

SUSTAINABILITY REPORT 2018



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To be successful in the long term, economy, ecology and social responsibility need to be in harmony!

Sandra Hollweg, Sustainable Solutions

Sustainability functions as an integrated whole

At first sight these goals do not seem compatible with economic thought. However on closer examination it becomes clear that economy, ecology and social responsibility need to be integrated in order to be successful in the long term. To put it briefly: entrepreneurship is only possible if there are sufficient resources to produce goods, and if there are people who are able to buy these goods. So in the following pages we should like to show our stakeholders

that sustainability is not a worn-out marketing cliché decorated with waste separation, tree-planting and jute shopping bags. From our viewpoint it is a concept that helps to master future challenges.

This is evident, for instance, with digitalisation. It offers the chance to make one's own business model more successful, to stay competitive and acquire new customers. But it also

brings the risk that people are not able to handle it, that they may lose their jobs or have to accept new working conditions. For the environment there is the risk that electricity consumption may rise steeply, for example, or that internet trade may result in longer transport routes, whereas the chances here include the possibility of reducing transports by consolidation, and replacing business trips by video conferences.

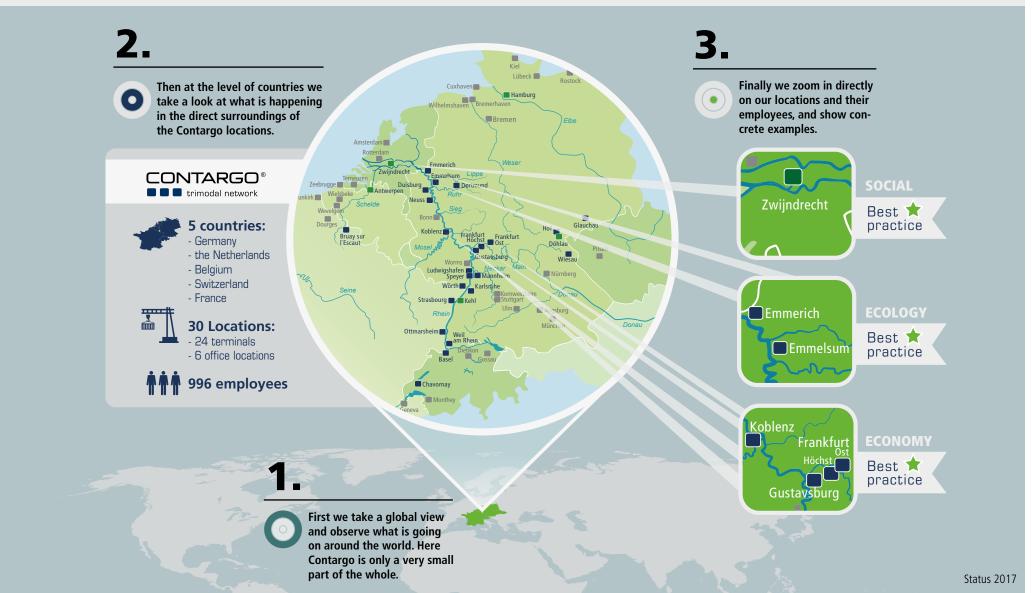








Infographic: Our approach = SUSTAINABILITY³







2016

CONTARGO

NACHHALTIGKEITSBERICHT 2016



The Sustainability Report 2018

This is Contargo's third Sustainability Report. We publish a report of this kind every two years. The present issue is based on data for the years 2016 and 2017 and follows the Global Reporting Initiative Standard (GRI Standard). We have dealt with details and data that play an important role for us and for our sector.

All the companies of Contargo are included in this report; however we were not able to collect all data consistently. This is due to various factors, for instance locations were added to the Contargo Group during the course of the period covered by the report, and there were changes to company structure. It was also difficult to record certain data types for the purely office sites, where auxiliary costs are lumped together and information is not available for separate energy meters or exact waste disposal costs. It is also difficult to access data from external providers of direct trucking. To this is added the complication that information from the different terminal systems, data from Administration, Maintenance and Repair and Depot are (still) recorded in different ways.

A new feature of the present report is that we worked together with Offenburg University on

students' projects concerned with various topics. This approach opened up quite new perspectives for us and stopped us from just going round in circles. More about this on page 67.

Another change is our calculation of CO₂ values, which we have been able to adjust at one or two points. Since there are now considerably more enterprises, organisations, associations and ministries addressing the question of CO₂ calculations, we can critically compare our estimates so far. Not only are the European states seeking to create one standard for the calculation of CO₂ values for all transport modes; today there are also substantially more precise emission values, and some of the measuring devices in place on vehicles, and in their surroundings, already pass on information in real time.

We should like to thank Offenburg University for its support in preparing the Contargo Sustainability Report 2018











Contargo introduces itself...



Contargo offers an extensive NETWORK FOR CONTAINER TRANSPORTS

Contargo is one of the leading container hinterland logistics networks in Europe. The enterprise integrates container transport between the western seaports, the German North Sea ports and the European hinterland.

Contargo maximises the intermodal advantages of the three transport modes inland waterway, rail and road in an integrated transport concept. The enterprise is present in Germany, France and Switzerland with 24 container terminals and maintains offices at seven additional locations in Germany, the Netherlands and Belgium. Contargo also operates its own barge and rail lines. In 2017 the workforce of 996 employees achieved a turnover of 471 million Euro.

At the terminals Contargo operates container depots and temporary storage, and offers many auxiliary services for containers, including local delivery by truck, maintenance and repair, and stuffing and stripping. At some terminals reefers are also handled and stored.

Some of the terminals are authorised to handle dangerous goods and store them in transit for up to 24 hours. In order to protect the groundwater, the terminals are sealed off from the underlying ground. At locations which frequently deal with dangerous goods (like Contargo Rhein-Neckar and Contargo Industriepark Frankfurt-Höchst) Contargo cooperates with the regional authorities, and interim storage is allowed for containers carrying dangerous goods. In the event of an emergency incident the enterprise has a Risk Management emergency service available 24/7.







Trimodal transports by barge, rail and truck



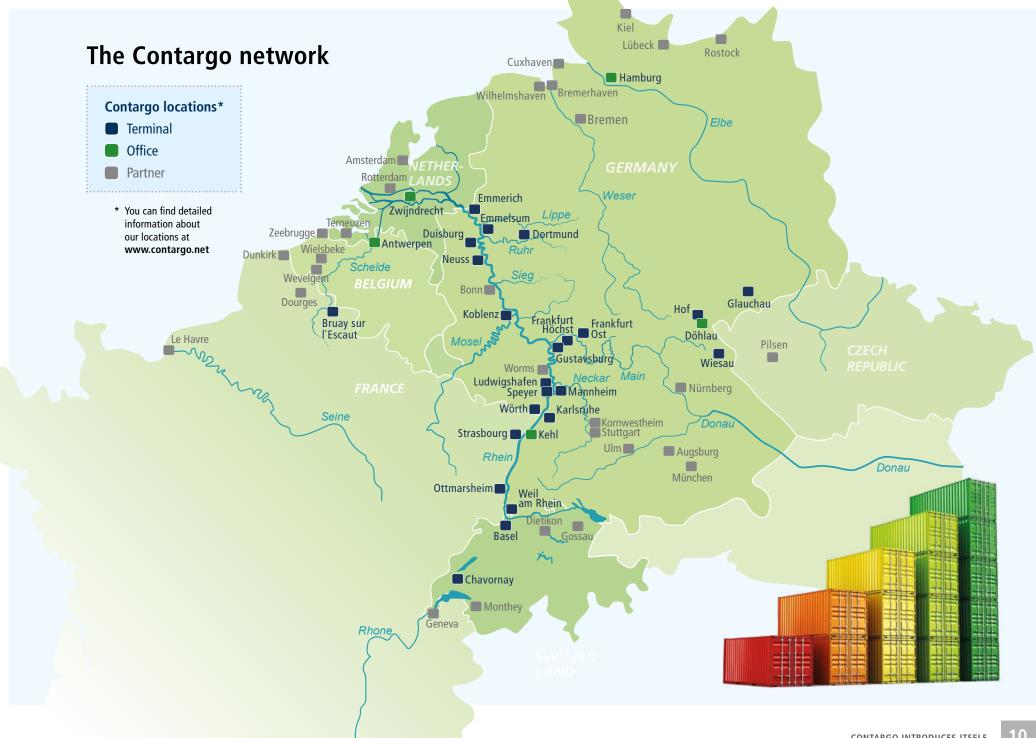
Maintenance & Repair





Reefer service Handling & interim storage of dangerous goods







Contargo's goals in comparison with the UN's SDGs.

Where do they match up already, and where does Contargo still need to adapt to the SDGs?

where do they match up already, and where does contargo still freed to adapt to the 3DGs:								
SDG Goal No.	Traffic light*	Contargo's dedicated actions include:						
1. No poverty		Secure jobs for the approx. 1,000 employees, support of aid projects.						
2. Zero hunger		Fair Trade coffee, to support sustainable agriculture. Regional fruit and vegetables as snacks for employees.						
3. Good health and wellbeing		Prevention of occupational illness, massage, eye test, fitness offer, vaccination.						
4. Quality education		Creating more training and dual study places.						
5. Gender equality		Flexible work times for parents, same starting salary for women and men.						
6. Clean water and sanitation		Groundwater protection at all locations, support of Rhine conservation project						
7. Affordable and clean energy		Promoting renewable energies, switching to genuine green electricity.						
8. Decent work and economic growth		A long-term measure with a social background for terminal workers.						
9. Industry, innovation and infrastructure		The Contargo IT department is constantly working on innovations and digitalisation.						
10. Reduced inequality		Flat hierarchies make it possible for everyone to influence a project by their input. The basic salaries in comparable positions are equal at every location.						
11. Sustainable cities and communities		Presence in local organisations and associations, close coordination with town and cities and their inhabitants.						
12. Responsible consumption and production		Making combined transport known to manufacturing enterprises, making it attractive to them and supporting the recycling economy.						
13. Climate action		Decarbonising all three transport modes relevant for us; our activities at terminals and offices up to 2050.						
14. Life below water		Supporting new technologies and innovations in inland navigation.						
15. Life on land		Continually reducing paper and water consumption, reducing waste, conserving the countryside around the locations and if necessary restoring its natural state.						
16. Peace, justice and strong institutions		Many of our terminals are compliant with the C-TPAT standards (Customs-Trade Partnership Against Terrorism)						
17. Partnerships for the goals		Our employees maintain contacts with policy, associations and organisations which address the above aspects, and contribute actively to attaining the goals.						



SDG – Sustainable Development Goals

Sustainability is an integral part of our company philosophy,

not only because Contargo transfers great volumes onto rail and inland waterway in the main run of the transport chain, thus reducing emissions and costs. Within the enterprise sustainability is regarded as an overriding principle that requires responsible handling of all resources and covers economic, ecological and social aspects.

At a General Assembly of the United Nations in September 2015, all the member states approved Agenda 2030 for sustainable development. In it the international community of nations expressed their belief that global challenges can only be met together. The Agenda creates a basis for shaping global economic progress in harmony with social justice and within the framework of the earth's ecological limits. Altogether there are 17 goals, subdivided into 169 sub-targets. They cover all three pillars of sustainability. Enterprises are designated as central players with a key function in the realisation of SDGs.

Thus all these political pledges have consequences not only for the governments of countries, but also for enterprises — and particularly for the energy and transport sectors.

- Contargo does not concern itself with this goal, as it does not relate to the activities of the enterprise.
- This topic is relevant for the activities of Contargo; however, we could do considerably more to commit ourselves.
- This goal fits perfectly to Contargo and we concern ourselves with it extensively.

^{*} TRAFFIC LIGHTS



Jürgen Albersmann, Contargo GmbH & Co. KG:

"Very important!"

Gilbert Bredel, Contargo North France SAS, Bruay-sur-l'Escaut:

"As a purely administrative and trading structure, we have only very little influence on sustainability. The terminals are not 100 percent our own, not all trucks, barges and rail facilities are our own. But we want to work hand in hand with our partners, because we believe that we DO have some influence."

Daniel Kaufmann, Contargo AG, Basel:

"We find the sustainable strategy very good – also because we increasingly notice that growing attention is being paid to sustainability on the market."

Christian Eichmeier, Contargo Rhein-Main GmbH:

"Today sustainability is no longer just a catchword for us – it's a way of business that we practise. Due to the market segment we are active in, we already stand for alternative, sustainable transport modes."

What are your views on SUSTAINABILITY?

Eugen Werwai, Contargo Rhein-Main GmbH:

"Because we offer combined transport services, I see sustainability as an argument to convince our customers of our services."

Team Zwijndrecht:

"Positive!"

Kawus Khederzadeh, Contargo Industriepark Frankfurt-Höchst GmbH:

"I personally find the theme of sustainability very important. However, in some instances sustainability is difficult to realise and is associated with considerable costs."

Arndt Puderbach, Contargo Rhein-Main GmbH:

"The Idea is not new. The requirements involved, namely: taking responsibility for employees, society, economy, ecology, geography in the present and in the the future, are based on the values of our society. However, it seems to me that meanwhile these values have been somewhat forgotten. So much the better, then, that the theme of 'sustainability' reminds us of them again."





All good things come in threes

Contargo aims for a balance between economy, ecology and social responsibility

Contargo's two-yearly sustainability report always bears the title SUSTAINABILITY³, since Contargo is active in all three areas of sustainability. The differences between editions of the report are in the details, because every reporting period sees new challenges for each of the three pillars of sustainability.

There are some constants at Contargo that never change. One of these, for instance, is the mission statement. The very first section of the General Terms and Conditions (AGB) is intended to give Contargo's employees and business partners a common understanding of what

Contargo stands for, and the rules that shape our business relations. In the foreground are the honouring of agreements, customer orientation (provided it is compatible with the law and with sustainability), putting right our mistakes, and according the highest priority to sustainability.

Other factors change within every reporting period, for example the economic framework data. Economic growth is directly dependent on numerous factors, for instance the global economic situation, competitors, the economic situation of customers, oil prices, and congestion in the seaports. The related challenges facing Contargo also change accordingly.



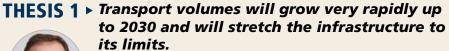
Economic challenges

The impact that one single event can have on economic success has already been demonstrated, for instance, by the collapse of the railway tunnel at Rastatt. Contargo had no influence over this event, but nevertheless had to deal with the consequences. Thanks to the flexibility of combined transport, the enterprise was able to offer its customers viable solutions. Digitali-

sation requires high investments and willingness to change on the part of employees on the one hand; on the other, it also offers many chances to do business more efficiently and more successfully.

Within the enterprise itself there are also many changes that influence economic success. Some examples of these changes are shifts in the Managing Directors' areas of responsibility, the founding of new companies, and ongoing growth.

Additionally Contargo is preparing itself to open up other regions in Europe and the world that cannnot be served by combined transport, as has been usual with Contargo until now.





"To be able to handle increasing quantities in the network, we have to begin the expansion of our terminals today. The main task of the management will be project development." **Thomas Löffler**

The future of industry is digital.

"Therefore we are investing intensively in the most modern IT solutions, in the form of Open Source solutions which we want to use as flexibly as possible, but also for as long as possible." **Heinrich Kerstgens**

◆ THESIS 3

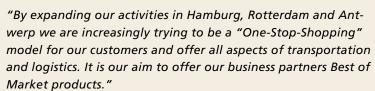




THESIS 2 > The economy is developing more and more rapidly, disruptive events in the market are increasingly frequent, enterprises will disappear from the market if they do not manage to react to this.

> "For this reason we must constantly re-examine the question whether our present business model is still the right one, and whether it will fulfil the expectations of our owners in future, too. The department 'New Business and Digitalization' is particularly intensively concerned with this aspect." Heinrich Kerstgens

Freight brokers and other digital sellers attract customers mainly by their prices.



Marcel Hulsker

◆ THESIS 4





Ecological challenges

In 2016 and 2017 Contargo was concerned with the following main ecological aspects: decarbonisation, E-mobility, annual sustainability targets and conserving resources by digitalisation. We are in the process of reducing our CO₂ emissions by 10% by 2020, and by 30% by 2030, relative to the base year 2012.

THESIS 5 > Beside the economic viability of an enterprise, protection of the environment is increasingly playing a decisive role.

> "Right from the beginning, our company philosophy has envisaged eco-friendly transport systems. Additionally we are focusing on projects at the terminals, LED lighting, photovoltaic power generation for our cranes, and changing over the company truck fleet to hybrid and electric drive. Topics like E-Trucks and E-barges are being examined in project groups."

Konrad Fischer

THESIS 6 ► CO₃-free activities present great challenges to industry.



"Our goal is decarbonisation by 2050. For this reason we need to identify every chance to produce our transports CO2-free or at least CO2-neutrally as soon as possible. This also requires a great deal of technical expertise, some of which we still need to acquire."

Heinrich Kerstgens

Social Challenges

Contargo will face various social challenges in future. A great deal of attention needs to be given to the theme of personnel development. To be able to cover requirements for skilled personnel, Contargo needs to raise the training quota even more, and invest in the training and advanced training of employees – especially since digitalisation has made lifelong learning a reality.

In 3-5 years a phase will begin in which, for reasons of age, a generation of managers will successively be leaving the enterprise.

◆ THESIS 7

"Because the managers concerned are in high level general management in the operative and commercial-administrative field, next generation successors need to be found and specifically introduced to these tasks." Thomas Löffler

Digitalisation is playing an ever-greater role.

"Economists say that it will have as great an impact on people as industrialisation did. Therefore it is important for us to adapt our present structures."

Marcel Hulsker

▼THESIS 8



Processes in the enterprise will change increasingly often and increasingly fast.

"Thus it is important to take the people in our enterprise with us along this path. Our employees need to be involved more than ever in decisions and the consequent development processes, so that the changes do not impede the specialists in the teams. For this purpose we started the strategy group 'Digitalisation and people' in October, resulting so far among other things in the idea of the Contargo Academy." Heinrich Kerstgens

▼THESIS 9







SWOT Analysis

SWOT analysis shows where our strengths and weaknesses lie, but also identifies the areas in which we see chances despite the challenges. In this Sustainability Report we want to take a first step and speak openly about our mistakes, and the potentials for improvement that are associated with them.

STRENGTHS:

- Trimodal network (terminals, barges, rail and truck fleet)
- Neutral service provider
- Sufficient capacities to meet demand fluctuations
- Stable ownership structure

WEAKNESSES:

- Too little scope for manoeuvre
- Many different IT systems
- Complicated, historically-grown price system

THREATS:

- Customers / Lessors become competitors
- Dependency on performance in the seaports
- Developments on the charter market
- Merging of sea carriers
- Little influence on quality in case of Congestion

OPPORTUNITIES:

- Further extension and densification of the network
- Integrated, unified, flexible IT system / digitalisation
- Expanding rail transports
- Climate protection objectives

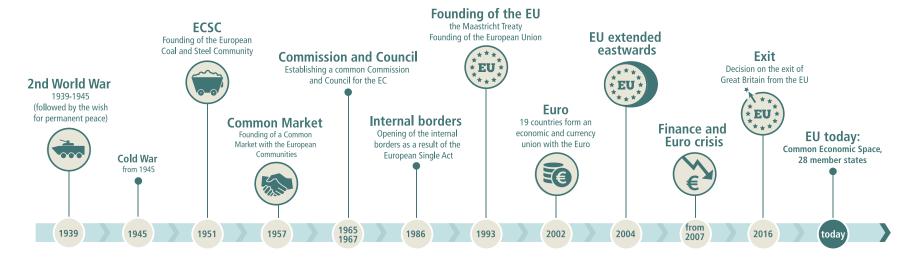


ECONOMY





Europe and the World



Timeline: Development of the EU from 1939 to the present day

All in one boat

GLOBAL TRENDS INFLUENCE THE EU

The European Union (EU) is the second largest economy in the world. With a nominal gross domestic product of 16.5 billion US dollars, it represents approximately 23 percent of global economic output. On the one hand this means that the economies of the member states benefit substantially from globalisation; on the other, however, they are also significantly influenced by world-wide developments.

The member states of the European Union have agreed on joint objectives which are set down in Article 3 of the EU Treaty. These include guaranteeing people's freedom of movement, setting up a joint internal market and working towards the sustainable development of Europe. In this way it is intended to strengthen the member states in worldwide competition.

