Risk Thought » Fast Forward





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Editorial

"The world is in big trouble."

Secretary-General António Guterres made this statement at the General Assembly of the United Nations on 20 September 2022 in New York.

We are undergoing times of permanent change, which many refer to as systemic transformation or multiple How do the 4 Risk Changers affect companies? crises strung together. This change takes place in different Companies are exposed to various kinds of risks. At the same time, systemic transformation exacerbates existing fields and segments. They, in turn, are interlinked at various levels. HORIZON's risk-oriented approach aims to risks and causes new risks to emerge. These primary risks define and outline the key areas of change affecting your have a direct bearing on companies. company. In doing so, we take a close look at the systemic influences of ecological, geopolitical, technological and Primary risks -Transformation leads to direct exposure social transformation on your company's risk landscape.

These transformation processes are very dynamic, they are When we look at climate change, we refer to climate often interdependent and thus characterised as complex risks. They are apparent in form of a changed or an processes. They also result in systemic risks. Managing increased exposure to natural disasters, such as floods, them requires much more than traditional methods of risk storms, and hail as well as heat, drought or a rising sea management. level. As far as companies are concerned, these risks can cause anything from material damages to disruptions of In terms of risk management, we refer to these systemic transport routes, in energy, or raw material supplies.

risks as "risk changers" that directly affect companies and categorise them as follows:

- "Environment in danger" for ecological,
- "Beyond globalisation" for geopolitical,
- "Digital transition" for technological and
- "Social disruption" for social transformation.

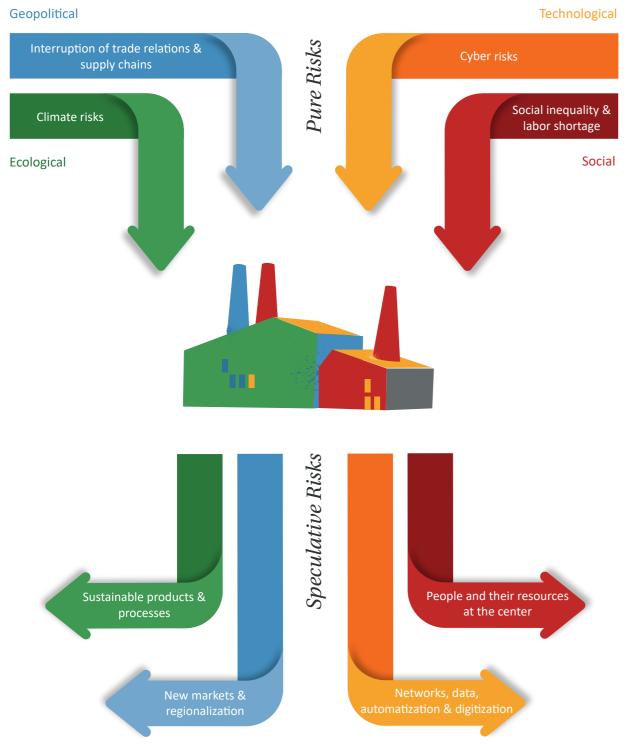


HORIZON - "Risk Thought » Fast Forward" is our platform for so-called risk thought leadership. It is based on our vision to detect the impact of these risk changers at an early stage and introduce risk management solutions that boost our clients' resilience.

Ecological risks

Geopolitical risks

Geopolitical change, characterised by an economic bloc having been established between the USA and China, has put free world trade to the test. It also shows, by looking at Russia's invasion of Ukraine, just how quickly a system



How do the 4 Risk Changers affect companies?

conflict, which we thought had been settled between the democratic and autocratic world, can be reignited. All that, exacerbated by global events, like the Covid-19 pandemic, puts pressure on the availability of energy resources, disrupts supply chains and leads to a global wave of price hikes that challenge governments, businesses, and the civilian population alike.

Technological risks

Technological change has resulted in an over-dependence on data, software and IT infrastructure. All are targets of a rapid increase of cyber threats all over the world and are thus one of the biggest threats of the 21st century.

Social risks

The growing divide between rich and poor, the lack of equal opportunities regarding age, ethnic background and nationality, gender and gender identity, physical and mental abilities, religion and ideology, sexual orientation and identity as well as social backgrounds increases social tensions. The Club of Rome deems equality and justice as part of the ideal solution for a liveable future.

Companies cannot shirk their responsibility in this regard. For instance, social issues are becoming more and more important as we are facing an inevitable demographic change that has already resulted in systemic shortages on the job market.

Correlation

The interdependency of these systemic risks is best demonstrated by the war in Ukraine: From a geopolitical point of view, it has led to an energy crisis. In terms of technology, it has led to an increasing number of cyber threats. On top of that, well-targeted campaigns are aimed at splitting society and disturbing social peace in our Western world. From an ecological perspective, however, there is hope that our efforts to reduce carbon dioxide emissions can finally be carried through.

