environmental Agency, 2018. EEA greenhouse gas – data vieweroku <https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer>

²⁷ Eurostat

²⁸ It is estimated that the Polish emission structure is similar to European

²⁹ <https://www.eea.europa.eu/data-and-maps/data/national-emissions-reported-to-the-unfccc-and-to-the-eu-greenhouse-gas-monitoring-mechanism-14>

³⁰ "Przewozy ładunków i pasażerów w 2017", GUS 2018.



Transport performance structure including sidings in 2017 and 2018 for diesel and electric rolling stock

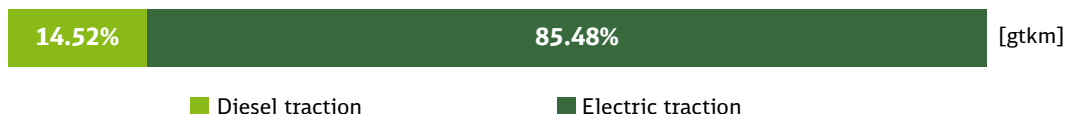
The transport fleet of 2,226 vehicles at the disposal of DB Cargo Polska consists of:

- **over 2,000 wagons,**
- **220 locomotives, 80% diesel ones.**

The amount of cargo transported in 2018 was almost 3,219.3 mil. gross tonkilometers. Although 80% of DB Cargo Polska loco-

motives are diesels, most transport, as much as 85%, is done with electric rolling stock. Only a small part of transports is performed with diesel locos despite the fact they are much more numerous. They are shunting locos used in sidings where, due to lack of catenary, electric locomotives cannot be used.

Transport performance done by DB Cargo Polska in 2018 by traction type³¹:



³¹ Assessed based on the share as of 2016, source: Audytel, 2017. DB Cargo Polska located in Zabrze energy audit. Audit report no. 715-0075.

Fuel and electric energy consumption

In 2018, the Group used 7.9 mil. liters of diesel fuel for traction, out of which ca. 56% was used for transport (for D-locomotives transporting cargo) and 44% for shunting.³² This fuel consumption was connected with emission of 21.2 thousand tons of CO₂.³³

Estimates show that emissions resulting from diesel rolling stock use are responsible for 4.7% of CO₂ rail freight transport emissions a year in Poland.³⁴

Average emission per gross tonkilometer transported with D-locomotives in DB Cargo Polska amounts to 45.41 g CO₂/gtkm.³⁵

Since 2016, diesel fuel consumption for traction purposes were decreased by almost 850 thousand liters, i.e. by 9.7% (compared to 2018). This is connected with continuous decrease of share of diesel traction which in 2016 was 20% and dropped to 15% in 2018, calculated by transport performance.

Average emission per gross tonkilometer transported with E-locomotives in DB Cargo Polska amounts to 21.24 g CO₂/gtkm³⁶, which is 24.17 g CO₂/gtkm less than with D-locomotives.

Social cost of pollution

Pollution, especially the so called low emissions (particulates and harmful gasses at the height of up to 40 m), cause numerous health problems. Social costs connected with health detriment and ensuring appropriate health care accessibility, implementing a system of limiting the emissions and air treatment are also results of air pollution.

Thanks to using electric locomotives, DB Cargo Polska reduced the social cost related to transport activities by PLN 9 mil. in 2018.

Social costs resulting from CO₂ emission from DB Cargo Polska activities amount to as follows³⁷:



ELECTRIC LOCOMOTIVES
ca. 0.29 gr/gtkm



DIESEL LOCOMOTIVES
ca. 0.62 gr/gtkm

32 Assessed based on the share as of 2016, source: Audytel, 2017. DB Cargo Polska located in Zabrze energy audit. Audit report no. 715-0075

33 Assessed based on EPA emission calculator, assuming average emission of 2,69 kg CO₂/1 liter of diesel fuel (<https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references>)

34 Assessed based on emissions in 2016 in accordance with EEA data (<https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer>)

35 Deloitte own calculation based on EPA Greenhouse Gases Equivalencies Calculator - Calculations and References.

36 Deloitte own calculation based on KOBiZE, 2018. Emission indicators for CO₂, SO₂, NO_x, CO particulates for electric energy and forecast concerning electric energy consumption by DB Cargo locomotives based on estimated data as of 2016

37 Eunomia, 2019. A deposit refund system for Czech Republic. Chapter A.5.0 Environmental Impacts.

Energy efficiency increase

Saving resources, including energy, is one of the important facets of European Union and Poland development policy. Energy efficiency increase and rational use of existing energy resources in the context of increasing demand for energy are areas of great significance for DB Cargo Polska Group. In the framework of continuous improvement, the company undertakes exemplary steps in these areas, such as conducting regular audits or using high efficiency solutions.



ON THE WAY TO PERFECTION

DB Cargo Polska conducts regular energy audits of its buildings aiming at finding solutions to increase energy efficiency and gathering information for potential energy savings. Identification of problems in this respect allows for continuous improvement of processes and technologies as well as equipment.

In 2018, thanks to energy audits, the following steps were taken:

- **exchange of electric heaters** to water-based heating,
- **replacement of window frames** in the multifunctional building in Rybnik,
- **replacement of lighting frames.**

As a result of these steps, DB Cargo Polska continuously decreases carbon dioxide emission and contributes towards minimizing pollution and resource depletion and thus decreases the whole industry's impact on the environment.



The report on DB Cargo Polska impact for 2018 is the second such report in the organization history. Both reports were prepared in cooperation with Deloitte Advisory sp. z o.o. sp. k. (former Deloitte Advisory sp. z o.o.) The first report was prepared for 2016, hence the many comparisons to that period in this publication.

About the report

The report was created in order to summarize DB Cargo Polska Group impact on the economy and environment. It includes companies: DB Port Szczecin Sp. z o. o., DB Cargo Polska S.A., DB Cargo Spedkol Sp. z o. o. and Infra SILESIA S.A.

Economic impact analysis concerns operational activities of the aforementioned companies in the calendar year 2018.

The companies' operational activity impact was quantified by means of Leontief's input-output model. It reflects interdependencies between various economy branches and allows to estimate the impact of a given entity on the whole economy in such terms as added value, employment and household income. The model results show effects of 2018 activities. Financial data for 2018 produced by DB Cargo Polska Group were used in the calculation.

In order to show economic impact fully, data concerning local and central taxes paid by the companies were gathered and aggregated.

For Leontief's model simulation, input-output tables for 2010, published by GUS in 2014, were used. Publishing new tables takes place every five years, the ones utilized here are therefore the most current.

DB Cargo Polska Group impact on the environment was presented on the basis of information produced by DB Cargo Polska Group and statistical data from open sources.

In order to present a possibly broad context of DB Cargo Polska activities in Poland, also other aspects were described, such as the company's activities development in the last 10 years, DB Cargo Polska as an employer and selected social initiatives of the company. They were presented on the basis of the information produced by the Group.

DB Cargo Polska Group is responsible for correctness and completeness of the information produced for the purpose of calculations.

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