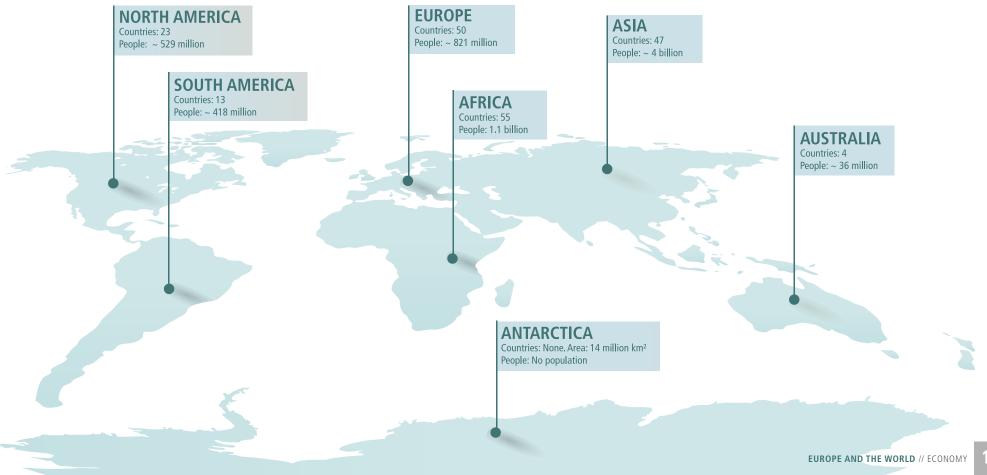


COMMON AIMS

An important area in the EU economic sector of Services is "Transport & Logistics", which accounts for 5 percent of value added in all 28 EU countries and provides more than 11 million jobs. Thanks to EU policy, the European transport sector has seen substantial improvements over the past 20 years: airspaces, seas and roads are safer, work times have improved, it has been possible to reduce pollution and strengthen competition within the EU. Large sums are still being invested in expanding the transport infrastructure, for instance in improving the infrastructure between the internal markets, and overcoming technical barriers (e.g. incompatible standards in goods transport).

GLOBAL INFLUENCES

Since by its very nature the transport branch is inter-state and intercontinental, it is significantly influenced by political and economic changes. Examples in Europe are the Brexit and the re-introduction of border controls in individual states within the Shengen area. Globally, for instance, US economic policy, TTIP and economic sanctions have impacts on the EU. For this reason the transport branch always has an eye to global politics, so as to be prepared for possible changes.





Stand still in a rocking ship and you'll fall over

FOUR CHALLENGES FOR THE TRANSPORT AND LOGISTICS SECTOR

For companies, the increasing global networking of economy and industry means that changes in any country can impact on the whole system. To anticipate the resulting challenges and react appropriately can be a question of survival for companies.

The world population is growing. Whereas in the western industrial nations the average age is increasing in combination with a high standard of living, other countries are falling economically behind. Thus immigration pressure has arisen in Europe which — although it has potential to create a 'younger' society — is also bringing increasing numbers of low-skilled non-native speakers onto the labour market. Companies also have to make more concessions to work-life balance in order to keep qualified personnel.

Over the past decade, decreasing logistics costs have led to changes in the division of labour. Many manufacturers have repeatedly changed their production locations in order to keep costs low. Supply chains have become more complex and transport volumes have increased. At the same time, almost all enterprises worldwide have become each others' competitors. This applies to classic enterprises as well as to startups that are developing new business models.



Digitalisation (more about this on page 22), robotics, autonomous driving, 3D printing, individualisation of customer requirements and artificial intelligence are only some of the issues that concern the logistics sector at present. Information management is becoming increasingly important. Another factor is that price is no longer the only decisive criterion — today improved, transparent and detailed data communication is an important prerequisite.

This aspect is an unalterable part of the logistics sector. It has to be assumed that as climate change progresses, this aspect will affect the other three challenges.

"We have always done it like that" will not work in future ...

Many of these developments are taking place in parallel and are even interacting, so companies have to be able to react to them very flexibly. There needs to be awareness of this at every level in the company. "We have always done it like that" will not work in future, because established procedures very soon reach their limits here. Management especially is involved; however, in many logistics enterprises the management still tends to be very conservative. Cooperations with universities or public research institutions can be helpful, as much more data can be accumulated than in individual companies, and anonymised analyses are possible.

Analyses are essential in order to find out what works and what does not. They help to identify possible synergies and make more accurate and more reliable forecasts, meaning that fewer events are unforeseen since critical developments have been anticipated early on.

CONTARGO DOES NOT STAND STILL

We consider these four challenges as chances. Because flexibility is one of the most important prerequisites for surviving on the market, we work with agile processes.

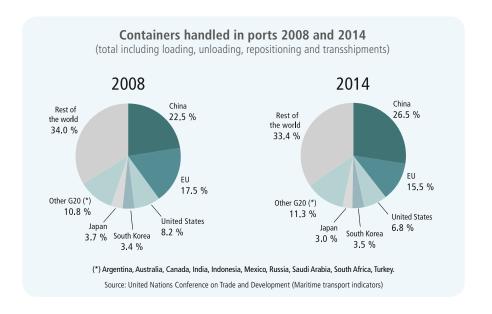


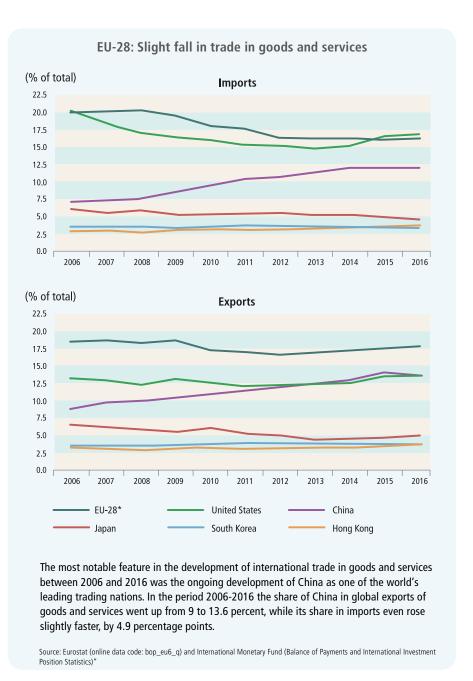
Success is standing up one more time than you fall down

THE ECONOMIC SITUATION OF THE EU IS DEPENDENT ON MANY FACTORS

Europe is very successful economically: together, the member states of the European Union are the biggest exporter and the second biggest importer worldwide. However, challenges like the increasing economic power of China, Brexit, the fragile legal status of the EU and the debates on the Euro and on migration may impact on the economic situation at any time, requiring fast reactions from companies.

In future, digitalisation will greatly increase the efficiency of the transport sector. Data analysis will contribute especially to optimising the complex logistic chain in combined transport, and will result in significantly better capacity utilisation. By more effectively filtering out certain patterns and legalities, "optimal" decisions can be reached more easily.







Always keep on the ball

IGNORE DIGITALISATION AND YOU WILL LOSE OUT

One of the biggest challenges for society, economy and policy is digitalisation. Europe is far behind the USA and Asia in the development of technologies, services and platforms. If European companies want to remain competitive they will have to make sure they do not miss the boat.

Examples like Apple, Amazon and Google demonstrate that digital transformation is much further advanced in the USA, partly because American society is more strongly characterised by visions of the future, self-confidence and acceptance of the "culture of failure", whereas in Europe security, calculability and employment issues are in the foreground.

Politicians in Europe introduce transformation processes so that disruptive technologies (3D printing, drone delivery, etc.) can give rise to new business models. This does not alter the fact that European enterprises that want to hold their own worldwide have to address questions such as how developments like block chain technology and artificial intelligence could change their business operations.

INNOVATIONS FOR THE TRANSPORT SECTOR

The transport sector is confronted by changing sectoral delimitations, and increasingly by digitally-supported internationalisation. The pioneers are already preparing to compete with digital freight forwarders and platforms. Combined transport is particularly interested by the ITS (Intelligent Transport System), which is a prerequisite for realising eFreight and paperless communication: it enables the optimisation of transport and fleet management and "tracking and tracing" throughout the whole transport network. Enterprises that allow these developments to pass them by may well end up like travel agencies and producers of chemically-developed film, who shrank within a few years from global players to small niche enterprises, or disappeared completely from the market.





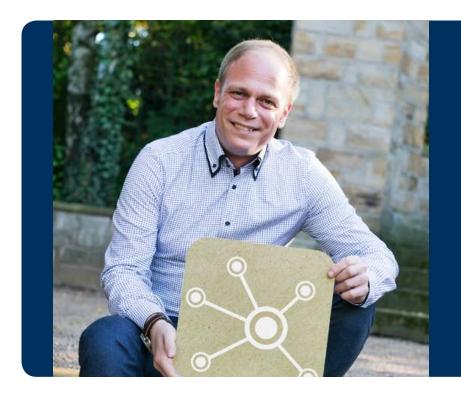


The Contargo Countries

Where the journey takes us

DIGITALISATION STRATEGIES IN EUROPE

Contargo has locations in Germany, France, Switzerland, the Netherlands and Belgium. Each of these countries has a different digitalisation strategy. However on closer examination it is clear that the focus is always on fast, simplified communication between interfaces because it is data exchange that incurs the biggest time (and money) losses.



Here in Mannheim we have an operations department, 'Coordination, Train Control and Monitoring'. Colleagues control the trains and track their progress. They also provide detailed information about the route and about any problems at our terminals. Information from rail transport companies, infrastructure operators, seaport terminals and other service providers is edited, processed, and passed on to the terminals as usable messages. The terminals in turn can use this information to improve their information and data exchange with sea carriers and forwarders. All in all, this is a complex and time-consuming procedure, but it is essential for good customer service in the area of information and report systems.

Andreas Mager, CCo-Managing Director Contargo Rail Services GmbH





GERMANY

There is a big digital divide in Germany. In the "Digital Economy and Society Index" 2017 (DESI) of the European Commission Germany is only in 11th place. However, plans for implementing digitalisation are ambitious: they include building up a gigabit network by 2025, initiating a new "Gründerzeit" (a historic era of industrial expansion) as well as research, development and innovation in the digital technologies in order to bring them up to a competitive level. Challenges include widespread uncertainties among companies and the general public (e.g. rapid failure of enterprises, data security, Fake News and loss of jobs caused by artificial intelligence).



NETHERLANDS

The Netherlands are among the digital pioneers in Europe, in the DESI 2017 they occupy place 4. ICT and Internet are drivers of economic growth. In the "Nederlandse Digitale Agenda" the major fields of action named are: education, knowledge and innovation, fast, open internet access, security, additional freedom of action for enterprises, and the digitalisation of individual areas (industry, health sector, energy and mobility). The challenges mentioned are: scarcity of specialists in the area of IT, and cyber crime.



FRANCE

26 percent of France's overall economic performance is based on a digital economy and France is only in place 17 in DESI 2017. Despite this the French government has not presented a comprehensive digitalisation strategy. Nevertheless, "Le Grand Plan d'Investissement 2018-2022" covers some topics in this area, like the support of innovations in enterprises, digital education of the public, investments in future-related topics such as artificial intelligence, Big Data and cyber security, and establishing an E-government.



SWITZERLAND

In "Strategy for Digital Switzerland" (2017) digitalisation is described as a chance to secure and enhance prosperity, while at the same time reducing the risks associated with structural change. Switzerland supports innovative firms and new professions, protects personal data and digital identities, and — thanks to E-government — has created a viable and citizen-friendly administration. The superordinate aim of all the measures is to secure high lemployment and good job quality.



BELGIUM

Belgium occupies 6th place in DESI. In 2016 Belgian companies made an average of 31 percent of their sales via electronic business transactions, almost double the average for the whole EU (16 percent). In 2015 the Belgian government established "Digital Belgium", with the aim of making Belgium a frontrunner in Europe. Some examples from the transport sector are digitalisation of freight documents and customs clearance.



Graphic: COLA System vision

Thanks to COLA, local transport dispatchers always have an overview of automated dispatch. They are also shown process inhibitors and deviations, so that they are in a position to support partners in case of disruptions.

The partner can participate

in all areas of COLA in at

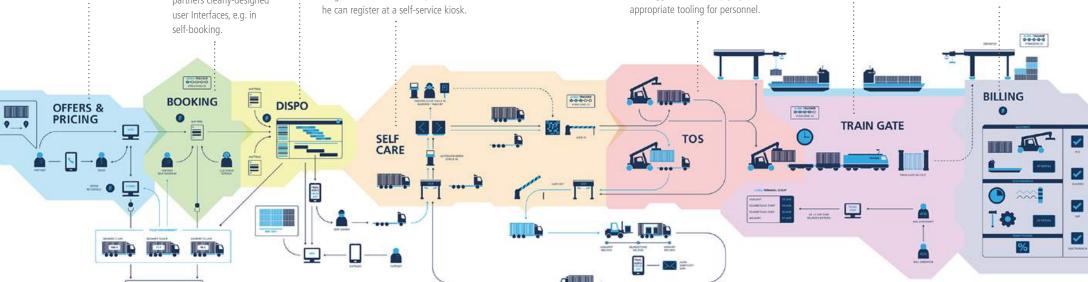
IMTIS compiles optimal offers. Thanks to "Contargo Pricing & Rates" in future we will be offering resource-based prices, thus offering customers possibllities for individualisation.

lease two ways: as well
as linkages via various
interfaces, COLA offers
partners clearly-designed
Once all the data are submitted, terminal admission can proceed automatically. In the optimal case the driver no longer has to leave his cab; otherwise

TOS bundles the many different players in the terminal (e.g. control station, slot management, heavy reach stacker and crane) and supports optimised operational procedures by its decisions and suggestions, or simply by appropriate tooling for personnel.

The Train Gate records all incoming and outgoing movements using OCR technology. Container number, condition and characteristics of the carrying wagon (UIRRC number) are used for quality control, but also for the management of downstream processes.

In future billing will be automated. For this purpose all relevant data along the transport chain will be enriched by events and will be made transparent to the partners in real time, for instance waiting times at the loading points.



In the new IT environment "Contargo Open Logistics Apps" — COLA for short — we shall be bringing our various operative systems together step by step over the next few years to form an integrated system. At the same time we are reacting to operative demand and prioritising specific COLA modules as required.





Pious hopes

FOCUSES OF ECONOMIC POLICY IN EUROPE

Contargo is active in five European states. Although four of these are EU members, each of them has its own economic policy priorities. For Contargo, this creates the need to adjust to the aims and measures of five different countries. Below we give a brief outline of some of their most important goals:

GERMANY

In the Federal Republic of Germany the "magic square" (price level stability, high level of employment, foreign trade equilibrium and continuous, adequate economic growth) is anchored in the Basic Law. To achieve these goals, emphasis over the past years has been on debt reduction, secure employment and wages, economic growth, global competitiveness and expanding digitalisation.

FRANCE

The French government's "Grand Plan d'Investissement 2018-2022" has four focal points:

Accelerating ecological change (e.g. less traffic emissions), learning and employment (e.g. training of low-skilled workers), strengthening innovation and competitiveness (e.g. investments in future-related topics like artificial intelligence), and introducing E-government.

SWITZERLAND:

As the most important economic policy goal for 2017, The Federal Council of Switzerland names "providing the best possible domestic economic frame conditions". The country should also keep a leading position in education, research and innovation, provide good frame conditions for digitalisation, secure the access of Swiss industry to international markets, and strengthen economic relations with the EU. The purpose of all measures is to secure high employment and good job quality.

BELGIUM

The Belgian government names goals like flexibilisation of the labour market and reduction of ancillary wage costs for employers. Regarding climate protection, international cooperation is aimed at. Rail transport is seen as part of the solution to the mobility problem.

NETHERLANDS

The goals of Dutch economic policy include: ensuring skilled jobs for as many Dutch people as possible, safguarding international security, and strengthening the European Union. The government works together with regional authorities and enterprises to ensure that goods transport on important routes runs as smoothly as possible.

A point that all five countries have in common is that a high level of employment can be ensured in an environment that is both innovative and resource-conserving. In each of these countries, Contargo is present to promote combined transport and give the states the benefit of future-oriented enterprises. A contribution is also made here by associations and organisations which represent the interests of the whole sector to policy decision-makers.



Self-representation is part of the job

CONTARGO KEEPS IN CONTACT WITH MANY ASSOCIATIONS

Societies and associations have a very decisive influence in societal and economic developments in Europe. They bundle the interests of their members in order to work towards common goals. In every country there are organisations specialising in particular aspects that are significant for Contargo.

Everywhere in Europe, societies and associations perform research and analyses in the market. They represent the standpoint of their sector in political and economic circles and to the public, and thus exert influence on decisions. In these organisations Contargo is either a member, an active participant, or at least maintains contacts. In this way Contargo can pass on its own knowl-

edge and experience as an input into the work of the associations, and at the same time can itself benefit from the cooperation. Some associations are also the competent partners for specialised questions.

As well as the superregional organisations there are also numerous regional societies and institutions with similar functions on a regional level. Many of Contargo's terminal managers are engaged in these. Some examples are the Propeller-Club Basel, IHK Pfalz (chamber of industry and commerce), IHK Traffic Committee Rhein-Neckar, the Ludwigshafen Round Table, the forwarding and logistics association SLV Hessen und Rheinland-Pfalz, and the association of Frankfurt Port resident companies (GFH).

In the following table we have listed the societies and associations that address various topics, grouped by countries.

	Barge	Rail	Truck	Terminal	Combined transport	Sustainability	Digitalisation
Europe	Verband für europäische Binnenschifffahrt und Wasserstraße (VBW)	European Rail Freight Association (ERFA)	International Road Transport Union (IRU)	The European Federation of Inland Ports (EFIP)	Internationale Vereinigung für den Kombinierten Verkehr Schiene-Straße (UIRR)	European Environment Agency	Digital Advisory Council (DAC)
Germany	Bundesverband der Deutschen Binnenschifffahrt (BDB)*	Deutscher Speditions- und Logistikverband (DSLV – Fachausschuss Schienengüterverkehr)*	Deutscher Speditions- und Logistikverband e. V.	Bundesverband öffentlicher Binnenhäfen (BÖB)**	Studiengesellschaft für den Kombinierten Verkehr (SGKV)*	Bundesministerium für Umwelt, Naturschutz, Bau und Reaktor- sicherheit	Bundesverband Digitale Wirtschaft (BVDW)
France	Voies navigables de France (Vnf)	Groupement National des Trans- ports Combinés (GNTC), Association Française du Rail (AFRA)	Fédération Nationale des Transports Routiers (FNTR)	Association Française des Ports Intérieurs (AFPI)	Club Logistique du Hainaut*, TLF - L'Union des Entreprises de Transport et de Logistique de France*	Ministère de la Transition écologique et solidaire	Ministère de l'Economie, de l'Industrie et du Numérique
Netherlands	Bureau Voorlichting Binnen- vaart – Vaarwegen (BVB) Centraal Bureau voor de Rijn- en Binnenvaart*	Railforum (Vereinigung)	Transport en Logistiek Nederland (TLN) ** bzw. Fenex - Netherlands Association for Forwarding and Logistics*	Vereniging van Nederlandse Inland Terminal Operators	Internationale Vereinigung für den Kombinierten Verkehr Schiene-Straße (UIRR)	Dutch Sustainable Business (De Groene Zaak) und maatschappelijk verantwoord ondernemen (MVO Neder- lands/CSR Netherlands)	Dutch digital delta association
Switzerland	SVS - Schweizerische Vereinigung für Schifffahrt und Hafenlogistik Basel*	Spedlogswiss (Verband schweizerischer Speditions- und Logistikunternehmen)*	ASTAG Schweizerischer Nutzfahrzeugverband	SVS - Schweizerische Ver- einigung für Schifffahrt und Hafenlogistik Basel* and Spedlogswiss*	Spedlogswiss*	Spedlogswiss*	Digitalswitzerland (Industrie- übergreifende Initiative)

^{**} Contargo participates actively *Contargo is a member



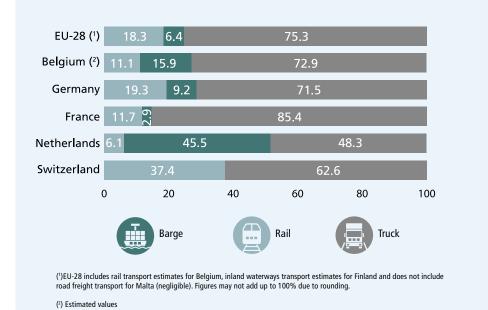
Actions speak louder than words

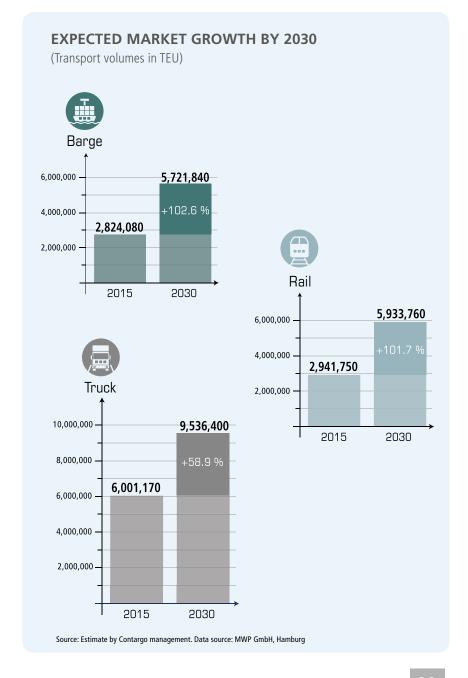
Each of the countries where we work is developing in a different way, even the modal split is different. However, they all have one thing in common: truck transports predominate. Contargo's strategic goal is to see this segment of the market shared between rail and barge, and trucks only used long-distance in exceptional cases.