Secondary risks -

Adaption creates new chances and challenges

Besides these primary transformation risks, which affect companies as "pure risks" from the outside, systemic change leads to secondary transformation risks that are "speculative". They derive from companies' adapted business models that were developed in response to systemic change and comprise both risks and opportunities.

Ecological adaption

In the fight against climate change, many companies have decarbonised their processes or have developed sustainable products. Saving resources and taking advantage of new opportunities are key focal points. However, new products and processes lead to new risks that must be identified at an early stage.

Geopolitical adaption

As a result of the geopolitical change, companies had to explore new markets and new sources for raw materials and find new ways of attracting both customers and suppliers, while keeping a watchful eye on possible dangers. Although the currently rising energy prices still paint a different picture, supply chains can be shortened through nearshoring. This could very well result in a wave of reindustrialisation in Europe.

Technological adaption

Technological change enables us to pursue totally new paths. While the automation and digitisation of value chains are gaining importance, the full potential of mergers, transparency, big data, and metadata remains to be exploited. Manufacturers of previously traditional products and services are becoming system providers, goods are being replaced by data, and machines by platforms.

» Our 2nd release of HORIZON concentrates on the geopolitical transformation and therefore looks at all its challenges from various angles. «

Social adaption

In the past, humans used to be regarded as resources. Now, humans with all their resources take centre stage. The concept of Industry 5.0. does exactly that. It places the human being at the centre to promote and foster diversity, different talents, and activities. Many companies have already initiated a transformation process because employees nowadays attach more importance to meaningful work. They believe that they can make a difference when it comes to resilience and sustainability.

Beyond globalisation -Geopolitical transformation in the spotlight

Our 2^{nd} release of HORIZON concentrates on the geopolitical transformation and therefore looks at all its challenges from various angles.

It is indeed a difficult and challenging situation that raises many most pressing questions. We need to discuss them, their impact on the transformation of the risk landscape as well as possible solution scenarios.

Georg Winter CEO GrECo Group



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"Investing in Backup Systems to boost resilience."

Mariana Kuehnel, Deputy General Secretary of the Austrian Chamber of Commerce spoke with Georg Winter, CEO GrECo Group about staying calm in these unpredictable times and how Europe can gain comparative advantages in the age of geopolitical transformation.

Winter: Recently you have been present in the Austrian media, speaking about the situation of Austrian companies in the Ukraine in view of the war. Does the war in the Ukraine show us the dramatic face of a new political world order?

Kuehnel: Austria's economy has been remarkably resilient so far in the face of the unstable geopolitical situation. But of course, there are continuing downward risks to the Austrian economic development, most pressing in the Energy sector. Energy prices in Europe are currently higher than in other parts of the world, massively hampering economic growth.

Given the current geopolitical situation and the increasing instability of existing supply chains, the EU

needs to find viable alternatives and more than ever engage with up-and-coming regions such as Latin America & Southeast Asia. EU trade agreements not only ensure better market access for goods, services, and investments in third countries, but are also an important tool to mitigate negative socio-economic developments. They help strengthen the economic resilience of businesses by providing opportunities for much needed supply chain diversification.

Winter: The war also made us aware of Europe's dramatic energy dependency, particularly on Russian natural gas. How can the economy become independent and mitigate this risk in the medium to long term?

Kuehnel: A warm winter and our strong efforts to store gas helped us to avoid energy shortages. But the current crisis is not over yet. To reduce our dependency from Russia, we need to further diversify our energy supply. On the one hand by accelerating the deployment of renewable energy in Europe, on the other hand by building up new energy import routes. In addition to improving energy efficiency and the availability of renewable electricity, we need to invest in back-up systems, climate-neutral gas, and liquid energy sources to compensate for the resulting volatility. Especially with the goal of climate neutrality by 2050 in mind, we need to employ all alternatives that can contribute to the reduction of greenhouse gases and embrace the principle of technological openness.

Winter: With the new Inflation Reduction Act (IRA), the United States are currently attracting numerous European companies to invest overseas., in particular in the field of renewable energy and infrastructure. What chances do you see and how should the European Union react to avoid the danger of de-industrialization in Europe?

Kuehnel: First and foremost, it is important to stay calm. A subsidy race between the EU and the United States is the last thing we need right now. As far as the level of funding is concerned, we see that existing EU funding is in no way inferior to the IRA. However, the IRA comes with much fewer regulations and bureaucracy than we have here in Europe. Therefore, we can actually learn from the US in this regard, on how a policy design for the EU could look like. In addition, the IRA mainly focusses on mass deployment of green technologies rather than innovation. By focusing on early-stage development and increasing EU resilience to trade disruptions the EU might gain a comparative advantage in the medium to long term.