Modal Split in the individual Contargo countries, inland goods transports only (2015, in % of total tkm)

In Switzerland, inland waterway transport of goods is concentrated around the Upper Rhine up to Basel. The Port of Switzerland plays a very important role here. Apart from this there is waterway transport on the numerous lakes, but this is mainly passenger transport.

Source: http://ec.europa.eu/eurostat/statistics-explained/index.php/Freight_transport_statistics_-_modal_split.







The Contargo World







You cannot tie knots with one hand

Contargo meets new challenges together with its stakeholders. In order to cope with the growing volumes of goods in the EU, in the period covered by this report Contargo has enlarged five terminals and has replaced handling equipment, or purchased additional equipment, at many locations. Within this period frame conditions have also changed in many ways. Intensive discussion with the enterprise's various stakeholders is constantly necessary.

In the years 2016/17 Contargo adapted its own terminal capacities to meet the increasing goods volumes. When doing this, it made use of the German Directive on Subsidising Terminal Infrastructure for Combined Transport ("KV-Richtlinien Fördergelder zum Ausbau von multimodalen Umschlagplätzen") in many areas. This also includes the purchase of new handling equipment and the modernisation of terminals to enable efficient work.

With the founding of Contargo Rhein-Waal-Lippe, an additional terminal was opened in Voerde-Emmelsum. The Mannheim terminal of Contargo Rhein-Neckar was enlarged. Contargo took over the remaining shares of Joint Venture Transbox United. With the founding of Contargo Combitrac, Contargo also extended the network in Bavaria to include a terminal in Wiesau.





COMMUNICATION IS EVERYTHING

However, Contargo also maintains good communication outside these special situations, because the people in our enterprise are convinced that good ideas can only arise through regular discussion with others. The company's most important stakeholders include customers (forwarders, shippers and sea carriers), but also partners like boatmasters, rail operators and forwarders, trucking firms, terminal operators along the Rhine, seaports,

suppliers, port companies, public services (fire service, police, customs, waste disposal agencies) and professional associations. Additionally there are the policy sector (ministers, authorities, cities, etc.), education and research (secondary schools, universities, chambers of industry and commerce) — and of course our employees themselves.

Contact is in person, or by telephone conversation. Contargo's employees meet up with their contacts at sectoral events, customers' events, trade fairs, exercises (fire service), the meetings of advisory committees and partners' meetings. Contargo also involves stakeholders closely in current issues and public debates, for instance on infrastructure and driving bans for diesel vehicles. Contargo sends out mailings (online newsletters) on important topics, and also makes a great deal of information available on its website and in the social media (Facebook, Twitter, LinkedIn, Xing, Google+).









EXTERNAL CHALLENGES

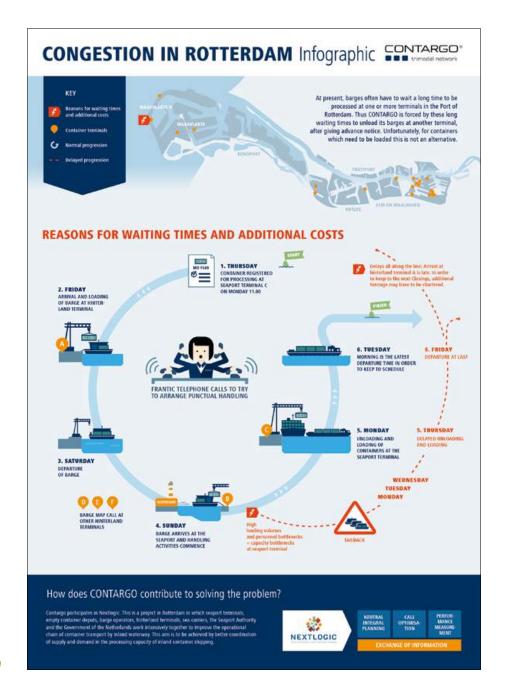
As well as the challenges arising in connection with these extensions, Contargo had to react to various external influences: for instance, as from 2016 the SOLAS Convention now requires the weight of a container to be established and communicated to the sea carrier beforehand. Due to a very long Low Water period in the first half of 2017, Contargo's customers had to pay Low Water surcharges almost continuously. These were used to finance the chartering of additional tonnage and the transfer of volumes to other transport modes. This, plus the increasingly frequent congestion in the western seaports, meant that inland waterway transport had to struggle to keep its reputation for reliability. Other transport modes benefited to some extent from this situation.

These developments demonstrated once again that more flexibility in the choice of transport modes is needed. For this reason Contargo decided to strengthen rail transport within its own network, and to found another company for this purpose: Contargo Rail Services. Indeed the company was able to offer a steadily increasing number of new connections. However, the temporary closure in autumn 2017 of the Rheintalbahn, the main — in fact the only — rail connection between southern Germany and Switzerland, triggered a domino effect that dramatically reduced the share of rail transport in the Contargo Group within a few weeks. Many of the Upper Rhine rail transport volumes were permanently lost to inland waterway, truck or even to the southern European seaports.

These challenges all had one feature in common: they demanded intensive communication with various stakeholders. Together with our employees and our partners we had to find solutions, and customers had to be kept informed of the current state of affairs.

Important external influences:

- the SOLAS agreement
- flooding and low water
- Congestion in the western seaports
- Closure of the arterial rail line Rheintalbahn





Being prepared is everything

THE CHALLENGES CONTARGO IS PREPARING TO MEET

In the period up to 2030 a great number of different factors will influence the business of Contargo. To hold its good position, the enterprise has developed its Strategy 2030 in order to be prepared for the near future. Additionally, individual regional developments confront the different locations with their own special challenges.

In Strategy 2030 Contargo assumes an annual growth of +4.4 percent for the overall market in the Hamburg – Le Havre Range and the southern European seaports, and a growth of at least +4.0 percent for Contargo. In order to achieve this growth the enterprise will have to continue to cooperate successfully with its current customers and also acquire new customers and new business. One way this could succeed would be by development within the existing network. However, geographical expansion is also the subject of ongoing analysis.

The greatest risk factors at present are prompt handling of barges in the western seaports, but also the lack of infrastructure for the rail transport of goods. It is also not clear how the automotive sector will develop over the next few years, and whether this will have impacts on Contargo's cooperative business relations with that sector. Today an increasing trend towards the merging of sea carriers is already apparent, and among other things this will require changes in the management of empty containers. At the same time the procurement power of the sea carriers is increasing, to the point of developing their own intermodal systems. Other unknowns in planning are the development of competitors, and the emergence of new business models due to digitalisation.



COPING WITH INCREASING VOLUMES

In the next few years Contargo will be generally combating space bottlenecks, caused by the expected volume increases at the terminals, with expansion measures.

One example: "More logistics enterprises settling in the areas set aside for them in the adjoining Netherlands, and in Emmerich itself, will step up the demand for container transports on the Lower Rhine", says Michael Mies, Contargo Rhein-Waal-Lippe GmbH.

However, at some locations there are no further expansion possibilities because port operators, towns or other stakeholders have a very restrictive attitude. For example in Basel, where the development of Gateway Basel Nord might still be halted by residents and nature conservation.



Modal Split: Development at Contargo

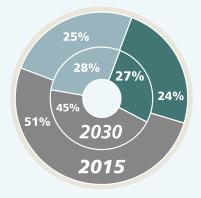
(2017: barge 75%, rail 20%, truck 5%); 2030: barge 48 %, rail 48 %, truck 4 %)





Modal Split: Development on the market (2015: barge 24 %, rail 27 %, truck 51 %;

(2015: barge 24 %, rail 27 %, truck 51 %; 2030: barge 27 %, rail 28 %, truck 45 %)









Source: MWP GmbH, Hamburg

Our terminals and their systems are the interfaces between the different transport modes. Digitalisation helps to simplify processes at the terminals. For interfaces to be optimised, especially in processes of change, all stakeholders need to be involved in their development.



Strategy 2030 envisages significant growth of goods transport by rail, without volumes being removed from the inland waterways. The long-term goal beyond 2030 is equal shares of barge and rail, at 48 percent each, and four percent trucking.

However, this still lies far ahead. Thus Contargo is still very dependent on the water levels in the Rhine. In high water or low water conditions, fulfilling customers' orders incurs additional costs. Another complication is the situation in the seaports of Rotterdam and Antwerp:

"The long waiting times for barges in the seaports of Rotterdam and Antwerp have a big impact on our terminal", says Eugen Werwai, Contargo Rhein-Main GmbH, Gustavsburg.

Despite these massive external influences, Contargo tries to find concepts that will better ensure the reliability of the products. Here, for instance, one idea under discussion is a unified price for all transport modes, in order to facilitate transfer from one mode to another.



The possibility of offering truly trimodal transport solutions in combined transport is a decisive advantage for Contargo. Regional developments are tending in the direction 'combination of import by rail via the northern seaports' and subsequently 'export by barge and truck via the western seaports' as a back-up possibility. Here we need to design appropriate products for our customers and make them offers.

Kawus Khederzadeh, General Sales Manager, Contargo GmbH & Co. KG

Strategy 2030 of course gives equal weight to all areas of sustainability. In the following chapters Ecology and Social responsibility; these are presented in more detail.



















Representatives of "ECONOMY" best practice locations evaluate Contargo:

"What do you most appreciate about Contargo's economic commitment?"

Christian Eichmeier:

"Contargo is regarded by the market as 'environmentally friendly' because of its emphasis on barge and rail transports and combined transport. This is an important argument for shippers. Forwarders tend to see the price savings compared to direct trucking. Sea carriers make use of our infrastructural advantages as a hinterland terminal operator in all transport sectors: cost-benefit advantages, shorter distances, better M&R conditions than in the seaports, nearness to the consignee, etc."

Eugen Werwai adds:

"Contact to people in responsible positions in other business enterprises, and exchange of ideas in other important areas such as emissions, infrastucture or approval processes is very valuable."

"How do you see the future of combined transport?"

Arndt Puderbach

"Development, especially with regard to digitalisation, is interesting but also challenging. IT startup enterprises, together with forwarders and sea carriers, are considering the idea of using a bonus-malus system to achieve better capacity utilisation of transport and handling capacities. This will be a challenge for everyone, but especially for service providers at the lower end of the delivery chain. Just like transport, most terminals are reaching their capacity limits. Acquiring additional capacity reserves is difficult if not impossible. I assume that combined transport will grow relative to the market as a whole. The bottlenecks that have been mentioned are solvable. They can be partially removed by digitalisation, but this will take some time."

"Where do you still see a need for improvement at Contargo regarding commitment to the environment, climate and social aspects?"

Kawus Khederzadeh

"In my opinion the locations are regionally active enough socially. They support clubs, aid projects and charitable foundations. Much more important is the need for more lobbying work for our sector. We must remind policy-makers from day to day that combined transport needs to be evaluated positively, so that they give us more consideration and support when developing the infrastructure."

Arndt Puderbach adds:

"The drive systems for barges are really dirty. That is something that needs to be improved."





A joy shared is a joy doubled

REGIONAL COOPERATION: THE EXAMPLE OF CONTARGO RHEIN-MAIN



The Contargo network was formed over the course of time by the integration of many smaller networks. The example of Contargo Rhein-Main shows how, and why, this regional cooperation arose, and demonstrates the advantages (particularly economic) that result from it.

Koblenz Frankfurt-Ost Frankfurt-Höchst Ginsheim-Gustavsburg











of three tiers. The terminal, which was already trimodal at that time, specialised in services for the chemical industry and supplying the foreign troops. The terminal in Koblenz completed the network between Mainz and Cologne. At the same time the economic areas of Rhine-Moselle, Rhine-Lahn and Westerwald acquired a connection to the western seaports. Frankfurt-Ost had concentrated mainly on shortsea and import business with special paper types, rubber, household goods and natural products.

managers are convinced of the advantages of the cooperation. The added value for the enterprise — and also for customers — is great, because the cooperation reduces costs, optimises capacity utilisation and makes alternatives possible in the event of technical faults or overcapacity at one of the terminals. Eugen Werwai says: "Joint purchasing of barge capacities enables us to offer more attractive prices, better capacity utilisation and more frequent departures compared to our competitors."

eration could still be improved, all four terminal

The four nodes of the Contargo network in the Rhine-Main region were already linked by the predecessor companies in the 1970s to 1990s.

AT THAT TIME the terminal in Mainz was the first container terminal on the Rhine. Thanks to its favourable position directly at the mouth of the Main, the terminal in Ginsheim-Gustavsburg was able to handle barges on both the Main and the Rhine, because over this short distance there are not yet any locks. It was also here that barges were made "Main-compliant", meaning that the top tiers of containers were removed, to enable barges to continue upstream on the Main to the Farbwerken Höchst in Frankfurt with a maximum

TODAY Since 2012 the three terminals of Koblenz, Gustavsburg (formerly named Mainz) and Frankfurt-Ost, which today belong to Contargo Rhein-Main GmbH, and the terminal Contargo Industriepark Frankfurt Höchst GmbH cooperate closely and complement one another. For instance, empty containers can be transferred between the locations by barge, or rail transports from the different terminals can be bundled. Kawus Khederzadeh says: "Thanks to the variety of products offered by all four terminals, we can offer a much wider range of services. This increases our flexibility in the Rhine-Main region." Although individual processes within the coop-

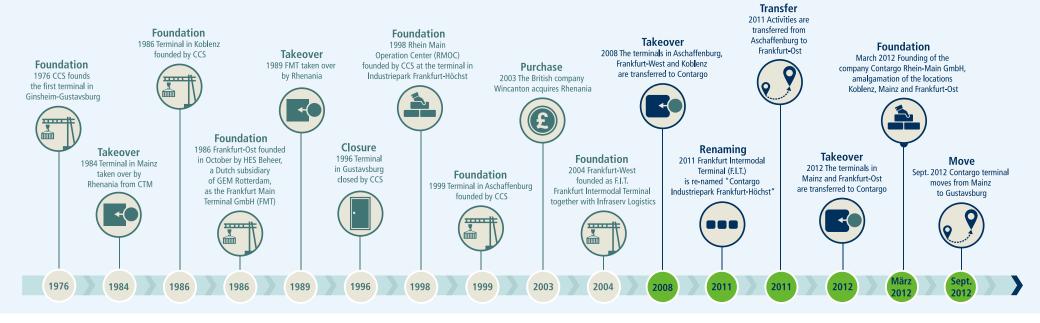
FUTURE PLANS

The success of the cooperation is apparent in the plans for the future: in Koblenz the terminal area and truck parking space are to be extended, in Gustavsburg the construction of a containment tank and a reefer station is planned. In Industriepark Höchst the terminal area is to be enlarged by at least 10,000 m² and a crane system added. In 2017 the Frankfurt-Ost terminal was prepared for the expected volume growth by demolishing two old silos that stood on the premises, and Frankfurt-Ost will be the second location after Koblenz to be equipped with the Terminal Operating System (TOS) developed by Contargo.





Timeline: How the Contargo terminals in the Rhine-Main area evolved





GRI Standard: 102-12, 413-1

If you don't sow in the spring...

COMMUNICATION AND COOPERATION ARE THE BASIS FOR SUCCESSFUL REGIONAL NETWORKING

Contargo's management maintains good contacts with regional policy, important associations, institutions and research organisations. For this reason employees from many different areas, including the management in the Rhine-Main region, take part in important events organised by the logistics sector, by policy and research. There they make new contacts and keep up existing ones. On these occasions they represent Contargo and the position of the enterprise, and at the same time they receive important information about new developments. In this way Contargo is able to adapt fast to new challenges.



Here, representing the whole company, we present the four managers from the Rhine-Main region and their commitments.



ARNDT PUDERBACH WITH CONTARGO SINCE 1986

POSITION: Terminal Manager Contargo Rhein-Main GmbH in Koblenz

COMMITMENTS: Since August 2017 Arndt Puderbach has been a member of the Interest Group IG Rheinhafen Koblenz, which was founded on his initiative.

AIMS: To build up better communication between companies in the region and communal and regional policy. This concerns infrastructure, noise protection, protection of drinking water, and the topics of emissions and digitalisation.

HIS TASKS: To clarify the needs and requirements of members and then represent these, together with other members, to communal policy-makers and institutions.

ADDED VALUE FOR CONTARGO: The Interest Group contributes to securing and expanding the location, restructuring and modernising the infrastructure, the future sustainability of our locations and the region, and the transparency of approval processes.



POSITION: Teminal Manager Contargo Rhein-Main GmbH in Ginsheim-Gustavsburg

COMMITMENTS: Since October 2014, Examiner of apprentices for the Chamber of Industry and Commerce (IHK)

HIS TASKS: As a Deputy Chairman of Examiners he is responsible for conducting the oral examination of trainees, and the supplementary oral examination for the occupation 'Freight Forwarding and Logistics Services Clerk'.

ADDED VALUE FOR CONTARGO: Combating the scarcity of trained specialists not only involves relying on other people – it also means being actively engaged ourselves. Professional training is the prerequisite for new potential employees becoming available to Contargo. By being practically involved, Contargo can also help to shape the training and the occupational profile.



CHRISTIAN EICHMEIER WITH CONTARGO SINCE 1997

POSITION: Co-Managing Director of Contargo Rhein-Main GmbH and Manager of the Frankfurt-Ost terminal

COMMITMENTS: On the Board of the Forwarding and Logistics Association of Hesse/Rhineland-Palatinate since 2016. Chairman of the Association of Frankfurt Port Operators, since 2016 a member of the IHK Traffic Committee Rhein-Neckar and the Association of Business Enterprises in Hessen

HIS TASKS: In all these groups Christian Eichmeier is committed to making combined transport more generally known and improving its image. Other goals are improving the infrastructure, increasing communication transparency, and investigating and testing alternative mobility – here concretely collaboration in the projects ELISA (a German federal project) https://sie.ag/2uO8f6t and AEOLIX (an EU project) http://aeolix.eu/)

ADDED VALUE FOR CONTARGO: Contargo is present on the committees, and as a result has not only a voice, but also media presence.

KAWUS KHEDERZADEH

WITH CONTARGO SINCE 2001

POSITION: Co-Managing Director Contargo Industriepark Frankfurt-Höchst GmbH and General Sales Manager

COMMITMENTS: On the Working Committee of Industriepark Frankfurt-Höchst since May 2016

AIMS: Regular meetings with those responsible for health and safety at work at the enterprises and partners in Industriepark Höchst. Since Contargo Industriepark Frankfurt-Höchst is classified as a 'hazardous incident plant', the enterprise gives the highest priority to safety and adhesion to basic principles, laws, regulations and work instructions.

HIS TASKS: Representing Contargo and acting as an interface between customers, enterprises and employees.

ADDED VALUE FOR CONTARGO: Better, safer procedures for activities in the Rhine-Main Region and in the whole network.





ECOLOGY



The personal sphere (page 63)





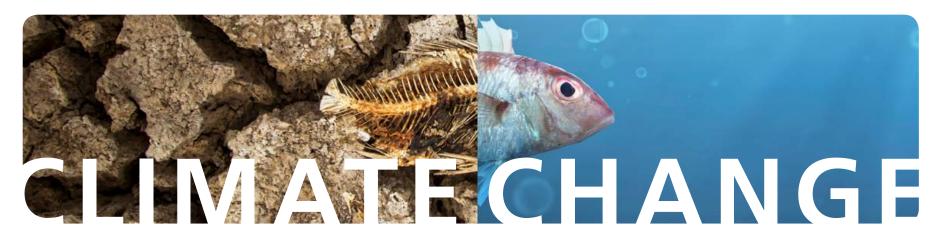


The Environment – our Geosphere (page 41)





The Environment – our Geosphere



Nothing venture, nothing win

CLIMATE CHANGE AS RISK OR CHANCE

At present enterprises all over the world are faced by the challenge of adapting their production or services to the impacts of climate change and/or the policy decisions resulting from it. In Europe, the transport and logistics sector in particular has to act on the criticism of CO₂ and particulate emissions. Contargo regards these challenges not as a risk, but as a chance to try out new approaches and review previous ones.

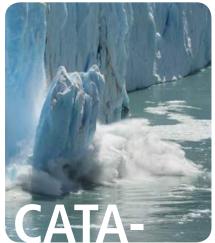
All of us have probably experienced them at least once in the last few years: extreme weather conditions such as torrential rain, hurricanes, flooding and long periods of heat or drought. They are just one consequence of the globally rising average temperatures.

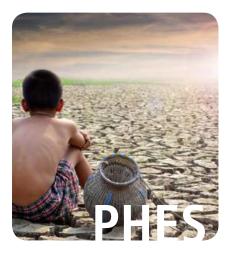
The climate on the earth has changed continually in the course of history, but scientists assume that many of the changes observed at present have been caused or at least accelerated by humanity.

Various gases are relevant for the climate and the greenhouse effect. More than half the effect caused by the human race is due to carbon dioxide (CO₂) and carbon monoxide (CO); both are generated by the burning of fossil fuels such as oil, coal and gas. Methane (CH₄) in high concentrations also has an influence on the greenhouse effect. However, nitrogen oxide, particulates, sulphur dioxide and NMVOCs (non-methane volatile organic compounds) also contribute to global warming.













MORE EXTREME WEATHER SITUATIONS

The second half of the 20th century was very probably the warmest 50-year period in the last 500 years. The high temperatures are causing the glaciers to melt, but also the ice of the polar ice caps and the ice in permafrost areas. Satellite photos show that the area covered by sea ice has diminished by about 40 percent between 1980 and 2015. In Europe, too, the glaciers are melting: scientists put the loss of glacier surface in the Alps between the years of 1850 and 2000 at about 50 percent . The consequence: rising sea levels. Between 1901 and 2010 the sea level rose by 1.7 millimetres per year, between 1993 and 2010 it rose by an average of 3.2 mm per year.

Another effect to be expected is very high water levels in the rivers when glaciers melt, and low water in hot summers when there is hardly any snow or ice to melt and feed the rivers with water. Another danger is that ocean currents like the Gulf Stream could change due to the water temperature and to the increasing quantities of fresh water, which would have drastic effects on the climate of whole regions.

Thus climate change does not only threaten the existence of some island states and low-lying coastal areas. All over the world, people will have to expect more frequent extreme weather phenomena like hurricanes, floods and drought periods.

POLICY COMMITMENTS

Ever since the 1990s there have been attempts by policy to stop climate change. The Kyoto Protocol¹ and the Paris Agreement² pledged the signatories to reduce emissions by a specific amount. At the 2017 UN Climate Conference in Bonn it was agreed that balances should be drawn for 2018 and 2019 to ascertain how the states had progressed in their efforts to reduce greenhouse gas emissions. But there have repeatedly been important initiatives outside the official climate conferences; for instance the Anti-Coal Alliance founded on an initiative of Great Britain, Canada and the Marshall Islands. The member states (including the Netherlands, Belgium, France and Switzerland, but not Germany) pledge themselves to opt out of coal-fired power generation completely between 2021 and 2030.

- The Kyoto Protocol was passed in 1997 and for the first time contained legally binding limit and reduction obligations for industrial countries. It was ratified by 191 states, including all member of the European Union.
- 2 The Paris Agreement was passed in December 2015 and has been in force as a new international climate agreement since 4 November 2016. Content: global warming is to be limited to well under 2 degrees centigrade, and efforts are to be made to limit it to 1.5 degrees centigrade.

CONTARGO FACES CLIMATE CHANGE It is not only high and low water levels that have a direct impact on Contargo's economic success; storms and other extreme weather events result in high costs. Moreover, depending on the outcome of discussions on diesel vehicle and barge engines, great adjustments may

be necessary within the next few years.

To make its own contribution to climate protection Contargo bases itself on the Paris Climate Agreement. The goal is to reduce CO₂ emissions by 30 percent by 2030 compared to 2012.



THE CONSEQUENCES OF CLIMATE CHANGE FOR CONTARGO:



"As a result of driving bans and rising diesel prices, combined transport can provide better value compared to direct trucking." Jürgen Albersmann, Contargo Neuss



"The desirability of offering different transport modes matches our broad transport range."

Daniel Kaufmann, Contargo AG

"Possible funding by the state and the EU will strengthen combined transport in future." Martin Körner,



"Switching to a renewable energy supply, or becoming self-sufficient in energy, offers an enormous savings potential viewed in the long term."

Andreas Roer, Contargo Rhein-Neckar

We are reducing the electricity consumption of the portal cranes by using the braking function to recuperate energy."

Kawus Khederzadeh, **Contargo Industriepark** Frankfurt-Höchst

CHANCES

barge and rail transport compared to truck transport will mean that our trimodal terminals will be used even more. Jürgen Bähr, Contargo Wörth-Karlsruhe

"The small carbon footprint of

"Climate change is a factor that influences public opinion in favour of barge transport. This improves the chances that associations and organisations supporting barge transport will be listened to."

Cok Vinke. **Contargo Waterway Logistics**

"Increasing numbers of customers are realising the necessity of consciously placing transport orders according to environmental criteria, so the demand for combined transport is going up."

Michael Mies, Contargo Rhein-Waal-Lippe

"During the low water periods – which are now becoming more frequent the demand for road transports is increasing."

Leo Maaskant, **Contargo Road Logistics**



"By using modern reach stackers (stackers for full and empty containers) we will reduce our costs, thanks to their low fuel consumption."

Christian Eichmeier. **Contargo Rhein-Main**



THE CONSEQUENCES OF CLIMATE CHANGE FOR CONTARGO:

"Low Water peiods are longer than they were; the consequence for our terminal is that we handle fewer containers, because rail transports are handled by our cooperation partners in Weil."

Daniel Kaufmann, Contargo AG



"During Low Water in hot, dry summers, corresponding surcharges are incurred to cover transport costs. This can reduce our range of customer orders."

Andreas Roer, Contargo Rhein-Neckar "In times of high or low water, our customer have additional costs, due to the need to transfer containers from barge to direct truck or rail."

Martin Körner, Duisburg Intermodal Terminal

"The gales and storms that have become more frequent over the last few years can cause damage to containers – both

during transport and while

Contargo Rhein-Waal-Lippe

they are in storage."

Michael Mies,





"Low Water means that freight is lost to other environmentally more harmful transport modes." Cok Vinke, Contargo Waterway Logistics

"The introduction of driving bans for diesel vehicles in cities like Düsseldorf and Cologne means that we have to adapt our truck fleet."

Jürgen Albersmann,
Contargo Neuss

"The difficulties of navigating the Scheldt have influenced costs and volumes. If fewer containers can be transported, the costs go up."

Gilbert Bredel, Contargo North France





Infrastructures in EU-28 + Switzerland (2015)

MOTORWAYS:

EU-28: 75,820 km Switzerland: 1,447 km



RAIL NETWORK:

EU-28: 218,181 km , of which 116,086 km electrified, equivalent to ~ 53.2%,),





NAVIGABLE INLAND WATERWAYS:

EU-28: 41,935 km, Switzerland: 562 km

(passenger waterway transport only, incl. car ferries)



CO₂ EMISSIONS

(in millions of metric tons):

EU-28: 3,640.6 CO₂ (of which 1169.6 CO₂ in the transport sector, equivalent to \sim 30%),

Switzerland: 38.8 CO₂ (of which 15.2 CO₂ are transport-generated)



One man's joy is another man's sorrow

A BROAD-BASED INFRASTRUCTURE CAN COMPENSATE BOTTLENECKS IN ONE OF THE TRANSPORT MODES

The growing probability of extreme water events makes big demands on the flexibility of transport chains. In all the countries in which Contargo is present, investments are being made in combined transport. This is partly because rail and inland waterway are environmentally preferable to road transport, and partly because this is the only way to ensure that an alternative is available to divert the traffic flow in case of need, for instance in a situation like the tunnel collapse at Rastatt, or during periods of high or low water.

The Rhine-Alps Corridor is well developed and has no major gaps. The greatest challenges arise from bottlenecks caused by heavy traffic and various tight spots. Capacity expansions and better multimodal connections in the seaports and inland ports are also necessary.

THE PRECEDENT OF RASTATT

One event in particular has clearly demonstrated how necessary a good, broad-based infrastructure is. When expanding the "Rheintalbahn" (the rail line that passes through the Rhine valley), a major incident occurred on 12 August 2017. While excavating a tunnel at

Rastatt that passed under the Rheintalbahn, the tunnel collapsed and caused subsidence of the rail tracks. The line had to remain fully closed until 2 October 2017.

For the rail transport of goods, the closure of the Rheintalbahn had serious, far-reaching impacts because the Rheintalbahn is the heart of the European goods corridor between Rotterdam and Genoa. It is by far the largest expansion project in the new German Federal Transport Infrastructure Plan (Bundesverkehrswegeplan) 2030. The Rastatt Tunnel, which is intended to be used for long distance transport and goods transport, is now not expected to go into operation before 2024.

Many days passed before practicable solutions could be found. According to statements by the Deutsche Bahn, alternative concepts were being worked on for goods rail traffic that involved large diversions and transfer to other transport modes. Big detours were arranged, with individual rail routes temporarily being used all around the clock on weekdays; on another line, repair work was completed ahead of schedule to make it available as an alternative route, and on the Rhine the maximum permissible length of motor cargo vessels between Basel and Rheinfelden was temporarily increased from 110 to 135 metres. Despite all efforts a large proportion of transports were transferred to other transport modes.





GERMANY

The ongoing increase in volumes of transported goods poses a big challenge to achieving the German federal government's environment goals for goods transport. In Germany a trend is observed at present towards longer transport distances, together with a tendency to transfer more goods to the less environmentally-friendly modes of truck and air transport. For this reason, the state is supporting research into ways of avoiding transports, and transferring them off the road and onto rail or water.

BELGIUM

In the time frame 2017-2020 the Belgian government is supporting combined transport by rail with 13.5 million euro per year. Only rail operators are eligible for this funding. The support enables rail companies to offer their customers lower prices and thus transport greater volumes by rail. Another aim is to facilitate the use of trains along less profitable lines. Unfortunately, the support is not available for logistics companies in road transport or shippers wishing to transfer their goods flows from the road and onto rail. This means that only direct investment in the infrastructure and the transport mode is promoted, and not the solutions that support a modal shift. There are also support measures for inland waterway transport in Belgium: the

Flemish government supports the replacement of engines, the installing of exhaust gas aftertreatment systems, and the equipping of quays for handling. Additionally the 2015 Benelux Recommendation regarding cooperation in the development of alternative fuels is implemented. This also includes goods transport, where research is concentrated on the possibilities for using LNG in inland water transport. Research is also taking place on cooperation in the areas of automation, Watertruck³ and other innovative projects on inland waterways. The Port of Antwerp itself is investing in numerous individual projects that aim to shift transports off the roads and onto rail and inland waterway, and contribute to innovation in the various transport modes.

³A concept for revitalising small waterways: www.watertruckplus.eu



In the Netherlands 71 percent of imports arrive by sea ship. Most are then transported by truck to their destination. In 2015, 80 percent of all goods transportation in the Netherlands was by road.

A promotion measure with a limited time frame (2012-2017), aiming to bundle goods flows transported by rail, was not prolongued. Since 2012 eight projects have received state support under this measure. The Dutch state is supporting the development of rail terminals

in Venlo and Born. There are ongoing projects on the level of the provinces to bundle transport volumes on the railway. Out of a grant of 82.8 million euro from Brussels for the support of infrastructure projects, 11 million euro for the renovation of the Twente Canal and the inland ports Hengelo and Almelo will create more room for inland waterway transport. In order to make this sector "greener", 7 million euro will be spent on buildng six climateneutral, electrically-driven barges. The Port of Rotterdam also supports barges that are

environmentally friendly by reducing port fees for them. At the same time the port is tightening up its regulations, so that from 2020 only barges with engine class ZKR II will be allowed into the port.

Engine class ZKR II is approximately equivalent to a truck with emissions classification 2. If a catalytic converter and a filter system are then added to engines in this class, they can be improved to the equivalent of a truck with emissions classification 3.





FRANCE

Despite much criticism, France regularly ranks high with regard to direct investments from the EU and other countries. This is largely attributable to the quality of the infrastructure, as France acts as an interface in Europe for transit passengers and goods. The French transport infrastructure is characterised by a dominant road network. The rail network is one of the biggest in Europe. The inland waterways remain marginal, are characteristically old and are not extensive. By contrast, the motorways and high-speed train lines have developed rapidly over the last 25 years.

However, an investment backlog in the transport infrastructure is threatening this strong position. For instance, inadequate river and rail transport services at the ports of Le Havre, Dunkirk and Marseille are obstacles to participation in some significant international goods flows. These pass to competitors in northern Europe that have the necessary hinterland connections.

Thus it is France's general strategy to promote the transport of goods by transport modes other than truck.



SWITZERLAND

The aim of Swiss transport policy is to shift trans-Alpine goods transport off the roads and onto rail. Thanks to the measures implemented so far, many truck journeys are avoided. However, it seems likely that the limitation, anchored in law, of trans-Alpine trucking to 650,000 journeys per year by 2018 will not be able to be realised. In 2017 954,000 trucks crossed the Swiss Alps.

The constitutional Article on the Protection of the Alps requires that transit goods crossing the Alps should be transported border-to-border by rail.

At the beginning of 2017 the LSVA (performance-related charge for heavy vehicles) was adjusted and the railways were given a temporary reduction on the train path price for the use of transit routes. This is a consistent continuation of the transport shift decided by the Swiss people.

The Swiss transport shift policy uses these main instruments and measures:

- The New Railway Link through the Alps (NRLA, German NEAT, French NLFA, Italian NFTA)
- The performance-related heavy vehicles charge (LSVA)
- The four-metre corridor (for all rail tunnels, enabling the rail transit of trucks) and the development of terminals



People are shaped by the environment

FOSSIL FUELS VERSUS RENEWABLE ENERGIES

By developing the infrastructure for more environmentally friendly transport modes, resources can be conserved and emissions reduced in the long term. However, regardless of the form of transport the energy supply also determines what is environmentally friendly. Here new ideas are being tried out in many different directions. It is not yet clear which solutions will eventually prevail.

Each country in Europe bases its energy concept on its own particular geographical and economic considerations. Factors like the number of land borders, transit routes, mountains, waterways and the position of the economic centres influence the decision on what preferred transport modes to support and, consequently, what energy providers are used.

At present fossil fuels derived from crude oil and natural gas are used as the main power source for vehicles. These are mineral oil products to which various substances such as cleaning additives, corrosion inhibitors and aging stabilisers have been added.

The burning of crude oil products releases ${\rm CO_2}$ which is harmful for the climate. In most cases no account is taken of the energy expended in extracting, refining and processing these fuels, nor of their transport, often over thousands of kilometres. To these negative factors are added the ecological impacts caused by associated gas flaring, oil catastrophes, and vapours emitted during storage and handling (generation of summer smog).

As well as the continuing development and quality assurance of conventional fuels, possibilities for using less fossil fuels are also being investigated.

There are three approaches here:

 The extraction of substances similar to crude oil from other sources, for instance coal liquefaction, biodiesel and bioethanol.

2. **Replacement by other forms of energy**, for example electrical energy and hydrogen.

3. **Reduction of consumption**, for instance by transporting larger quantities by rail, inland waterway or long trucks.

At present electrical drive in particular is under discussion as a solution for the transport sector. The automotive industry is investigating serially-produceable, affordable technologies that can also be used in utility vehicles and trucks. For instance, in 2019 Contargo will be taking part in the first trial of an overhead electricity line for trucks in Hesse.

With electrical drive, approximately 80 percent of the energy used is converted into movement (by comparison: with a combustion engine the figure is between 20 and 30 percent in daily traffic conditions). Moreover, electric cars do not emit pollutants into the air (locally) and are CO₂-free on the road.

A second variant is hybrid technology, usually a combination of electric motor and combustion engine. One feature of these vehicles is that braking energy is recuperated and stored in a battery. The so-called "plug-in hybrids" have a somewhat larger battery that is charged from the grid, enabling short distances to be travelled by electric drive. Over long distances the combustion engine then kicks in, so that their range is virtually unlimited and comparable to conventional vehicles.









ENERGY SOURCES AND THEIR USES (Part 1):



Diesel

Vehicles of all kinds: cars, trucks, ships (gasoil), handling equipment, agricultural machinery, large machinery (e.g. construction), heating oil



Petrol (gasoline)

Ethanol

Fuel for motor vehicles

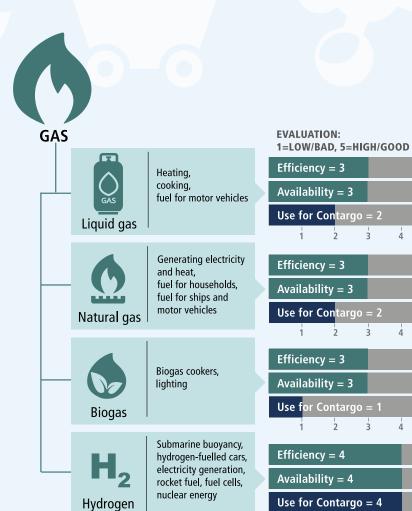
vehicles of all kinds



Plant oil, biodiesel, bioethanol, biomethane, BtL (Biomass to Liquid), motor vehicles



Use for Contargo = 1





ENERGY SOURCES AND THEIR USES (PART 2):



Solar

energy

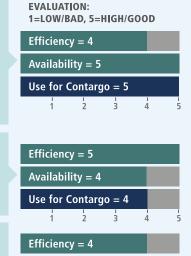
Solar hot water, solar air conditioning, solar cells, solar thermal power, solar collector systems, solar photovoltaic electricity generation, solar electric vehicles, solar water pump systems, solar cookers, solar lighting, solar hydrogen production, solar desalination



Elecricity generation, drive for ships, wind water pumps, wind heating



Generating electricity



Availability = 5

Use for Contargo = 3

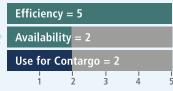






Electricity supply, analysis of material combinations, customs/industry: X-ray, medicine, agriculture, desalination of sea water, atomic weapons

EVALUATION: 1=LOW/BAD, 5=HIGH/GOOD





Good things take time

In order to show that changes like the use of renewables and innovations contribute to protecting the environment, they first have to be made measurable and then comparable. Organisations in Europe and throughhout the world are working on standards for calculating CO_2 . In areas where there are not yet unified standards, many enterprises take the trouble to do their own calculations. The drawback is that very different parameters are used, and this makes it difficult to compare the figures of different companies.

Standards such as DIN EN 16258 for road freight transport and IATA RP 1678 for air transport have been in existence for quite a long time; however, all transport modes and logistics-related activites are considered independently of each other and the overlaps are not covered.

One initiative in which we are involved is the "GLEC Framework". This Global Logistics Emissions Council aims to create a framework within which all calculations and standards from all areas of transport are brought together in one document. This is intended to close gaps, so that mulitmodal transport chains can be represented in a unified and comparable form. One gap concerns inland waterway transport, and here we are glad to support the GLEC initiative, as we have been calculating emissions in this area since 2012 and should like to pass on our experience to other enterprises.

The Institute for Energy and Environmental Research (IFEU) from Heidelberg, the Öko-Institut from Berlin and the Rail Management Consultants GmbH (RMCon/ IVE mbH) from Hanover

have developed the EcoTransIT-Tool to quantify emissions from freight transport. This project was initiated in the year 2000 by five European rail companies. All project partners make information inputs available for the database and continually update the tool in accordance with national guidelines and technical progress. EcoTransIT calculates the environmental impacts of goods transport on the environment in terms of direct energy consumption and the emissions of vehicles used to transport products. Calculation also includes indirect energy consumption and emissions generated in the production, transport and distribution of the energy needed to operate the vehicles. In freight transports numerous factors determine the extent of the impact on the environment. Many influences are used as an input for calculating the impacts.