Winter: The United States are also gaining in importance for European companies in view of the cooling relations with China, which is confidently promoting its role on the global stage. The Chinese Belt and Road Initiative for instance demonstrates the future balance of power. Strategic competition between the U.S. and China is driving global fragmentation as both focus on boosting self-reliance, reducing vulnerabilities, and decoupling their technology sectors.

While China was one of the most promising trading partners just a few years ago, companies are now faced with political unpredictability resulting in unreliable supply chains, to name just one effect. Taiwan is another key flashpoint. How do you see the future development of foreign trade with China?

Kuehnel: In these unpredictable times we are currently living in, we can observe a trend that companies are looking into diversifying their markets and supply chains. However, China will remain an important player on the world economic stage given the sheer size of its market. Although 2022 was a tough year for Austrian businesses in China, our trade relations actually increased. From January until November Austrian exports rose by 9.6% and imports registered a plus of 33%.

Winter: Do you see trends that the lessons learned from the supply chain problems over the last years will lead to a relocation of production back to Europe, for example Eastern Europe?

Kuehnel: We have indeed learned that, in addition to efficiency, we need to pay increased attention to resilience and the reduction of strategic dependencies in our international trade relations. Various legislative initiatives at the EU-level, such as the European Chips Act or the Critical Raw Materials Act, are designed to do exactly that. In addition, it is important to also expand our trade relations with likeminded partners and promote global cooperation.

Winter: The European Union has been negotiating an association agreement with the Mercosur countries

(Argentina, Brazil, Paraguay and Uruguay) to create stable and predictable rules for trade in goods, services and investments. In 2019, an agreement in principle was reached. What is the strategic relevance of those countries for European companies and which other territories should be on the radar for the future?

Kuehnel: Europe is deeply connected with Latin America by common languages, culture, and commerce. We are like-minded partners with shared values and interests. Faced with an unprecedented multitude of crises, it is crucial to deepen our economic ties with this up-and-coming region. In addition, global climate concerns require urgent and coordinated action to ensure a transition toward clean energy. The access to critical raw materials, is one of the preconditions for the digital and green transition in Europe. We should therefore secure our resource supply channels through EU trade agreements.

With regards to other areas of strategic interest, the EU is currently negotiating with Indonesia and Australia. We hope that also negotiations with the Philippines, Thailand and Malaysia will soon continue. These markets offer great potential for Austrian businesses. Indonesia and the Philippines combined have over 380 million inhabitants and in the case of Australia offer important resources like Lithium, cobalt, and rare earth metals. When it comes to Africa, there is also a geopolitical need to strengthen the EU's presence on the continent. In the past we have seen increasing engagement of China and Russia on the continent, mostly to the detriment of the traditionally close ties to Europe. Therefore, deepening and improving EU-Africa relations should be a priority.

Winter: Companies in all industries are struggling to find new employees. In view of the demographic developments, there are clear signs of a dramatic shortage of workforce in Europe. On the other hand, fewer and fewer people are willing to work full-time. What are the most urgent actions for both, companies and politics and what role will migration play in the future?

Kuehnel: The demographic development and the resulting lack of skilled workers are really challenging for Europe. In Austria, the number of 20- to 65-year-olds is said to decline by 244.000 by 2040. Much more needs to be done to allow companies to fill their vacancies and to close this developing gap. Apart from tapping the domestic potential, by increasing the number of women in full-time employment and by mobilising older people, a clear focus must be put on developing a qualified migration policy.

Mariana Kuehnel Deputy General Secretary Austrian Chamber of Commerce



Georg Winter CEO GrECo Group



The New Silk Roads

This article will provoke thoughts and create awareness about the new political world order, the changing influence of Western and Eastern powers as well as the emergence and formation of a new centre of gravity in the global economy. It takes a close look at an emerging geopolitical dominance and focuses on the new cross-roads between the West and the East – the New Silk Poads the New Silk Roads.





been extraordinary in terms of rising levels of macroeconomic uncertainty and business cycles. The troubling combination of a global pandemic exacerbated by energy shortages, soaring inflation and geopolitical tensions poses serious challenges to businesses in managing emerging risks and opportunities. The systems, institutions and orders that have supported global stability and security for decades are now unravelling and taking on new forms.

Geography will shape future politics

Over the past hundred years, geo-politicians have proposed three theories depicting the control of the world from a geographical perspective:

- In his "Sea Power" theory, Alfred Thayer Mahan from the United States argued that those who controlled the sea would control the world.
- John Mackinder from Britain argued that those who controlled Eurasia would control the world.
- Land" theory that those who controlled the rim land would control it.