GLEC: www.smartfreightcentre.org/glecFRAMEWORK/

There are so many different methods that comparing the greenhouse gas emissions of different transport modes can be like trying to compare apples with pears.



However we too regularly review our terminal activities and our transports in order to adapt the basic factors to changed conditions.

CO, EMISSIONS AT CONTARGO

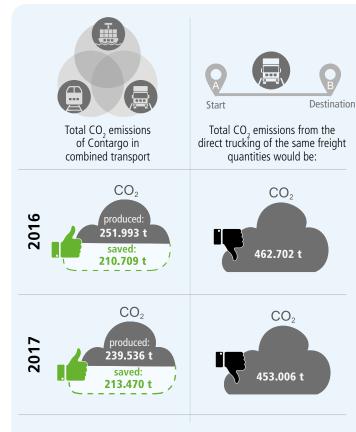
All Contargo companies aim to reduce CO_2 emissions. All locations implement individual measures for this purpose. In order to make the success of these changes visible they are regularly converted to figures. This year Contargo enlisted the help of Offenburg University in calculating CO_2 emissions. The previous calculation was critically reviewed and reworked. There were changes especially with regard to terminal activities and rail and truck transports. The analysis also confirmed that the calculation methods used up to now were correct.

Every two years Contargo checks the factors on which the calculation of CO₂ emissions is based, and if necessary adapts them to changed frame conditions. To ensure a unified structure and

determine emissions as exactly as possible, Contargo works with the WTW (well-to-wheel) approach. This means that the whole functional chain for locomotion is examined, from the extraction/generation and supply of the drive power to its conversion into kinetic energy. This enables a comparison to be made of the various transport modes (truck, rail and barge).

Control and regular reviewing of these figures is important, because changes caused by an altered fleet structure, or a cleaner electricity mix, have an effect on CO_2 emissions. Rail transport has the advantage that most routes are electrified. As soon as power from the grid in Germany becomes "cleaner", the environmental compatibility of rail transports relative to barge transports will increase.

It is also important to know other emission values and take account of them. However, at present standards are not yet in place for measuring the emission of fine particulates, NOX or SO, in a unified way.



In 2017 Contargo saved 2.3 percent more CO_2 than in 2016 compared to direct trucking. This is evidence of a further improvement in our carbon footprint.

Our total ${\rm CO}_2$ emissions went down by 4.9 percent overall. As explained in previous chapters, the reasons for this included reduced volumes, modal shift and technological developments.



When calculating CO₂ emissions in 2016 and 2017 the following changes were made:

1. TRANSPORT

The basis is still DIN EN 16258 (Methodology for calculation and declaration of energy consumption and GHG emissions of transport services). Although this method does not require handling to be considered, it is included in the calculation here.

Barge: In future a differentiation will also be made in the calculation between upstream and downstream transports; averaged values for these will be determined for the permanently operating barge fleet.

Rail: Here values have been adjusted for import and export, since in Central Europe the weight of import and export containers differs substantially. For instance, in Germany export containers are often very heavy, because they are often loaded with industrial and mechanical engineering goods. The calculation is also adapted to the official German electricity mix.

Truck: The most important driver of change for CO₂ values in truck transports is capacity utilisation of the trucks; in the period covered by the report, more empty trips were avoided. The proportion of Euro 5 and 6 trucks has gone up. Here exhaust gas aftertreatment and SCR technology (AdBlue) are factors that reduce the CO₂ values.

2. TERMINAL

During stationary logistics processes CO₂ emissions are usually generated at multimodal logistics nodes, for instance, by the electricity consumption of the handling equipment, the storage facilities and offices, by energy consumption for space heating in storage facilities, workshop and offices, by the use of other energy sources (e.g. gas, diesel, etc.), for example for reach stackers, fork-lift trucks and other vehicles, and by administrative activities in the offices (paper, office materials, electricity, energy expenditure from business trips, etc.). Measuring the emissions from handlings is very difficult because they are affected by very many factors. For example: Is a crane or a reach stacker being used? How heavy is the container? How long is the distance travelled within the terminal? How many containers

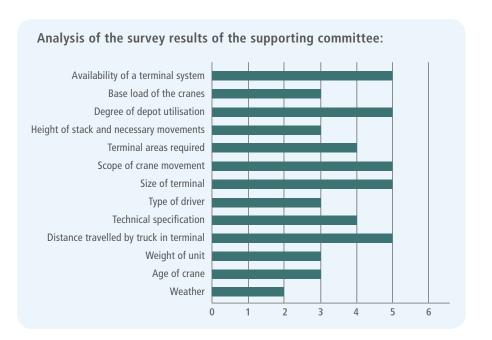
need to be repaired? Here digitalisation may help in future, because sensor technology and movement assistance systems can record the movements, which can then be evaluated and optimised.

Reach stackers: Less emissions thanks to leasing, because emissions are reduced by regularly exchanging the stackers for newer models. In addition, at two locations hybrid reach stackers are used.

Cranes: It is assumed that emissions from handling have gone down, because in the last five years energy recuperation from cranes has become increasingly more important. Also the distances travelled by cranes have been continuously optimised by improved depot management. The focus is now on the distances travelled, rather than on the number of lifts⁴. Another new feature is the differentiation of values between handling by reach stackers and handling by cranes.

In a questionnaire addressed to terminal operators by the German Federal Ministry for Economic Affairs and Energy, the following points were named as decisive influencing factors:

4 German Federal Ministry for Economic Affairs and Energy (BMWi), Final Report on extension of the CO₂ balance method toolbox for the more precise measuring and assigning of environmental effects in multimodal logistics ("Erweiterung des Methodenbaukastens CO₂-Bilanz zur exakteren Ermittlung and Zuordnung von Umwelteffekten in Multimodalen Logistik"), 18.04.2016





CO₂ factors: Changes in CO₂ factors, Sustainability Report 2016 and Sustainability Report 2018 (All figures in kg CO₂/Ctrkm)

0.375

0.210



Barge Lower/Middle Rhine **Upper Rhine** Scheldt **FULL** Import/UP 0.310 0.430 0.427 0.170 0.230 Export/DOWN **EMPTY** Import/UP 0.270 0.400

0.140



	Rail	
	IMPORT	EXPORT
EMPTY		
Diesel value	0.480	0.417
Electric value	0.322	0.279
FULL		
Diesel value	0.480	0.417
Electric value	0.322	0.279



Truck	
FULL	
0.851	
EMPTY	
0.713	



Handling terminal
10.8 kg CO ₂ / Container

Sustainability Report 2016

Sustainability Report 2018

Export/DOWN

Barge					
	Lower/Middle Rhine	Upper Rhine	Scheldt		
FULL					
Import/UP	0.310	0.430	0.427		
Export/DOWN	0.170	0.230	0.427		
EMPTY					
Import/UP	0.270	0.400	0.375		
Export/DOWN	0.140	0.210	0.375		

	Rail		
	IMPORT	EXPORT	
EMPTY			
Diesel value	0.500	0.500	
Electric value	0.340	0.340	
FULL			
Diesel value	0.400	0.400	
Electric value	0.270	0.270	

Truck	
FULL	
0.880	
EMPTY	
0.730	

Handling terminal

12.0 kg CO₂ / Container

Energy suppliers of the future

To reduce CO_2 emissions Contargo is concentrating at present on replacing fossil fuels by electricity. Provided the engines of the vehicles are capable of being electrically driven, it does not matter whether they are still powered at present by a diesel generator, a battery or a fuel cell – the basic prerequisite is fulfilled and they will be able to use the the energy source that prevails in a few years.









Best 🇙 practice On first sight the two terminals of Contargo Rhein-Waal-Lippe

(CRWL) in Emmerich and in Voerde-Emmelsum are very different: the Emmerich terminal has been established for years, the experienced team have worked together for a long time, and long-standing customers appreciate the reliable service. The terminal in Voerde-Emmelsum, by contrast, has been newly developed for Contargo; a team had to be put together there, and customers had to be acquired. However, in the meantime the two locations have not only grown together within their own company, but have become integrated into the Contargo network.

In fact with regard to sustainability the company already plays a pioneering role in some ways. It is now almost taken for granted at Contargo that both terminals are trimodal and help to free up the roads on the Lower Rhine. Both terminals

have also implemented small and large-scale measures to make handling, transport and administration more environmentally friendly.

One aspect of sustainability is close cooperation with regional authorities. An example: CRWL in Emmelsum has applied for approval for interim storage of dangerous goods in accordance with the Federal Immission Control Act (BImSchG). To receive this authorisation the enterprise has to fulfil stringent conditions, for instance the requirements of the North Rhine-Westphalian State Office for the Protection of Nature, the Environment and Consumers (LANUV) and the Ordinance on Installations for the Handling of Substances Hazardous to Water (VawS). Thanks to this conscientious approach to the environment, the proximity of the two terminals on the Lower Rhine does not conflict with the numerous nature conservation areas and projects in their surroundings.

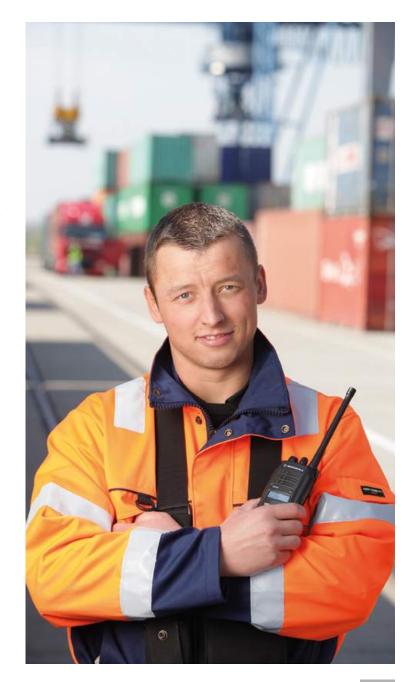


NATURE CONSERVATION PROJECTS IN THE AREA:

"Fluss und Aue Emmericher Ward": Here a parallel channel is being created near the river, and the riverside forest is being developed (www.life-rheinemmerich.de/de/projekt/idee).

Pionierhafen Dornick:

This part of the riverbank, previously used as a port for military engineers, is being turned into a nature conservation area.







Contargo takes great care to conserve resources, not only in the transport and handling of containers, but also in all other areas including depot, repair and reefers.

More than just reducing CO₂ emissions

CONTARGO RHEIN-WAAL-LIPPE SHOWS HOW:

Many small measures together can also be effective. Thus for instance the Emmerich terminal was the first of Contargo's terminals to pioneer the use of green electricity. And all lamps in the offices of Contargo Rhein-Waal-Lippe are equipped with LED. In Emmelsum the terminal illumination is also LED, and Emmerich will shortly be installing the same system.

It was a big advantage for Emmelsum that the newly-constructed terminal could be sustainably planned right from the start: instead of oil or gas heating, a heat pump provides appropriate temperatures for every season of the year. By using a hybrid reach stacker, 40 percent less fuel is used than with a conventional reach stacker. Braking energy from the crane is fed back into the Contargo electricity supply. By using an electric spreader less grease and oil are used, protecting the ground from possible pollution. In addition, a barrier layer (rather like a membrane) has been let into the ground below the crane in the dangerous materials storage area, to contain any contaminating substances.

One way to deploy resources sensibly is to optimise depot use. The location advantage shared by the two terminals means their capacity use is adjustable: if there are too many containers at one terminal, additional handlings are needed and there is often more work than can be completed in the available time (over-utilisation of staff and equipment). If there are too few containers at a terminal the resources are not fully utilised. Finding and maintaining a balance requires a continuous dialogue with customers about possibilities, alternatives and CO₂ optimisation.



THE SUM OF ALL MEASURES

At other locations, too, small measures help to produce a big result: almost all the terminals operate with the quality management standards ISO9001, 14001 and 50001 which require continuous improvements, environmental protection and energy management. One example of an individual measure at another terminal is the use of the biological lubricant Innoself at Duisburg Intermodal Terminal. Unlike conventional lubricants Innoself is only a slight hazard for water, not dangerous to health, and non-flammable. When modernising and constructing new buildings in Hof and Mannheim the resident fauna were also considered: lizards and bats were resettled in a new location.

Whenever Contargo constructs new buildings or extends a terminal, the surfaces are now sealed on principle, and empty cable ducts are laid so that charging stations for e-vehicles can be installed as required. Zwijndrecht has gone a step further: charging poles are already installed there because several colleagues drive to work in electric cars and hybrids.

Recording accidents at work is one of the requirements of ISO 14001.

NOTIFIABLE WORK ACCIDENTS:



*Accident frequency index

CONSUMPTION FIGURES

Compared to the Contargo Group as a whole, our Best Practice examples Emmerich and Emmelsum do better on several points:

- **100% green electricity** unlike the Group as a whole, which only averages approximately 49%
- 15 % less paper than the average for all Contargo
- only 1/3 as much water consumption per capita compared to the average for the Group
- only 1/3 as much non-recyclable waste per capita as the Group average

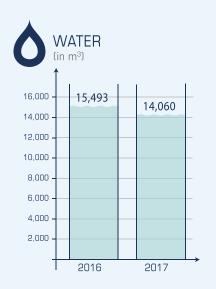




KEY CONSUMPTION FIGURES FOR 2016 AND 2017

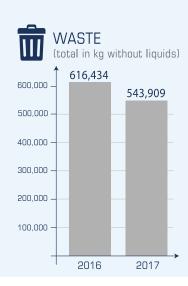
This graphic shows the key consumption figures for the whole of Contargo for 2016 and 2017.* It includes the figures for all companies as listed on page 107.

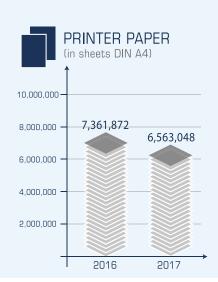


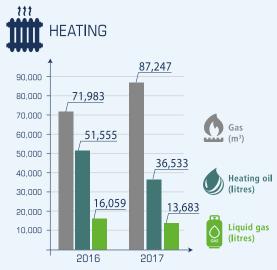




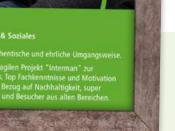












The same in **GREEN**?

LISA NEUMANN

IS COMMITTED TO SUSTAINABILITY

Sustainability relies on our employees – nothing would work without them. Some of the ways we contribute to protecting the environment are so much taken for granted that we all act automatically, for instance separating waste, or economising on toilet flushes. In other areas it is good to have role models, people who are particularly interested in these aspects, who contribute their ideas and motivate other people to do the same.

The overall commitment of Contargo's employees is quite considerable. In Emmerich, for instance, dustbins for separate waste collection are even put out for truck drivers to use. Some employees make use of Contargo's JobRad offer and acquire a bike to cycle to work, or come to work on their own bike. Many people try to save paper by printing out fewer documents.

A special role is played here by Lisa Neumann. She makes a big contribution to the implementing of new green ideas. Because she is the first full-time appointee at a terminal location dedicated wholly to sustainability and quality management, she was honoured by Contargo in 2017 with a place on the "Wall of Sustainability".







Let us introduce our colleague:



LISA NEUMANN

Age: 25

With Contargo since: January 2014

Position: Administrative Assistant

WHAT ARE THE (MAIN) TASKS THIS POSITION INVOLVES?

I mainly support environmental, energy and quality management audits. I am responsible for projects, and I monitor processes.

HOW DID YOU COME TO WORK AT CONTARGO?

After my training I was looking for a challenge with a different transport mode and by chance there was a post advertised at the port in Emmerich. Container transport has always interested me, so I applied for the job and was lucky enough to be able to start here after completeing my training in 2014.

WHAT CAME NEXT?

Until 2017 I was working in the areas of operations, barge, rail, service and order support. At the beginning of 2017 I also took on the task of Dangerous Goods Officer. At the end of 2017, I took the position of Administrative Assistant, and I hope to progress further in this direction.

WHAT DO YOU ESPECIALLY LIKE ABOUT WORKING AT CONTARGO?

The work and the topics it involves are very varied, and each day offers new challenges.

DO YOU HAVE ANY "PET PROJECTS" TO DO WITH YOUR WORK?

I'm very interested in topics like team building, teamwork and open communication. I find First Aid important, as well as the aspect of assistance and support in all areas.

WHICH OF YOUR IDEAS ON SUSTAINABILITY HAVE YOU BEEN ABLE TO REALISE ALREADY OVER THE LAST FEW YEARS?

Together, our team and I made a big contribution to the auditing for ISO 50001 in 2016. The documentation was very lengthy and work-intensive to start with. We managed to shorten the collection intervals for key indicators from an annual comparison to a three-monthly one. The collection of consumption figures was broken down in more detail to individual consumers. Since then the awareness level has been higher and more intensive. I have already been able to motivate some of my colleagues to cut down their paper consumption and print two-sided more often. I have also made some progress with waste separation.

AND WHAT IS STILL WAITING TO BE IMPLEMENTED?

Well, I have lots of ideas: changing terminal operations to more environmentally acceptable transport means and other energy-saving measures, like switching to hybrid reach stackers and installing more LED lighting.

DO YOU ALSO TRY TO LIVE SUSTAINABLY IN PRIVATE LIFE?

Yes, I separate my waste, almost always buy country-grown organic products, regional products from the weekly market and Fair Trade products. Whenever possible I ride my bike rather than taking the car, and I would like to switch to an electric car.

WHAT CHALLENGES DO YOU THINK CONTARGO WILL BE FACING?

In the interests of our customers and the environment, we should further intensify our network in all areas: inland navigation, trucking and terminals. We should also continue with the consolidation of goods flows, to save resources.



The personal sphere





HOW EVERY EMPLOYEE CAN MAKE A CONTRIBUTION TO PROTECTING THE ENVIRONMENT

Sustainability begins in people's heads. First they need to know what the challenges are, and what possibilities there are for action, and they need to respond emotionally. In an enterprise, it is the management who are responsible for informing and motivating the employees. They should also develop ideas as to how employees can be brought to consistently practise behaviour patterns at work that they use automatically at home.

Information about the importance of sustainability, about climate change, plastic, the throwaway society, peak oil and renewable energies is in all the media. In fact, people in Europe do not have any real information gaps, they have an action gap.

Despite comprehensive knowledge about sustainable behaviour, people find it difficult to adapt their own behaviour accordingly. Habit, presumed higher costs, convenience, blocking out the facts or rejection of the arguments stop them from putting their knowledge into practice. In private life people can mostly be won over by cost savings (for instance by saving water or electricity), but this motivation does not apply at the workplace.











CREATING AWARENESS

Thus one of corporate management's challenges is to create and mobilise awareness of sustainability among employees. Management should also make it as easy as possible for employees to behave sustainably at work. In future Contargo will be introducing a Reduction Unit which will not only make effects visible and measurable, but will enable them to be compared with other locations (see page 67).

It should also be made clear to employees that their own actions are always a part of the solution. "One person can't really change anything" is not an argument for inactivity. Of course one individual cannot solve the whole problem on their own, but he or she can make a difference in their private or professional surroundings. Thus employees are also encouraged to inform their superiors about situations that are unsatifsfactory and, if they have a solution, to communicate it at the same time. Only very rarely is an idea rejected. Every individual also sets an example by their own behaviour. By cycling to work, bringing their own cooked meal in a glass or driving a reach stacker at a moderate pace, they can inspire other people to do the same.



INSPIRING AND SETTING AN EXAMPLE

At Contargo there are already some examples that show how this can succeed. To begin with, only people from a few of our locations took part in the employees' competition "Contargo gets on its Bicycle". Meanwhile, teams from all the locations are participating. The number of cyclists has gone up from 9 in 2011 to 36 im 2017. The joint action, which takes place every year, is now a staple part of corporate culture and is also used as an opportunity to regularly remind people of certain information points (e.g. about saving CO₂). By the example of software development with SCRUM, Contargo demonstrates that every individual and their suggestions for improvement can improve the total result. In the area of sustainability this is particularly in evidence on the recently-installed Wall of Sustainability, where each year employees who have contributed a decisive impulse to sustainable improvements are given a place of honour.

Since 2011 "Contargo gets on its Bicycle" has collected 66,488 kilometres!

GO₂

CO₂: 10,289 kg

This has saved:



Fuel costs: 7,353 Euro



3,365 bars of milk chocolate (equivalent calories)



REASONS WHY ENVIRONMENTAL PROTECTION IS WORTHWHILE

Environmental protection generates (frequently good) jobs and stimulates the economy:

agriculture, energy produc-

tion, tourism, transport

Environmental protection stimulates invention and research:

research copies a lot from nature, e.g. water-repellent surfaces, aircraft, medicines, aerodynamics

Environmental protection prevents natural catastrophes:

forests and humus-rich soils bind CO₂, prevent soil erosion, landslides and avalanches Environmental protection has no fron-

tiers: even if we are not directly affected by individual results of climate change, we may still be affected by their consequences such as climate refugees, rising food prices etc.