Not so long ago, former White House Strategic Adviser Steve Bannon proposed that China's "Belt and Road" initiative embodied all three theories, intending to control the world by promoting this initiative.

Geopolitical risks are reshaping the world

Geopolitical risks refer to a situation involving power struggles such as wars, aggravated tension between states or terrorist attacks that cannot be resolved peacefully. Up to now, geopolitical risks were always related to growing geopolitical tensions between the world's major powers.

It would be correct to define the current geopolitical situation in the world as a period of uncertainty. The 20th century saw two world wars. After World War II, the United Nations was formed to prevent similar catastrophes and disasters in the current events unfold, this account future. Soon thereafter, it became seems flawed. There are other ways

The past two and a half years have obvious that the two existing super- of looking at the world and its past powers USA and USSR were engaged in a fierce competition known as the Cold War. Alarmingly, and as a result of the arms race, a large amount of Today, much attention is devoted to the weapons of mass destruction (nuclear, chemical, biological) were produced. The Cold War ended after the collapse of the Soviet Union and the Russian Federation as its heir took control of the former Soviet Union's weapons of mass destruction.

> Today, the economic impact of Russia's war in Ukraine has many problems associated with it:

- The energy supply in Europe
- The food supply in the Middle East and North Africa
- Inflation
- Global supplies of energy and other raw materials

• In his "Heartland" theory, Halford Russia's war in Ukraine also height- It is a region that is associated with ened another possible risk: that of accidental shelling on the territory of a NATO member state. The severity such as Afghanistan, Iran, Iraq, and • while Nicholas John Spykman from of the consequences of such an Syria - or ill-versed in best practices the United States argued in his "Rim incident cannot be predicted. A of democracy, such as Russia and nuclear threat - or more precisely the spread of radiation - exists even without weapons being used because the biggest nuclear power plant in Ukraine has been under heavy shelling. Intentional damage to the and friends control sprawling business nuclear power plant would create a real disaster, not only for Ukraine but for Europe as a whole, as well as for the rest of the world.

Geopolitical transformation will create a new centre of gravity in the world

"Ancient Greece begat Rome, Rome begat Christian Europe, Christian These countries seem foreign to us Europe begat the Renaissance, the Renaissance the Enlightenment, the Enlightenment political democracy and the industrial revolution. Industry yielded the United States, embodying the rights to life, liberty and the pursuit of happiness." This is the story we have been told - the mantra of the political, cultural, and moral triumph of the West. However, watching

ways that do not take the perspective of the winners of recent history.

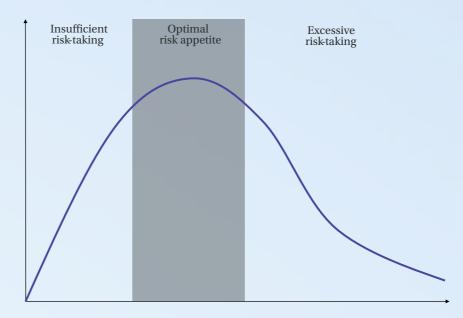
assessing the likely impact of rapid economic growth in China, where the demand for luxury goods is forecast to quadruple in the next decade. Similarly, social change is happening in India, where more people have access to a mobile phone than a flushing toilet.

On the other hand, the halfway point facets that will aggravate numerous between the East and the West, running from the Eastern shores of the Mediterranean and the Black Sea to the Himalayas, might seem to be an irrelevant position from which to assess the world. This region is home Closed transportation or trade routes to Kazakhstan, Uzbekistan, Kirgizstan, Turkmenistan, Tajikistan, and the countries of the Caucasus.

> regimes that are unstable, violent and a threat to international security, Azerbaijan. Overall, it appears to be a region that is home to a series of failed or failing states, led by dictators who win impossibly large majorities in national elections and whose families interests, own vast assets, and wield political power. These are places with poor human rights records, where freedom of expression in matters concerning faith, conscience and sexuality is limited, and where control of the media dictates what does and what does not appear in the press.

and are treated by the Western world as obscure and political backwaters. Yet, in fact, they are the bridge between the East and the West. They crossed with democracy in turn represent the very crossroads of civilisation - as they have always been since the beginning of history: The New Silk Roads.