Environmental protection gives a sense of purpose: people who take responsibility for their own actions consume fewer resources and generally try to keep the effects of their own actions on other people in distant regions as low as possible

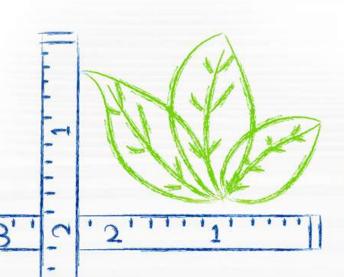
Environmental protection is protection of people: the results of ruthlessly exploiting nature may rob people of their basis of existence in future, keywords: shortage of drinking water, civilisation diseases, bee mortality etc.

Environmental protection is enjoyable:

most people enjoy being surrounded by beautiful, unspoiled nature, going swimming, rambling, cycling, diving







HOW GREEN IS YOUR BUSINESS?



2 teams of students

1 TASK:

Develop a **"Contargo Reduction Unit"**, to make sustainability measurable.

The Contargo Reduction Unit

A PROJECT WITH OFFENBURG UNIVERSITY

In the next two years Contargo's Sustainable Solutions department will develop a game-related concept for employees to internalise behaviour changes and enjoy saving energy.

For this purpose it is intended to introduce a "Contargo Reduction Unit" which will make sustainability measurable. This unit can be universally used in all areas and can serve as a communication means. In future, for instance, competitions can be carried out based on the numbers of reduction units.

Team 1

Proposal 1:

One proposal envisages that the savings potentials — defined by every employee for themselves — would be displayed in an internal project portal and mantained by the employees themselves. The progress of CO₂ saving would be shown by a simple system of symbols.

Proposal 2:

Team 2

The second proposal envisages an account im which all activities, both those recorded manually and automatically, are shown as a total.

Example at department level:

If the user takes a sheet of recycled paper instead of normal paper, this has a specific positive effect, for example.

Example at Contargo level:

If a container has to be transported by truck when it should be transported by rail or barge, this has a negative impact of a different order.





INDIVIDUAL EMPLOYEES HAVE A BIG INFLUENCE ON SUSTAIN-ABILITY AT CONTARGO

Awareness is often the first step towards improvement. But when they become interested in the aspect of sustainability, people are overwhelmed by the sheer size of the topic. It is easy to think that one small person on earth cannot achieve anything at all. Many people at Contargo show that this is not so.

It is the same with environmental protection as in many other parts of life: if we just get angry about other people and think "they" ought to start doing something, we can wait a long time for changes to happen. It is better to bear in mind the words attributed to Mahatma Gandhi: "Be the change you want to see in the world." In practical terms this means: instead of feeling angry for half an hour every morning about the traffic jam you get caught in, you could try out an alternative. Perhaps switching to a bike is health-

ier, cheaper and gives you a sense of wellbeing? Thus for instance Matthias Krämer, Contargo Rhein-Main GmbH, Frankfurt Ost enjoys his one hundred percent ecological garden with homemade compost for his fruit and vegetables, and his water conditioner which transforms tapwater into spring water through a complex filtering and mineralising system.

FIND ADVICE ON THE INTERNET

If you decide to make a change yourself, you do not have to start from square one. Perhaps you are not happy with buying a plastic bottle of water every day. So - enter the problem in a search machine and you will find a hundred solutions. Everybody can adopt the one that suits them best. There are already so many pioneers in these areas giving great hints and tips which you can simply take over, and the Internet is an excellent source of inspiration and motivation. Even if you don't feel like reading a long website or blog, there are handy videos to watch on the subject.

ACHIEVE MORE TOGETHER

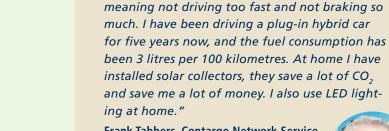
Although this sounds like a solitary struggle, it is not. There are numerous actions and projects where you can make a change together with other people. Cities and regions offer many actions you can join in. In this way you can help a good cause, and get to know new people.

The same is true within the Contargo Group. If everyone gives a little of their time and energy, this can generate a big effect. And every commitment acts as an example or motivation for other people. This does not just refer to the colleagues in the Sustainable Solutions department. Contacts and mediators at all the locations are important, and there are fewer inhibitions about this than about taking on a function within the whole Holding. Weak points can be identified, suggestions for improvements can be tried out and solutions can be worked on together with colleagues.



"I find it very good that we use recycling paper and LED lighting in the office. The water that Contargo provides for us is local water in returnable glass bottles, and 51 percent of our electricity mix is already derived from renewable energies."

Matthias Krämer, Contargo Rhein-Main GmbH, Frankfurt Ost, GERMANY



Frank Tabbers, Contargo Network Service, Zwijndrecht, NETHERLANDS

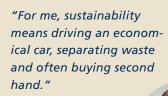
"When driving I take care to drive sustainably,



Sustainability goes international

"At home we have installed special window blinds that have an insulating effect and reduce heat loss in the cold seasons of the year. In this way we can save up to 20 percent of heating energy, and in summer the blinds keep the sun out, so that the rooms do not get overheated."

Alexander van Wichelen, Contargo Sales, BELGIUM



Elodie Mignonneau, Accounting Contargo North France, Buray-sur-l'Escaut FRANCE "I come from a very sustainable family. I am very proud of my father, who is actively committed to renewable energies. He was the first person in our village to install a solar system on his roof. Last year he renewed and expanded the whole system, and installed a large warm water tank, so now he can heat the whole 3-family house with the electricity and self-produced hot water. Only in winter does he sometimes have to switch on the oil heating as well. He drives an electric car which he charges with self-produced electricity."

Sarah Blattner, Contargo AG, Basel, SWITZERLAND



Constant dripping wears away a stone

CONTARGO HAS ITS OWN DE-PARTMENT FOR SUSTAINABILITY

Inform, inspire and implement – this summarises the work of the "Sustainable Solutions" department.

In 2011 Contargo set up a Sustainable Solutions Department. Since then the department has taken on an increasing number of tasks. First, a sustainability principle was developed and coordinated. More and more tasks were added over time, so that in 2017 one of the three part-time posts even became full-time. The team always works with the support of colleagues at Contargo's locations, because only they see what problems occur in practice. With the action "Green Light for your Ideas", the department regularly calls on colleagues to send in their ideas.

For anyone who does not know what it is all about, or wants to find out what other people are doing, many sources can be used:

INFORMATION

In the internal **employees' magazine Contargo Open**, ever second issue has news about one of the three pillars of sustainability.

Several times every month the department contributes ideas to the **Contargo Facebook** page. Here users can get information that is both clear and entertaining.

Every month In **Contargo Wiki** the department places "monthlies" on current topics, reports and events. This is practical, because the information can be entered directly and users can implement a keyword search.

INSPIRATION

The Contargo Sustainability Report is issued every two years. It shows what colleagues in the other Contargo companies are doing. In this way everyone can save time and money by benefitng from the experience of their colleagues.

At least once a year a member of the Sustainable Solutions department visits the locations or companies to ask around on the spot and find out what topics are currently relevant.

The department also enters for local and supraregional awards and prizes. This is not only good PR, but demonstrates to colleagues within the enterprise that active commitment to sustainability is valued.

IMPLEMENTATION

In 2017 Sustainable Solutions carried out a Sustainability Workshop for the first time. This proved to be a good and effective way of stimulating discussions across the Group and taking action together. Thus a workshop of this kind will now be held each year. In future the focus will be directed towards colleagues who do not regard sustainability as a given, or are not so familiar with it; in this way increasing numbers of people will be involved in sustainability activities in the long term.

There is also the "Wall of Sustainability". Each year a person or team is chosen who has achieved something for the Contargo Group by their particularly active engagement in sustainability. As well as a Sustainability Trophy, they receive a place of honour on a wall especially created for this purpose in the Sustainability office of the Holding in Mannheim. So far, awards have been made for the years 2011 to 2017.

CONTACT

At any time, by phone or email: sustainable.solutions@contargo.net

THE "SUSTAINABLE SOLUTIONS" TEAM



Sandra Hollweg



Kristin Kahl



Nicole Kudras



The journey is the reward HOW EMPLOYEES CAN MAKE THEIR JOURNEYS MORE ENVIRONMENTALLY FRIENDLY Travelling to work every day is stressful – often not only for commuters, but also for the environment. Thus it is up to enterprises to develop intelligent mobility concepts. Driving to work or to an appointment often involves traffic jams, stress and pollution. Companies need to provide adequate parking spaces – their employees are already stressed when they arrive at their place of work or their meeting. It is well worth considering whether there may not be other ways of doing things. **52** people 11 people 2016 2017 **JOBRAD** cyclists



Opting **OUT**

The aim of a sustainable mobility concept is to make journeys by car an exception. Cars should be used as far as possible only to transport something, or to travel a greater distance if a train journey would take a disproportionately long time. Since our locations are mainly in port areas, cars are the standard means of transport. Public transport alternatives are limited and in some cases non-existent. Thus journeys by car should be optimised as far as possible. For instance, by giving a lift to a colleague who has business at the same location, or by questioning whether a three- or four-hour car journey is necessary just for a 90-minute meeting, or whether it could at least be used as a "courier trip".

Opting **IN**

It is well worth thinking about alternatives to going by car. Many employees whose job involved a lot of driving have already received a 25 or 50 percent railcard ("Bahncard") from Contargo. Using public transport or rail is not only good for the environment, but also for people: during a train journey people can work, or the journey can already be used as leisure time, to read, relax, listen to music, make plans or enjoy games. Many monthly or yearly season tickets also cost less using the Bahncard or a job ticket. Unlike driving a car, when using public transport people walk part of the way. This has a very positive effect on their condition, their locomotor system, and often on their feeling of wellbeing as well.

Switching **OVER**

It is possibe to do without journeys altogether: in the meantime Contargo is increasingly replacing meetings by telephone and video conferences (you can read more about internal communication and alternatives to meetings on page 105). Long journeys are also saved by an occasional home office day. For office workers, home office is a good option not only on days when traffic jams or extreme weather are expected — if workmen are scheduled to call at home during the day, it is also possible to concentrate on work without worrying about missing them. Even in the IT department home office is possible, because remote servicing has been standard for a long time now.

Saddling **UP**

Contargo supports cycling in various ways. To give employees an incentive to try cycling to work, in 2011 the employees' competition "Contargo gets on its Bicycle" was announced for the first time. Since then an increasing number of employees have taken part every year, cycling with their teams to compete for the trophy, the honour and an all-inclusive cycle tour. Also Contargo's "JobRad" offer induces people to get on their bike more often, whether for private trips or on their way to work. If an employee needs a car at short notice, there are cars available for business trips at many Contargo locations.

Thus quite a few people have discovered the advantages of riding a bicycle to work: depending

on the distance, cycling can be almost as quick around town as driving a car (walking to and from the car, traffic jams, traffic lights, looking for a parking space). Not to mention the health benefits: cyclists train their muscles, burn fat — and the exercise puts them in a positive mood.

TIPS FOR BEGINNERS

Is there a colleague who travels the same way to work? How about a carpool? This not only saves money, but also spares your nerves. A very useful idea for the 30 percent of industrial workers at Contargo who have identical work times.

- 1. Agree on a central meeting-point, then at least one car will be left there and not used.
- 2. If someone does not like to chat, prefers listening to the radio or just thinking, he or she should just tell the other sharer(s), they won't have a problem with this.
- 3. Sharing doesn't have to be every dayif someone has other plans after work,they can tell the other(s) in advance.





SOCIAL



The individual stage (page 97)



The playing field of Contargo (page 87)



The basis: the population (page 74)





The basis: the population



All beginnings are difficult

PEOPLE IN THE CONFLICT ZONE BETWEEN ECONOMY AND ECOLOGY

Society is composed of very different groups and individuals who have quite different priorities in the weighting of economy, ecology and social factors. A society cannot be sustainable without rethinking in terms of "less is more". However, in the field of tension between economy and ecology people's needs and wishes must not be neglected.

The European Union can look back on decades of successful socioeconomic development that has led the nations of Europe from a disastrous war to the longest period of peace this continent has ever known. For 500 millon people Europe is a good place to live in peace, on the basis of equal rights and rule of law, prosperity, non-discrimination and a fairly egalitarian society. People in Europe live longer and more healthily than in most other countries of the world.

The other side of the coin: Europeans consume too many resources, emit too many pollutants into the atmosphere, over-fish the seas and contribute to the loss of biological diversity. Moreover European society is repeatedly exposed to drastic changes due to events like the world financial and business crisis in 2008, the wave of refugees in 2015, and progressive digitalisation.



CHANGES MAKE PEOPLE INSECURE

At present new models of society are being tried out, often based on new digital technologies. Environmentally friendly energy and mobility concepts are also being developed. Plans need to be developed for dealing with extreme weather situations and for streams of refugees resulting from climate changes.

Societal change is necessary. Because the resultant fundamental changes make many people feel insecure, this process needs to be supported, also by the state. Broadbased awareness and information campaigns to support rethinking processes, appropriate infrastructures and legislation are just a few examples of this. Up to this day no-one can say exactly what a "societal search process" of this kind looks like, or how it should be shaped, because transformations lead to structural changes in society – in culture, in values, technologies, production, consumption, infrastructure and policy. These processes do not happen in chronological order and they can greatly influence, weaken and strengthen one another.

On the one hand policy has to meet these challenges, identifying approaches to what the support (governance) of a successful societal change could look like, and what could contribute to more sustainability and a culture of sustainability. On the other hand, movements

are increasingly arising from society itself which influence policy in their turn and lead to the changing of decisions and laws.

Humans are generally characterised by being flexible. Although not every individual can cope with the rapid pace of technical and societal changes, after one generation many developments are taken for granted that seemed unimaginable twenty years ago. It is scarcely imaginable for a 40-year-old woman in Germany today that right up until the 1970s a wife had to ask her husband's permission if she wanted to go out to work. A 30-year-old would have difficulty imagining that his father used to do his homework without a computer. Today a 20-year-old could hardly envisage what life was like without smartphones. Processes of change are unpleasant for many people, but for the next generation they are a given.

SEEING THE CHANCES

For instance, in the transport sector preparations are being made at present for "platooning". For drivers, autonomously moving trucks represent a threat to some extent. For this reason, now would be the right time to develop new perspectives for drivers. As the DVZ (the German logistics weekly newspaper) has suggested: why not even "fundamentally question the classic job description 'truck driver' and create a contemporary, perhaps even higher-value occupational qualification? Someone who does not 'just' sit at



the steering-wheel mile after mile but instead, thanks to new digital possibilities, contributes more added value to his company as the truck rolls autonomously along the highway, might even get better paid." In the end everyone might benefit: drivers would get more appreciation (also in financial terms) and forwarding companies would have fewer administrative costs; at the same time an attractive professional profile would be created which would counter the present shortage of drivers.

Because in the last analysis, it always depends what you make of the change.

^{*}Source: https://www.dvz.de/rubriken/meinung/detail/news/die-fahrer-nicht-alleinlassen.html



"What's going on?"

DIVERSITY IS A PLUS FOR TEAMS, IF THEY KNOW HOW TO HANDLE IT

It is an effect of demographic change that within one country, one enterprise or one team people of different sex, origin, upbringing, education, beliefs and ages live and work together. Thus it is one of the great social challenges of our time to recognise and use the various competences of individuals. Here we describe the possible communication problems, using the example of values changes between generations.

Today teams in many enterprises consist of people from different generations, because the proportion of older employees is increasing. Forecasts suggest that by the year 2060, every third employee will be at least 65 years old. Their training will have taken place a long time ago and the knowledge they gained then will be partially out of date. Even their long years of experience will not compensate for the fact that their knowledge base is not state-of-the-art (e. g. digitalisation). By contrast the younger generation have grown up under quite different conditions: more education, more media, more prosperity produce different attitudes to work and to life in general.

Where teams from different generations are working together, there is often a lack of understanding for the other generation.

One example: A manager from the Baby Boom generation might regard his Generation Y employees as being unreliable because they often do not arrive punctually at work. He expects punctuality and presence at work as a matter of course. The employees, on the other hand, do not understand their boss. They completed some tasks the evening before and at the weekend, so why should they be told off if they arrive 5 minutes late?









GRAPHIC: DIFFERENCES BETWEEN GENERATIONS

	TRADITIONALISTS	BABY BOOMERS	GENERATION X/ GENERATION GOLF	GENERATION Y/ MILLENNIALS	GENERATION Z
	1922-1955	1955-1965	1965-1980	1981-1995	1996-2010
EXPERENCE	Second World War, post-war reconstruction, obedience, respect for rules	Years with high birth rates, the German 'economic miracle' , Cold War, student protests, feminist move- ment, oil crisis, Chernobyl	Economic growth, German reunification, end of the Cold War, grew up with television, first computers, high level of education	Digital revolution, worldwide terror	Globalisation, global warming
COMMUNICATION CHANNELS / USE OF	Personal discussion / no or little use of new technologies	Personal discussion, telephone/new tech- nologies are mainly used in a professional context	SMS, email, messengers / tech-savvy and experienced	Social media, messengers / digital natives, 24 hours online	FaceTime, messengers / technoholics, Virtual Reality, Cloud, music streaming
ATTITIDE TO WORK	Work is there to finance the cost of living, not for self-fufilment	Work has high priority value, this generation coined the word "Workaholic"	Professional career is equally as important as work-life balance	Work should be fun, a career is not so important. Work and private life no longer kept separate, strong team spirit	For Generation Z, clear structures and the boundaries between work and private life are important. The wish for self-realisation tends to be sought in the private rather than the professional sphere.



SOCIAL DIALOGUE

We put 4 questions about sustainability to **Roland Hörner (born in 1954)**, Managing Director of state-owned port company Hafengesellschaft Mannheim (HGM) and to two students, **Marielle Rüppel and Ann-Sophie Kneip (both born in 1995)**:

Question 1: "How is the world of work changing?"



Roland Hörner Port Director

Port Director (b. 1954)

"Learning processes continue alongside without being noticed."

"Since everything started to be done by EDP, paper consumption has gone up enormously."

"Emails have the disadvantage that the other person expects them to be read."

"It has to be possible to keep data security under control." (1)



Marielle Rüppel Student



Ann-Sophie Knei Student

Students (b. 1995)

"Lifelong learning is the prerequisite for everything."

"Employees should be able to make more use of home office."

"Work should be fulfilling, not dull and tedious."

"Sometime in the future we will only be working 20 hours a week for the same wages, the rest of the time we will be able to do voluntary work in the community or continue our education." (2)

Question 2:

"How can we protect the environment more effectively?"

Port Director (b. 1954)

"The way we meet challenges is typically German – we exaggerate. We are a wealthy and innovative country but we are also hysterical, and we often only go half way, for instance in promoting E-mobility." (3)

"There are many possibilities for saving energy – for instance, the lights on a train could switch on automatically as needed."

"With photovoltaics you definitely need to think of fire protection, so you should bring in the Fire Service already at the planning stage."

Students (b. 1995)

"Organic solar cells offer many advantages." (4)

"It is important to handle resources intelligently." (5)

"It is much less sustainable to just wait and see, rather than taking action and making a mistake occasionally; and we ought to consume less to reduce our ecological footprint – keyword Sufficiency."

"You should mainly use surfaces that are already sealed." (6)

Explanatory notes:

- (1) Data security:
- Data can only be accessed by authorised persons
- Integrity of data, protection from manipulation and technical defects
- Existing data may be used when necessary
- (2) Is a socio-educational theory claiming that the way we behave is composed of three elements: material, skills and significance. A change in behaviour requires changed awareness acquired by dynamic group action. Enterprises can have a decisive influence on behaviour.
- Example: Repairing: Repairing should be an "in" thing, second hand should be more highly valued again — and of course people need to know how it is done.
- (3) Electrical recharging stations for passenger ships: should supply electrical power to vessels when they are in port, so that the engines can be switched off.
- (4) Research organic solar cells: It is hoped to use these to replace crystalline solar cells in future. Their production requires substantially less energy and is cheaper. They are intended to be more flexible in use, and the cells are safer.
- (5) Smart Grid systems: In future "intelligent power grids" will support the use of renewable energies. Power failures caused e.g. by bad weather can be bridged.
- **(6)** Brown field use: Re-use of unused areas such as obsolete industrial estates and old army sites for new projects.



Question 3: "How will mobility change?"

Port Director (b. 1954)

"Carsharing is only used by young people, either for financial reasons, from political beliefs or because they are used to it. There will certainly be changes here – for instance, everyone may have their own passenger cell and only the chassis will be shared." (7)

"Charging by cable is out of date." (8)

Students (b. 1995)

"The Sharing Economy and totally cool company pool cars will change individual transport."

"Autonomous driving will come (9), but other forms of driving should also be promoted, for instance e-bikes, which can also be supported by companies."

"Private e-charging should be free of charge."

Question 4: "How will the structure of society change?"

Port Director (b. 1954)

"Solidarity will be still further reduced, we will get a system like the one functioning in the USA, the contractual obligations between generations will be dissolved." (10)

"In Germany education has still not caught up – for instance in sport (PE) the emphasis needs to be on motivation, with a modern, progressive approach focussing on fun." (11)

"Humans are and will remain social beings; it is also essential to maintain "real" contacts."

Students (b. 1995)

"Digitalisation must be possible and accessible for all." (12)

"Education without pressure to perform is important. Children need opportunities to discover their interests and be curious and creative. And they need to develop a healthy relationship with nature – so, fewer abstract models and more reality!"

"In higher education we need to encourage critical, interdisciplinary thinking that broadens horizons."

"Slowing down plays an important role, taking time for social contacts and giving the brain a rest from digitalisation." (13)

Explanatory notes:

- (7) Separation of the passenger cell from the drive chassis: very futuristic, but a lot of thought is being given to it: a driving machine similar to the truck trailer system, with "trailers" fo individual private transport. These could even be attached to one another like train wagons.
- (8) Induction loops: Instead of charging poles there could also be induction surfaces in parking slots or at traffic lights. In this way vehicles could quickly recharge during these "unproductive" periods.
- (9) Platooning Step 1: semi-autonomous driving: with the help of steering systems, several trucks could drive in columns very close together.
- (10) Inter-generation contracts and basic provision: the generations that are now in their working life look after those who have retired.
- (11) Interactive sport in combination with real sport: the advantages of both will be combined, e.g. having fun playing 'remote' team football in front of an interactive screen
- (12) Air ballons as "transmission masts": more than half the world's population still does not have access to the internet. The Loon Project is a network of stratospheric balloons, released to extend internet connectivity to rural and remote regions all over the world.
- (13) Use of public space: When planning new residential, working and urban areas, places are specifically created in which private and business activities can merge.





Hand in Hand

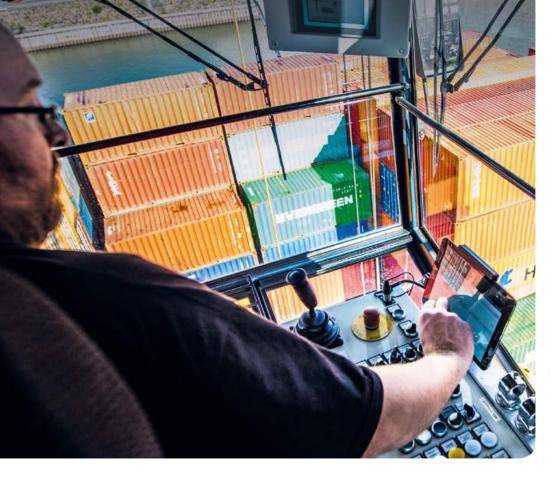
CONTARGO INVOLVES ITS EMPLOYEES IN THE PROCESSES OF CHANGE ASSOCIATED WITH DIGITALISATION

The progress of technical innovations is unstoppable. New devices and applications come onto the market every day. To remain up to date – whether in their job or in private life – people have to be continually prepared to learn, and to discard old habits and work processes. In these developments Contargo takes account of business factors, people and the environment.

For Europeans, digitalisation is already the norm in their private lives: in 2016, 79 percent of citizens in EU-28 between the ages of 16 and 74 were using the internet at least once a week. 59 percent of them used mobile devices to connect up to the internet when not at home or at their place of work. 55 percent of people purchased goods or services online, and 52 percent used the internet for social networks.

A fast internet connection, combined with knowledge and relevant skills, makes it easy for us to carry out numerous activities online: we can exchange views with people, find information, read news, watch videos, buy or sell goods and services, perform official business with authorities, and so on. This not only revolutionises business models, but also significantly affects the economic, social and political participation of individuals and groups. New patterns of work, socialising and information exchange become independent of geographical location.



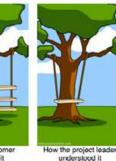


From the viewpoint of Contargo, one of the central tasks of logistics today is the control of information flows. Contargo is able to perform this, thanks to its competent IT department and collaboration with a creative service provider. In order for the solutions that are found to be person-friendly — and thus productive, because people like using them — colleagues from operative practice are always involved in the development, adaptation and alteration of software. SCRUM is one of the methods used to make sure of this. SCRUM is a method for the management of agile software projects in which theory and practice work closely together. The advantage of this method is that it produces programs which are actually used, rather than programs which, although they fit the original specifications, are too remote from employees' day to day work.

How Projects Really Work (version 1.0)

Create your own cartoon at www.projectcartoon.com













low the project was









OUR OWN DIGITALISATION DEPARTMENT

Digital change has great impacts on the professional world: enterprises are no longer competitive, whole job profiles are marginalised, the competencies demanded differ from those previously required. For instance, today a crane operator does not just have to handle containers, he also needs to be able to use software on a tablet. In order to exploit the chances of digitalisation to the full, Contargo has established a "New Business and Digitalisation" department, with the aim of initially strengthening networking between management and the IT department, and exploring the digital possibilities for Contargo.



USERS INFLUENCE SOFTWARE

"

Because there are always new impulses from practice, and because frame condtion are continually changing, Contargo mainly works with Open Source in self-developed programs. The source code of these programs is freely available, meaning that Contargo can be sure of being able to continue working on the programs in a few years' time, and can also make use of "swarm intelligence" (collective intelligence): everyone can download this software from the internet, use it, copy it or even change it. So users of these programs will always find up-to-date versions on the net. This has several big advantages for Contargo. For routings and price calculations the enterprise uses OpenStreetMap and Android on the smartphones and tablets on cranes and reach stackers.

The individual applications are put into operation step by step. Since the summer of 2017 Contargo has been using the progressively growing **COLA Terminal Operating System** (TOS) to control the terminal in Koblenz. The aim is that in future the new software will enable process automation and electronic processing right up to the transport's destination. COLA: TOS is evolving in seven steps, which will be developed over the next months and years together with the terminals. In parallel it will be introduced in daily operation and installed at other terminals, initially at Frankfurt-Ost, Gustavsburg, and Bruay in northern France. Contargo's GateControl not only controls the intelligent inflow at fully-integrated COLA terminals and authorises entry to the terminal - in Neuss (as it will later in Emmelsum) it acts as a gate intermediator between the current inventory systems.

Because we often use our software for longer than many IT companies even exist – or for longer than they are willing to maintain our systems – at Contargo we use Open Source software. In other words: this way we succeed in avoiding vendor lock-in – we are not dependent on specific IT companies and we avoid the high costs involved in switching to a more appropriate IT provider.

Heinrich Kerstgens, Co-Managing Director of Contargo GmbH & Co. KG





SUCCESSIVE INTRODUCTION OF NEW SYSTEMS

Contargo has big overall plans in the area of digitalisation. Implementing them will take several years.

Thus the strategy is first to change the flanking systems and then to tackle the core applications. "At the same time we are reacting to operative demand by agile roadmap shifting and bringing COLA modules forward as required. Examples of this are STAR and requests for GateControl to extend the Speyer gate system by providing intelligent admission control and modern authorisation monitoring", explains Henrik Hanke, IT Manager Contargo GmbH & Co. KG.

By support and maintenance of the existing systems, Contargo ensures that the terminals can act and react professionally as usual. Customers regularly approach Contargo with new requirements. For instance, to meet customers' requests Contargo has introduced special reportings and electronic data exchange with direct connections.

"At present, digitalisation is not only transforming many business models – it will also be an important driver of sustainability", Heinrich Kerstgens, Co-Managing Director of Contargo GmbH & Co. KG, is convinced, because at Contargo the user friendliness of digital processes, and the fact that they protect the environment, for instance by more effective processes at the terminal, are important as well as their economic efficiency.



GRI 414-2 Taking a wider view

PEOPLE WHO COMMUNICATE HAVE BETTER IDEAS

The sum of human knowledge is doubling at ever-shorter intervals, so no wonder the motto "we can achieve more together than alone" is more relevant than ever today. Contargo is trying out new ways to find new and quite different solutions, in interchange with various different people. But also workshops with our own employees and sponsored events in the locality bring fresh ideas into the enterprise.

The Sustainable Solutions department has already placed topics in two project seminars of Offenburg University, to be examined from an "out-side-in" perspective by students, with the aim of getting new and different results. Contargo's input consists in project preparation and introduction,

and continuous support and teamwork during the project.

For instance, one of the questions posited by Contargo for the seminar on logistics and trade was: "Paperless office in the logistics sector – realistic or Utopian?". This project examined in detail what processes there are, which of these are easy to digitalise and which would be more difficult. Criteria such as the customer experience, economic efficiency, complexity, risk and time horizon were evaluated. The Contargo Reduction Unit, as well as CO₂ stocktaking and the new calculation of CO₂ emissions in combined transport, were developed in collaboration with the students. The clear advantage is that students have fewer reservations about feasibility, and are not afraid to question current practice, or develop ideas on the basis of their own perspectives and experience.







STUDENTS TAKE THE HELM

A sustainable "bar camp" in Karlsruhe inspired Contargo to try out a similar format. After a preliminary discussion with Contargo, two motivated students from the Karlshochschule International University, Karlsruhe, took over the moderation of a workshop.

In October 2017, 15 Contargo employees took part in this Sustainable Solutions workshop. Each of them could contribute one or more workshop topics. Since some of the workshop sessions took place in parallel, the employees had to choose the ones that suited them best.

Each workshop session was introduced by an impulse talk to make the discussion round easier for participants and establish the main focus. The impulse talks were given by employees from various locations who were already familiar with the topics concerned. Feedback from the participants was consistently positive, and some of the ideas that emerged at the workshop have already been implemented.

It also gave rise to the plan of offering employees a workshop of this kind once a year. All Contargo employees can — and should — take part, from trainees to technicians and customer service, to managing directors.







TAG CLOUD: LOCAL SPONSORING

Voedselbank-Rotterdam

RadioRegenbogen

Hilfsgütercontainer-für-Entwicklungsländer

NET-Tembertheim

NET-Tembertheim

NET-Tembertheim

NET-Tembertheim

Settleren Diugendergesellschaft-Heidelberg Spende Jugendabteilung Fußball Delta-Port-vor-Ort

DJK-SE-Frankenthal STERNTALER-KINDERHOSPIZ

Transport&Logistics-Antwerpen

BetriebsSportGemeinschaft Spende DLRG

JUNGENDFEUERWEHR-MANNHEIM Hans-Peter-Dentler Deutsch-Niederländische-Logistik-Konferenz

Diakonisches-Werk-Karlsruhe

Trägerverein-Gemeinschaft-Verein-für-Neuhofen

Rugby-Heidelberg

NABU SV-Büchelberg Runtegrate SpendenlaufFürHilfsprojekte SpendenlaufFürHilfsprojekte HafenclubMannheim FahrradclubFriesenheim

BEYOND THE TERMINAL

At Contargo, communication does not end at the company gates. So the individual companies and locations also take part in many activities in their neighbourhood.

One example is "Neuss on Tour". In this action, Contargo Neuss participated as a Partner of the Tour de France second stage on 2 July 2017. Local businesses grouped together to support the organising and financing of the second Tour stage through Neuss. As well as the second stage partnership there were many ideas for actions to accompany the sporting highlight. The one finally adopted was a bicycle course for the youngest Tour de France spectators.

Support of regional sport and cultural events ranges from donations between 100 and 1,000 Euro, to gifts of football strip and containers, to advertising on the bands – and straightforward manpower.

To keep in touch within the sector, Contargo also supports branch functions and strengthens the combined transport presence at logistics events. Contargo personnel give lectures as quest speakers at universities, technical colleges and training institutions.









The playing field of Contargo











EVERY OPINION COUNTS

JOINING IN MOTIVATES PEOPLE

Communication is another area that aims to enhance employee satisfaction at Contargo. On the one hand Contargo informs its personnel through the internal magazine Contargo Open, via Contargo Wiki and on the social media; on the the other, it also relies on the participation of its employees. For instance, in the area of sustainability the action "Green Light for your Ideas", organised by the Sustainable Solutions department, invites employees to make suggestions about how Contargo can make even more improvements in the areas of ecology, economy and social responsibility.



FVFRY OPINION COUNTS

















GRI-Standard: 405-1

Zwijndrecht

Everyone under one roof

EXEMPLARY LOCATION: ZWIJNDRECHT



In Zwijndrecht employees of Contargo **Network Service, Contargo Road Logistics and Contargo Waterway** Logistics work side by side in one building. With just under 100 people and a 60:40 personnel ratio of men to women, Zwijndrecht is not only Contargo's biggest office site but also the location with the highest proportion of women employees.

The seven-storey office building, where Contargo now rents three floors, is in Zwijndrecht, a community on the north bank of the Rhine arm Oude Maas, opposite the city of Dordrecht, and is less than 50 kilometres from the Port of Rotterdam. Here the teams organise whole transport chains for containers. These include direct trucking and transport by rail, barge or combined transport, both between the seaports and between seaport and hinterland.

Contargo Network Service Contargo Road Logistics Contargo Waterway Logistics





MUTUAL SUPPORT

The advantage of occupying the same location is that knowledge, and even personnel, can be exchanged. When bottlenecks arise the different companies can support each other, which is helpful both financially and socially. Especially when work is complicated by external influences like extreme water levels or congestion in the seaports, the teams can usefully complement one another.

There is praise from many participants, too, for the communication between managers and employees. Every employee has two appraisal talks per year: in summer each employee tells their superiors what they have been doing in the past half-year, considers the challenges, and suggests what additional training or equipment they need. In the second talk at the end of the year the superiors give the employee feedback and an assessment according to a points system.

EVERY PERSON COUNTS

The example of Frank Tabbers shows that employees' wishes are taken seriously and implemented wherever possible. Frank acquired a hybrid electric car in 2013, the first employee to do so.

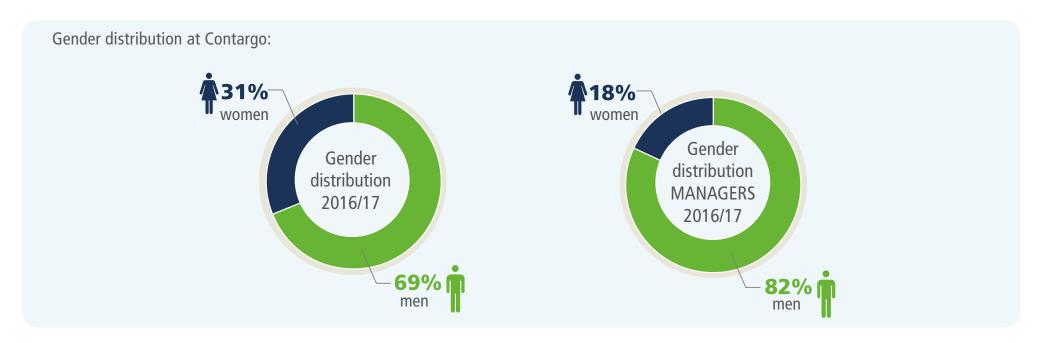
A charging post was installed in the carpark for him. In the meantime it is used by other colleagues as well.

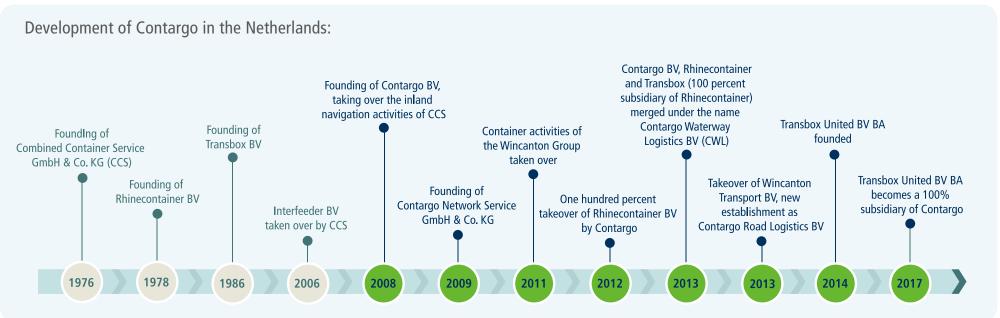
For an atmosphere of wellbeing there is a well-equipped kitchen on each floor with a large table that invites people to eat together. Massage at work, fresh fruit, free health checks and contributions to sport studio membership help employees to stay healthy. Employees get together outside the office too, for instance at the annual Christmas party and on other festive occasions, Some colleagues strengthen team spirit at the yearly "Verkerkloop", a public running event in Zwijndrecht.

Here, too, Contargo extends responsibility beyond the boundaries of the enterprise by making donations to various organisations such as Unicef, Greenpeace, the WWF and cancer research. The colleagues in Zwijndrecht also support the regional football club Feyenoord Rotterdam.











Never start giving up, never give up starting

HELEEN SCHARROO

ENJOYS THE COOPERATION WITH HER COLLEAGUES

Every day Operations Manager Heleen Scharroo and her colleagues are confronted with new challenges like congestion, low water or storms. These often mean longer working hours – including weekends. To keep the stress level low in situations like this, people need to feel motivated to reach a goal they have set themselves, if they are to maintain the intensity and focus of their activity. So that people give the job full commitment and do not just regard it as a "necessary evil", a motivator can help to make sure they go on enjoying their work, and create an open atmosphere in which everyone can make suggestions for improvements and express their own opinions. This is a task Heleen Scharroo takes on often and willingly in Zwijndrecht.



Challenges:

- Low water
- High water
- Congestion
- Storms
- Time pressure



Let us introduce our colleague:



HELEEN SCHARROO

Age: 49

With Contargo since: June 2003

Position: Operations Manager

WHAT ARE THE (MAIN) TASKS THIS POSITION INVOLVES?

I carry out the operative control of the barge and rail section at Contargo Waterway Logistics. I perform qualitative and quantitative monitoring of developments, look after the planning and realisation of container transports, discuss structural and operative problems with the managers and also give them my suggestions for solutions. I also process damages and claims.

HOW DID YOU COME TO WORK AT CONTARGO?

I worked for various sea carriers including United Arab and Hanjin Shipping. This brought me into professional contact with Cok Vinke and George Karras, who asked me if I would be interested in working for CCS.

HOW DID THINGS GO FROM THERE?

I was Assistant Operations Manager from 2003 to 2005, and I have been Operations Manager since 2005.

WHAT AIMS DO YOU STILL WANT TO REALISE?

I would like to contribute to modernising Contargo's trimodal products and would like to support this process. A basic requirement for this is cooperation between the departments at Contargo – from operations to sales to IT.

WHAT DO YOU ESPECIALLY APPRECIATE ABOUT CONTARGO?

I like being creative with the daily operative processes, which are different every day. And I like motivating my colleagues, creating a good working atmosphere so that together we deliver a good product. And so far I have always been able to express my opinion, regardless of the position of the person I was talking to. To me, this means a degree of freedom — even when the other person does not agree with me.

WHAT WOULD YOU LIKE TO ACHIEVE IN FUTURE?