> Ways to manage geopolitical risks Our world is already undergoing a global transition to the next economic era. This transition can be considered



through the prism of the PEST analysis. However, we have replaced the traditional economic factors with factors concerning energy:

- Political The world order is moving towards multipolarity, a reassembly into regionally and ideologically aligned groups. Such multipolar changes, coupled with regionalisation, create new risks for companies operating in different countries.
- Energy Resource-based energy systems face security vulnerabilities as they channel investments into low-carbon energy sources. At the same time, they must meet a growing demand for energy. The transition towards a carbon-neutral economy will thus be accompanied by geopolitical tension between global producers and consumers of energy resources. This creates several risks for companies active in the energy sector.
- Social Demographic forces will transform a young world into an ageing urban world, an era of infectious diseases may give way to an era of non-communicable diseases, and inequality within states may increasingly challenge the social structure and the businesses that support it.
- Technology Technology platforms face a rapid growth of transversal technologies, particularly artificial intelligence, or bioengineering, which, if combined, could create another great surge of progress in the next economic era and create new risks and opportunities for companies and global institutions.

These factors pose new geopolitical and macroeconomic challenges for businesses. They, in turn, must respond through effective risk management and insurance systems. An effective risk management strategy serves as a compelling tool for increasing enterprise value through its risk function. Any decision made by the company's management increases, preserves, or reduces the enterprise value of that company.

Due to risk being an integral part of value creation, leading strategically oriented businesses do not seek to eliminate risk.

Their approach creates a new perspective of risk management, as opposed to past traditional views of risk that considered it as something to be avoided. Rather, these businesses seek to manage risk across all parts of their organisation so that at any given time, they are taking just the right types of risk necessary to effectively achieve the company's strategic goals. This optimal risk appetite or optimal risk zone is shown in the picture below.

The most versatile and effective risk management tools that effectively describe and manage geopolitical risks include the following:

- Event tree analysis a graphical technique that represents the mutually exclusive sequences of events that can take place after an initial event, depending on whether various systems designed to modify the consequences are functioning. An event tree can be quantified to provide probabilities of different possible outcomes.
- Scenario analysis, which involves identifying one or more risk scenarios, detailing the key assumptions (conditions or drivers) that determine the magnitude of the impact, and assessing the impact on the key target.

The role of a company's risk function is crucial in correctly assessing the geopolitical risks and defining the optimal risk appetite that will, in turn, enable a company's enterprise value to grow. After mapping geopolitical risks against the company's optimal risk appetite, one can work with the risks above it and address the insurance market for transferring these risks. The role of the insurance broker is to collaborate closely with the company's risk function in tailoring an effective insurance program that meets the exact insurance demand of the company and maximises the insurance value.

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Back Swan events

"Prediction is very difficult, especially if it's about the future!"

(Niels Bohr, Nobel laureate in Physics)

Emerging risks and new threats that are hard to grasp and estimate are a much-discussed topic. Add to that today's increasing number of Black Swan events. These are unprecedented and unexpected events which nobody could have imagined, making them almost impossible to predict.

Experience shows that Black Swan events can, however, turn into emerging risks and can eventually be regarded as conventional risks and be treated as such in terms of standard risk management processes. Cyber risks, a blackout or pandemic comes creative techniques (e.g. brainstormto mind as typical examples.

Lack of patent recipes for complex issues

Strategic warning systems are thus gaining importance for both strategic management as well as for corporate risk management. In principle, this topic is not new in business theory and practice, but there is still a lack of "patent recipes" due to the complexity of this issue. This is mainly because, due to the lack of empirical data for such events, subjective assessments and evaluations can naturally turn out differently. Sci- i. e. managing the risks of Black Swan entific debates on this topic can be events - because traditional risk mantraced back to the mid-1970s.

Back then, Igor Ansoff's theory of monitoring weak signals was deemed a milestone in business management. Ansoff established that companies are surprised by discontinuity because traditional planning processes - if such situations have been considered in a timely manner – are not suitable. According to Ansoff, an arising discontinuity can be identified by increasing management's awareness of weak signals, such as:

- An accumulation of similar events within the company
- ments
- Trends in jurisdiction and similar indications in domestic and foreign legislation

Both the system's surrounding environment (external) and the company's system (internal system) must be monitored. Ansoff also established that this process is a typical team task that involves ing or scenario analysis) and requires an organised and formal approach. He also highlighted the fact that these changes pose risks as well as opportunities. Or, in the words of Max Frisch, Swiss playwright and novelist: "A crisis is a productive state. You simply have to get rid of its aftertaste of catastrophe."

Managing the risks of **Black Swan events** In light of recent turbulences, universities have once again taken a closer look at ways to manage the unimaginable agement quickly reaches its limits in the face of the unimaginable.

Harvard strategy professor Robert S. Kaplan discussed how one could even grasp the unimaginable. In doing so, Robert Kaplan identified three human traits as obstacles:

 Lack of experience in dealing with and addressing seemingly absurd situations. He recommends inviting scriptwriters to brainstorming sessions.