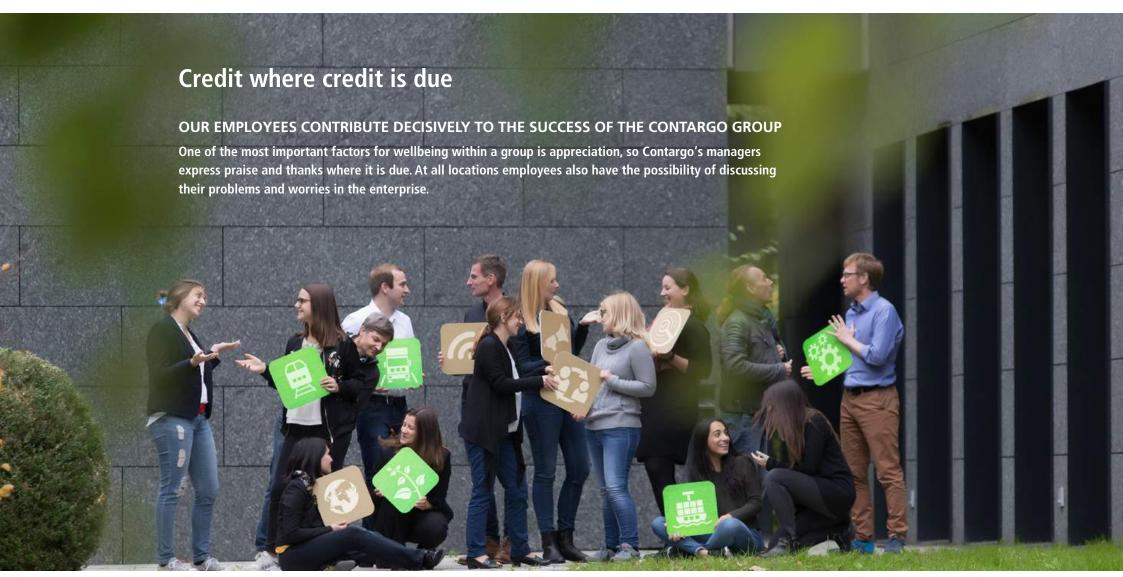
"Green transport" should not be regarded as a selling trick. We must show that we consider customers' requirements together, but at the same time we must take care that future generations also have a chance to enjoy this world.

WHAT FUTURE CHALLENGES DO YOU SEE CONTARGO HAVING TO FACE?

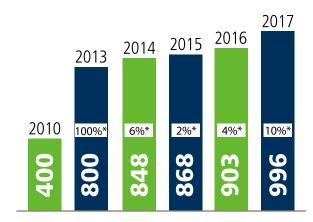
We must give thought to the problem of congestion. Volumes are increasing, not only in the seaports but also in the hinterland. We should prepare for this in good time, by using good personnel and giving them further training. And finally, we should be aware of the consequences that our growth may bring.



The individual stage

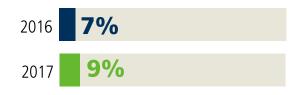






NUMBERS OF EMPLOYEES

* percentage increase compared to previous period



FLUCTUATON RATE not including retirement

In the busy daily round, thanking employees for what they do every day sometimes gets neglected. Because in logistics, exceptions tend to be the rule: flooding or low water, congestion in the seaports, closed rail lines, building a terminal extension while carrying on business as usual, above-average volume increases, or the introduction of a new software system, are just a few of the challenges employees have to meet in addition to their regular tasks.

TALKING ABOUT PROBLEMS

These and other situations may cause problems again and again, but at Contargo problems are discussed and solved together. The way this is done varies from one location to another. One site may have digital complaints management, another an anonymous suggestions box or an open postbox for employees' ideas. Of course apart from these it is always possible to discuss problems directly with a superior in order to find a solution. Topics of this kind are often taken up again in team meetings, team leader meetings or management meetings, and solutions are found together.

STARTING JOINT ACTIVITIES

Open communication is especially easy if the team know each other well and the atmosphere is relaxed. To make sure this is and remains so,

various team events take place at all the locations. They range from department excursions to bowling evenings, from visiting ice-cream vans to sports events, from summer festivals to boat trips, terminal parties and Christmas celebrations.

PROGRESSING WITHIN THE ENTERPRISE

Another incentive for employees: at Contargo they have many possibilities to develop further. If they would like to have further training or aim for a higher position they are supported. 97 percent of Contargo's managers come from the vicinity of the locations. Only some managers are recruited externally. At Contargo they more often come from the enterprise itself, and began their career with Contargo or one of its predecessors.







We are especially proud of our colleagues, who have been working under very difficult conditions. In the Osthafen they carried on as usual during demolition work and the construction of pre-loading places for trucks.

Christian Eichmeier, Contargo Rhein-Main GmbH







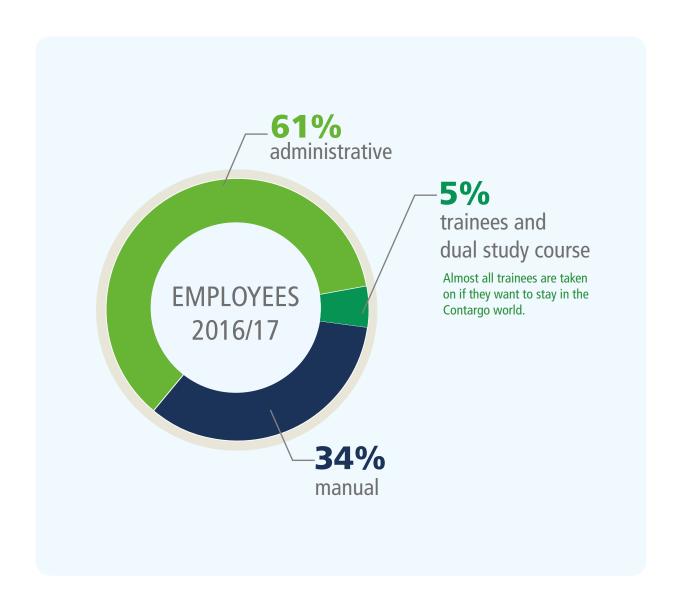








Personnel figures











Prevention is better than cure

CONTARGO HELPS ITS EMPLOYEES KEEP PHYSICALLY AND PSYCHOLOGICALLY HEALTHY

"Helping me to help myself" is a precept from education – but it also applies to preventive health care at Contargo. The enterprise does not try to replace its employees' responsibility for their own wellbeing, but gives them valuable support in their efforts to maintain and recover their health. There are no central solutions here, but individual offers by the locations.

The vulnerable points of Contargo's employees depend on their type of work — in the offices the main effort is to prevent back and neck pain and headaches, to counter poor muscle tone and general condition, and prevent eye problems. With some employees working in the terminals, it is more a question of dealing with the effects of long period spent standing up, or back problems cause by sitting in cranes or reach stackers.

As well as individual prophylaxis, sometimes with participation of their own health schemes, employees can obtain support from Contargo. For several years now Contargo has taken over part of the costs for membership of a fitness studio. Some locations offer regular muscle relaxation massages at work. Some colleagues can get a 'flu jab directly at work, or benefit from a medical checkup for employees in monitor-based workplaces. At many of its locations Contargo also takes over part of the cost of glasses for employees working with a computer screen.

Employees also receive information from the internal magazine, "Contargo open", about the right way to sit, how to build exercise into their working day, or the best way to arrange a workstation.



EXERCISE: THE 'CURE-ALL'

It is estimated that approximately 50 million people in the European Union suffer from

depression, exhaustion and addictive conditions. Thus, as the German Federal Ministry of Health (BMG) reports, mental illnesses are an ever-increasing cause of absence from work and early retirement. In Germany around 15 percent of all days of absence from work are accounted for by illness of the psyche. Especially significant: The average duration of these illnesses is 36 days – three times as long as for other illnesses.

For this reason, prevention and the support of mental health is becoming increasingly important as a part of sustainable management. The aim of health information at Contargo is to give

people tips and background knowledge about where they can find the appropriate offer. For

one person a massage might be helpful, whereas for someone else time management training may be what is needed.

Exercise is also an important prophylactic measure. As well as preventing obesity and diseases of the heart and circulation, joints and muscles, sufficient exercise can even prevent or lessen psychological illness. Teams at many of Contargo's locations take part in **sporting** events and motivate each other. The employees' competition "Contargo gets on its Bicycle" also promotes exercise as a part of daily life.





HEALTHY EATING

Many Contargo locations are situated outside the urban infrastructure where a choice of healthy, affordable lunches might be available. For this reason all Contargo's locations have kitchens where food that people bring to work can at least be stored and heated. Ordering together from delivery services can help to make lunchtimes healthy, too. Most Contargo locations also offer their employees **fresh fruit free of charge**.





Inspiration for simple meals to prepare at home beforehand and re-heat at work can be gained from the cookbook series "Contargo Cooks". The 2016 edition especially focuses on sustainability and has ideas for more healthy, regionally-sourced dishes that are quick to prepare and also conserve resources.

Apart from being good for your health, good food also promotes social solidarity, because the kitchen and the recreation room are the places where information is passed on and ideas develop.





Easier said than done

REGULAR DISCUSSION WITHIN THE TEAM AND BETWEEN COLLEAGUES MAKES WORK EASIER AND IS GOOD FOR THE WORKING ATMOSPHERE

Good communication within an enterprise is very important. Dialogue is the only way of finding out where action is needed, where hidden potentials lie and what conflicts exist. Internal communication can also define aims, clear up misunderstandings and strengthen corporate identity.

Communication at Contargo is mainly in person, by email or by other digital means. Daily discussions take place in the teams on site — as in Emmerich, for instance, where a ten-minute meeting is held every morning to discuss current matters: events that could influence that day's work, what barges will be arriving when, or the time when a crane will be switched off for servicing. Particularly exemplary in internal communication is the IT department, which has been exchanging and processing ideas at various intervals in SCRUM for several years now.

For other teams, weekly or monthly discussion is the ideal coordination variant. For instance, heads of department in both locations of Contargo Rhein-Neckar communicate by Skype. The four Managing Directors of the Contargo Group meet in person once a month, with a virtual meeting taking place every two weeks in between, in order to optimise travel times and work times. Twice a year all the managers of the Contargo Group attend the Contargo Management Meeting — here the emphasis is on personal exchange centring on the general development of the Group.



DEEDS FOLLOW WORDS

Especially when teams are working cross-locationally, it is important to include all participants in the processes. This motivates everyone to take part in improving their daily work experience and the results become visible.

However, meeting regularly is not enough — the results of the meetings have to lead to action. For this reason minutes are kept of the weekly and monthly meetings and these are made available to colleagues. This avoids a situation where work carries on in parallel or even in contradiction, since everyone can see who is working on a topic already.

A good overview of the results other people have arrived at so far can be obtained from Contargo Wiki, Facebook, the Contargo website and CWA Flow. For instance, if an employee is looking for a suitable contact, or wants to find out whether anyone in the enterprise has already done some work on photovoltaics, this is where they can go. Improving this process further is the aim of the Strategy Group BÄNG! In one project the group is addressing internal knowledge, and the distribution and communication of knowledge. The homepage, Contargo Wiki, E-learning and

social media are used for this. New communication tools are being developed (e.g. chats) and solutions found to the question of what a secure external communication system could look like. A new post has been created for a colleague who will act as a link between external and internal information and focus on the aspect of Content Management. The work of the Strategy Group is described in Contargo Projects. The active members are listed: Managing Directors, IT, Marketing and Site Management. Contargo Projects is used to coordinate projects better and present them more transparently.



In a digitalised world, knowledge and information is enormously important. Modern means of communication offer many possibilities to disseminate information and knowledge in ways that are fast and independent of geographical

location. Iniformation is the present and the future. It is becoming faster, more complex and more detailed all the time, thus it is just as important to make it available in a filterable form, so that everyone can find information using their own parameters.

MORE PEOPLE HAVE MORE KNOWLEDGE

Making use of employees' existing knowledge is also the basic principle of the supraregional groups of managers and other experts, founded at the end of 2017, that address various topics. Thus there are cross-locational discussions on aspects like climate change, digitalisation and people, knowledge management, and products and geography. In these groups communication and the approach to the topics is exemplary.

Discussion is not only important for specialised work, however — social relations are a basic human need. Thus a certain amount of networking among colleagues, even beyond the professional level, is not only tolerated but welcome. However this also give rise to the "office grapevine" or kitchen gossip, often based only on assumptions and speculation. Here everyone is urged to inquire and get informed, rather than just relying on rumours.



Contargo Companies and Locations

This Sustainability Report includes information and data from the following subsidiaries and holdings of Contargo GmbH & Co. KG (registered in Duisburg):

	COMPANY	LOCATION	CONTACT
1.	Contargo AG	Basel	Sven Zoelle, Daniel Kaufmann
2.	Contargo GmbH & Co.KG	Mannheim	Sandra Hollweg, Kristin Kahl, Henrik Hanke, André Szopa
3.	Contargo Industriepark Frankfurt Höchst GmbH	Frankfurt-Höchst	Kerstin Junker, Kawus Khederzadeh
4.	Contargo Network Logistics GmbH (bis 2016)*	Döhlau, Glauchau, Hof, Hamburg	Karlheinz Mulzer, Ilona Niessler
5.	Contargo Network Services B.V	Kehl, Karlsruhe, Zwijndrecht	Cok Vinke, Peter Zerr
6.	Contargo Neuss GmbH	Neuss	Claudia Dreifke, Jürgen Albersmann
7.	Contargo North France SAS	Bruay-sur-l'Escaut	Gilbert Bredel
8.	Contargo Rail Services GmbH	Mannheim	inkludiert bei Contargo GmbH & Co.KG
9.	Contargo Rhein-Main GmbH	Frankfurt-Ost, Ginsheim-Gustavsburg, Koblenz	Christian Eichmeier, Arndt Puderbach, Eugen Werwai
10.	Contargo Rhein-Neckar GmbH	Ludwigshafen, Mannheim	Andreas Roer, Jan Gass
11.	Contargo Road Logistics B.V	Hamburg, Zwijndrecht	Leo Maaskant
12.	Contargo SARL	Straßburg, Ottmarsheim	Jean-Marc Sabetta
13.	Contargo Waterway Logistics B.V.	Zwijndrecht	Cok Vinke, Heleen Scharroo, Ella Steeger
14.	Contargo Weil-am-Rhein GmbH	Weil am Rhein	Torsten Peter, Holger Bochow
15.	Contargo Wörth-Karlsruhe GmbH	Karlsruhe, Wörth, Speyer	Jürgen Bähr
16.	Contargon Rhein-Waal-Lippe GmbH	Emmelsum, Emmerich	Ralf Gerlach, Simone Mies-Kempkess, Michael Mies, Lisa Neumann
17.	Duisburg Intermondal Terminal GmbH	Duisburg	Andreas Frantzen, Martin Körner, Klaus Müller

Unless explicitly stated otherwise, all key indicators contained in this Report relate to these companies. *In summer 2017 the terminal activities of Contargo Network Logistics (CNL) were transferred to the company Contargo Combitrac GmbH; for this reason only the office activities of CNL are included from that point on. Contargo Combitrac GmbH is not included in this Report.

We should like to thank all those who have contributed to preparing this year's Sustainability Report.



GRI Content Index - Contargo Sustainability³

GRI-G4 OLD	GRI Standard NEW	Disclosure title The individual aspects ("a", "b", "c", etc.) are not listed here	Comment	From page
G4-3	102-1	Name of the organization	Contargo GmbH & Co. KG	9
G4-13	102-10	Significant changes to the organization and its supply chain		Foreword
G4-14	102-11	Precautionary Principle or approach		90
G4-15	102-12	External initiatives		27, 38
G4-16	102-13	Membership of associations		27
G4-1	102-14	Statement from senior decision-maker		13
G4-2	102-15	Key impacts, risks, and opportunities		13
G4-56	102-16	Values, principles, standards, and norms of behavior	These are anchored in our Mission Statement.	13
G4-34	102-18	Governance structure		11
G4-35	102-19	Delegating authority		13
G4-36	102-20	Executive-level responsibility for economic, environmental, and social topics		87
G4-42	102-26	Role of highest governance body in setting purpose, values, and strategy		87
G4-45	102-29	Identifying and managing economic, environmental, and social impacts		87
G4-47	102-31	Review of economic, environmental, and social topics		Foreword
G4-48	102-32	Highest governance body's role in sustainability reporting		13
G4-52	102-36	Process for determining remuneration		87
G4-4, G4-PR6,	102-2	Activities, brands, products, and services		9
G4-5	102-3	Location of headquarters	August-Hirsch-Straße 3, 47119 Duisburg, Deutschland	Last page
G4-6	102-4	Location of operations	6	Foreword
G4-24	102-40	List of stakeholder groups		29
G4-11	102-41	Collective bargaining agreements	There are no collective agreements at Contargo	This page
G4-25	102-42	Identifying and selecting stakeholders		29
G4-26	102-43	Approach to stakeholder engagement		29
G4-27	102-44	Key topics and concerns raised		3, 9
G4-17	102-45	Entities included in the consolidated financial statements		107
G4-18	102-46	Defining report content and topic Boundaries		3
G4-19	102-47	List of material topics		Foreword
G4-22	102-48	Restatements of information		3
G4-23	102-49	Changes in reporting	The CO ₂ calculations have been adapted.	3
G4-7	102-5	Ownership and legal form	Contargo GmbH & Co. KG is a 100% subsidiary of Rhenus SE & Co. KG.	Last page
G4-28	102-50	Reporting period	2016 and 2017	3



GRI-G4 OLD	GRI Standard NEW	Disclosure title The individual aspects ("a", "b", "c", etc.) are not listed here	Comment	From page
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G4-30	102-52	Reporting cycle	Every two years	3
G4-31	102-53	Contact point for questions regarding the report	See Impressum	Last page
G4-32-a	102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option.	This page
G4-32-b	102-55	GRI content index		108
G4-32-c, G4-33	102-56	External assurance		Foreword
G4-8	102-6	Markets served	Belgium, Germany, France, Netherlands, Switzerland, Czech Republic	Foreword
G4-9	102-7	Scale of the organization		Foreword
G4-10	102-8	Information on employees and other workers		97
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G4-20, G4-21	103-1	Explanation of the material topic and its Boundary		3, 13
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G4-DMA-b, G4-LA16	103-2	The management approach and its components		13
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G4-EC2	201-2	Financial implications and other risks and opportunities due to climate change		41
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G4-EC6	202-2	Proportion of senior management hired from the local community		97
G4-EC7	203-1	Infrastructure investments and services supported		29
G4-EC8	203-2	Significant indirect economic impacts		33
G4-S04	205-2	Communication and training about anti-corruption policies and procedures		87
G4-S05	205-3	Confirmed incidents of corruption and actions taken	No incidences of corruption found in the reporting period.	This page
G4-EN3	302-1	Energy consumption within the organization		60
G4-EN6	302-4	Reduction of energy consumption		58
G4-EN7	302-5	Reductions in energy requirements of products and services		60
G4-EN8	303-1	Water withdrawal by source		60
G4-EN11	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		52
G4-EN12	304-2	Significant impacts of activities, products, and services on biodiversity		52
G4-EN13	304-3	Habitats protected or restored		58



GRI-G4 OLD	GRI Standard NEW	Disclosure title The individual aspects ("a", "b", "c", etc.) are not listed here	Comment	From page
G4-EN14	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations		58
G4-EN15	305-1	Direct (Scope 1) GHG emissions		52
G4-EN16	305-2	Energy indirect (Scope 2) GHG emissions		52
G4-EN18	305-4	GHG emissions intensity		42
G4-EN19	305-5	Reduction of GHG emissions		42
G4-EN23	306-2	Waste by type and disposal method		60
G4-EN25	306-4	Transport of hazardous waste		58
G4-EN26	306-5	Water bodies affected by water discharges and/or runoff		58
G4-EN29	307-1	Non-compliance with environmental laws and regulations	There were no incidents in the reporting period due to noncompliance with environmental regulations.	This page
G4-LA1	401-1	New employee hires and employee turnover		97
G4-LA2	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Full time and part time employees have the same entitlement to many offers. Permanent employees have individual agreements.	102
G4-LA3	401-3	Parental leave		87
G4-LA6	403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities		58
G4-LA7	403-3	Workers with high incidence or high risk of diseases related to their occupation		11
G4-LA9	404-1	Average hours of training per year per employee		87
G4-LA10	404-2	Programs for upgrading employee skills and transition assistance programs		87
G4-LA11	404-3	Percentage of employees receiving regular performance and career development reviews		87
G4-LA12	405-1	Diversity of governance bodies and employees		87
G4-LA13	405-2	Ratio of basic salary and remuneration of women to men	The basic salary is the same for men and women.	87
G4-HR3	406-1	Incidents of discrimination and corrective actions taken	No cases of discrimination were reported during the period covered by the Report.	This page
G4-S01	413-1	Operations with local community engagement, impact assessments, and development programs		38
G4-LA15	414-2	Negative social impacts in the supply chain and actions taken		74, 84
G4-PR7	417-3	Incidents of non-compliance concerning marketing communications	No incidences of noncompliance with marketing guidelines were found during the reporting period.	This page
G4-PR8	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	In the reporting period there were no incidences of endangerment of customers' privacy.	This page
G4-PR9	419-1	Non-compliance with laws and regulations in the social and economic area	In the reporting period there were no instances of noncompliance with social or economic laws.	This page



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