 The dissemination of to date unknown opinions, ideas, and state-

- Discarding one's opinions and stereotypes which have trapped creative thought, and
- Standing up to peer pressure and those claiming to be "reasonable" as one is quickly branded as being paranoid if one wants to safeguard oneself against the highly unlikely.

Kaplan therefore suggests two organisational alternatives:

- Designate a Chief Worry Officer (CWO) to keep his ears to the ground to detect any anomalies and highly unlikely Black Swan events at an early stage.
- Set up a non-hierarchical detection and reporting system that is easily accessible by all employees. This must ensure that employees can immediately report their alarming concerns without fearing sanctions (call it a whistle-blower system for Black Swans if you like)

To sum up: The more we are surprised and affected by new and unexpected threats, the more innovative, creative, and unusual the methods we develop must be to identify and assess these risks. Or, as Albert Einstein so aptly put it: "I'm more interested in the future than in the past, because the future is where I intend to live."

Christian Oppl Dean of GrECo Academy

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"Putting all your eggs in one basket is just not good enough."

Georg Knill, President of the Federation of Austrian Industries (IV) discussed the challenges of the energy transition for the industrial sector and the impact of the war in Ukraine with Jürgen Spari, GrECo's Regional Manager in Styria, Austria.

Spari: Industries in Austria are challenged by the change towards renewable energy. Do you regard the energy crisis, fuelled by the war in Ukraine, as a threat to our domestic industry and its climate targets or as an opportunity to accelerate technological developments or even fast-track change?

Knill: The war in the Ukraine has made our dependency on Russian Gas painfully obvious. If the gas supply from Russia were to be stopped from one day to the next, we would experience a catastrophe of unknown dimension because our industry and our entire economy need natural gas - now, and for many years to come. The process of transformation to reach the climate and energy targets 2030 and 2040 is already underway but will take guite some time. The current uncertainty regarding the supply of energy increased peoples' awareness and in turn accelerated some processes. We must also understand that the resources that are now being used to tackle the crisis can later possibly not be used as an investment for the transformation.

Spari: Let's look at supply chains. What does the current crisis and the impact of the war in the Ukraine teach the industrial sector? Which measures should be taken to counteract disruptions in supply and value chains? Is nearshoring an option?

Knill: Austria's participation in world trade is decisive for our wealth, prosperity, and employment because our export rate makes up 59% of our GDP. International trade has not only fully recovered after 2020, the first year of the pandemic, it was also higher in 2021 than in 2019 – just like Austria's foreign trade. Globalisation is still part of the game.

However, we require more diversification among trading partners – putting all your eggs in one basket is just not good enough. We learned that from the Covid-19 pandemic, and we see it again with the effects of the war in the Ukraine.

This, however, should not put an end to globalisation. On the contrary, it should be an appeal to our trading partners to choose wisely and with strategic foresight. This would require additional EU trade agreements like Mercosur or agreements with Australia or the USA. While nearshoring may be feasible for some sectors, it depends on many different factors: the industry sector itself, the individual company, the availability of raw materials or the workforce.

» Risks and challenges are growing, yet so do opportunities. «

Spari: Given today's multiple challenges and – apparently – increasingly frequent crises, the resilience of industries is permanently put under the microscope. Companies seem to be subject to a constant process of transformation. Which possible crises or risks do you think may industries be facing in future, and which strategies would best prepare companies for this rising uncertainty?

Knill: As I see it, there are currently three central challenges for people and businesses in Europe and Austria:

First, there is Russia's brutally aggressive war against Ukraine and the ensuing humanitarian catastrophe. Besides the social consequences, we now increasingly see and feel the economic consequences in Europe. The volatile supply of energy is one direct consequence of the war because Putin uses energy exports to put pressure on the Western world, and this spreads uncertainty and instability in Europe.

We therefore need a pragmatic approach and we need to focus on a fossil transitional strategy. We already see the first signs – following our continued criticism – in the connection of the Haidach gas storage, in restarting operations in the decommissioned coal-fired power station Mellach, and in securing OMV's supply capacities with 40 TWh.

Secondly, the current skills shortage is gradually turning into a labour shortage. The number of open jobs in the manufacturing sector has almost quadrupled over the last ten years. This requires a comprehensive strategy on part of our federal government, addressing the need for skilled employees and migration, while realising the full potential available on the job market.

Third, Austria and Europe are challenged to master the green and the digital transformation in the years to come – a huge opportunity for us all. The current crises will accelerate this change and spur us on. For example, the Covid-19 pandemic has undoubtedly added thrust to digitisation. For many sectors it was like a crash course

in digital transformation. Notwithstanding that, we have a long way ahead of us if we want Austria to become a competitive digital business location.

A new study conducted by the IV and Accenture mirrors this conclusion: 33.3% of large companies use analyses and forecasts based on data or rely on business models. At the same time, less than half of the small and medium sized companies do the same. Therefore, there is not only a need for more digital action among the small and medium sized businesses, but among the big players as well. Europe is losing ground against the USA and Asia, especially when it comes to future-oriented key digital technologies.

Spari: How significant is holistic risk management for industrial companies?

Knill: The industrial sector lives with change and uses the crisis as an opportunity to grow, move forward and put new ideas into practice. We have proven these capabilities time and again in the past and continue to do so every single day.

Risks and challenges are growing, yet so do opportunities. To make the most out of them, we will need it all: society, politics as well as our economy with all its variety and diversity, from large industrial companies down to one-man businesses.

Spari: Thank you for your time.

Georg Knill President of the Federation of Austrian Industries



Jürgen Spari Regional Manager Styria GrECo Austria



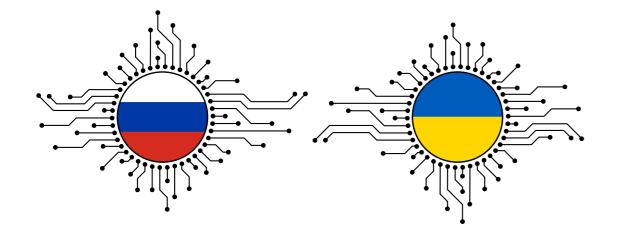
Cyber War – State-sponsored cyber-attacks against companies: a tool of modern warfare

Helen Evert, GrECo Practice Leader Liability & Financial Lines in Estonia, about the pitfalls of cyber warfare and how the small nation of Estonia successfully steels itself against attacks.

In April 2007, the government of Estonia relocated the bronze soldier statue of Tallinn, a Soviet-era monument. After two long nights of riots and lootings the first state-sponsored cyber-attack against websites of Estonian organizations took place. Targets included the parliament, banks, ministries, newspapers, and broadcasting corporations.

Why are companies being targeted?

State-sponsored cyber-attacks usually have three goals – exploiting infrastructure weaknesses, gathering information or skimming off money to recover losses from sanctions. Such attacks are politically motivated, the targets can seldomly be identified at first sight, and they may change over time.



On 24 February 2022 Russa invaded Ukraine. Yet, Russian cyber-attacks against Ukrainian organisations and companies started much earlier. They increased ever since the illegal annexation of Crimea in 2014.

It therefore comes as no surprise that Estonian public institutions and its private sector once became the targets of extensive cyber-attacks in August 2022 after another war monument from the Soviet era – a T-34 tank – was removed from the border city of Narva. Except in a few cases, most websites though remained up and running after the attack and only some private media companies were temporarily offline.

Companies have become favourite targets of such cyber war attacks. Directly attacking a government or military system is far more complex and requires the attacker to use more resources. Companies are often less protected and provide hackers with an easy entry point into a country.

State-sponsored hackers often wait a long time undetected in corporate systems. This makes it difficult to manage the threat they pose. Removing it is an even bigger challenge. Once companies have been hit, they often require technical assistance from experts or national safety authorities. Attackers like to focus on public service providers, supply infrastructure and infrastructure companies where they can cause a significant disruption by taking the target offline (gas, electricity, water, telecommunication, IT technology and Internet, the medical sector, transport, waste management, educational institutions).

Local government agencies, valuable brands and brand-name companies as well as those with sensitive data or high asset values in intellectual property are also preferred targets.



Cyber war attacks are on the rise

In the future, wars will become more frequent, more physical, and more high-tech. Everything can be used as a weapon – spreading false information, causing a stock market crash, diminishing currency credibility, launching and conducting a smear campaign or organizing a cyber-attack.

State-sponsored attacks can be anything, from simple DDoS attacks to massive disruptions of supply chains.

In 2021, the group behind the Solar-Winds Hack, known as Nobelium and linked to the Russian foreign intelligence service SVR, targeted about 140 organisations, each an integral part of the global IT supply chain. According to Microsoft experts, the actions taken by Nobelium support the notion that Russia tries to gain long-term, systematic access to numerous points along the technology supply chain to install a surveillance mechanism and monitor targets – now or in the future – that could be of interest to the Russian government. Furthermore, state-sponsored hacker groups have devoted themselves to cybercrime, using cyber-attacks as a good and relatively risk-free source of income once they have stolen sensitive data from their victims.

Why did the Russian cyber-attacks have hardly any effect on Estonia?

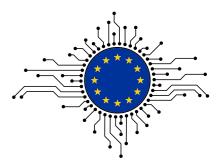
In Europe, Estonia has become a front runner in digitization. The country has even been nicknamed "e-Estonia". There are good reasons as to why the recent cyber-attacks seemed to have gone unnoticed and were largely ineffective. Apart from a few short and insignificant exceptions, websites remained up and running the entire day. The attack did not result in substantial losses, nor did it cause any inconveniences in the provision of national digital service.

Besides, the massive attacks back in 2007 showed Estonians just how important cyber security really is. Being a neighbour to a hostile country, comprehensive surveillance and defence mechanisms against all kinds of attacks, whether physical or in cyberspace, has become essential.

During the last couple of years, cyberattacks launched at public institutions and media companies in Estonia were the order of the day. After Russia attacked Ukraine on 24 February 2022, Estonian state-owned enterprises and private companies registered a significant rise in (attempted) attacks. Hence, IT security is on top of the country's agenda and increased investments in cyber security on part of the government have thus done much to minimize the impact of cyber-attacks.



RIA is the national IT authority responsible for cyber security. Some 1,000 state employees protect the Estonian cyberspace. They are backed by a highly developed IT system that automatically fends off intruders. Highly motivated computer scientists who would support their country in the event of an emergency and ensure up to date expertise act as a volunteer IT fire department. Estonia aims to retain its lead in cyber security. In doing so, the country received support from NATO that operates a cyber defence centre in Tallinn. Simulated cyber-attacks are in the pipeline for training purposes.



Companies managing and operating critical infrastructure are also obliged to continuously improve their cyber protection by implementing best practices.

Cyber war should not be taken lightly. Who will be the next target?

Cyber-attacks are part of an information war and are often used as a reaction to the political decisions made by a government. Cyberattacks on key trade routes between Europe and Asia, in regions of armed conflicts or those against strategic targets have spiked during the last few years. It is often hard to predict which targets are next on the list of cyber-warriors. However, it is safe to say that state-organised attacks, preying on political instability or a social divide, are set to increase.

Given their geopolitical situation, the Baltic States are constantly threatened by cyber-attacks. The same though applies to allies and countries that express negative views about Russia, its allies, and the ongoing war.

Helen Evert Practice Leader Liability & Financial Lines IIZI Estonia



More creative thinking to solve complex problems

"To achieve the possible, we must attempt the impossible again and again." (Hermann Hesse).

certainly exists as crises, wars and catastrophes call for more

EU: New Horizons

been earmarked for this EU-wide research and innovation in the transport sector as a result of inflation, have been programme. Given the necessity to rethink the future – also exacerbated and will surely cost many times more each in light of environmental protection – and better safeguard year than back in 2015. it against new crises, this is a drop in the ocean. To name a reference value: Europe's NATO countries have budgeted about 400 billion EUR for military expenditure. Looking at the "Horizon Europe" expenditure, every EU citizen contrib-

Back in the 15th century, Leonardo da Vinci thought out to convey problem-solving skills, the promotion of tax-de-

"Who hates this government as much as I do?" – many

Supply chain disruptions

local supply chains in 2015 have cost Europe about 50

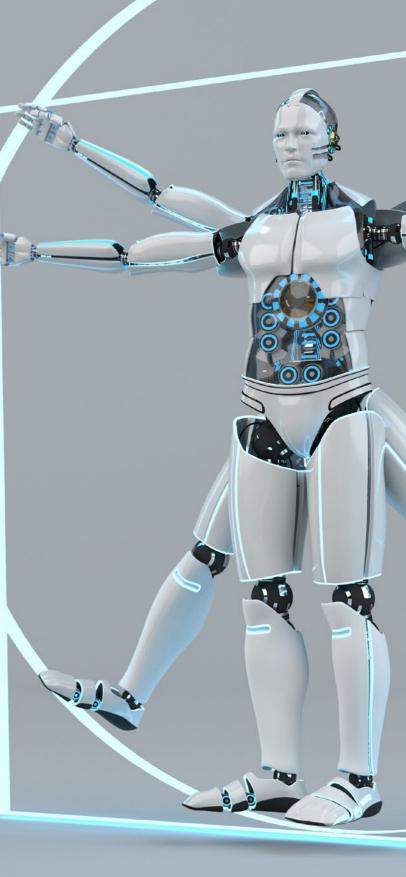
shipping caused by temporary port closures in China, to name However, to develop real sustainable solutions in research an example. Given the sustained high container freight rates, and innovation, a tenfold investment would be required. A paradigm shift would mark the first step, starting with primary school children as they will be the main decision makers in thirty years. They should be motivated not to weither the sustained high container height rates, we may notice a shift in the flow of goods. Those goods that were cheaply produced in China, yet were subject to costly transport, could perhaps be produced in Europe and cost less in the end – provided the required raw materials and resources

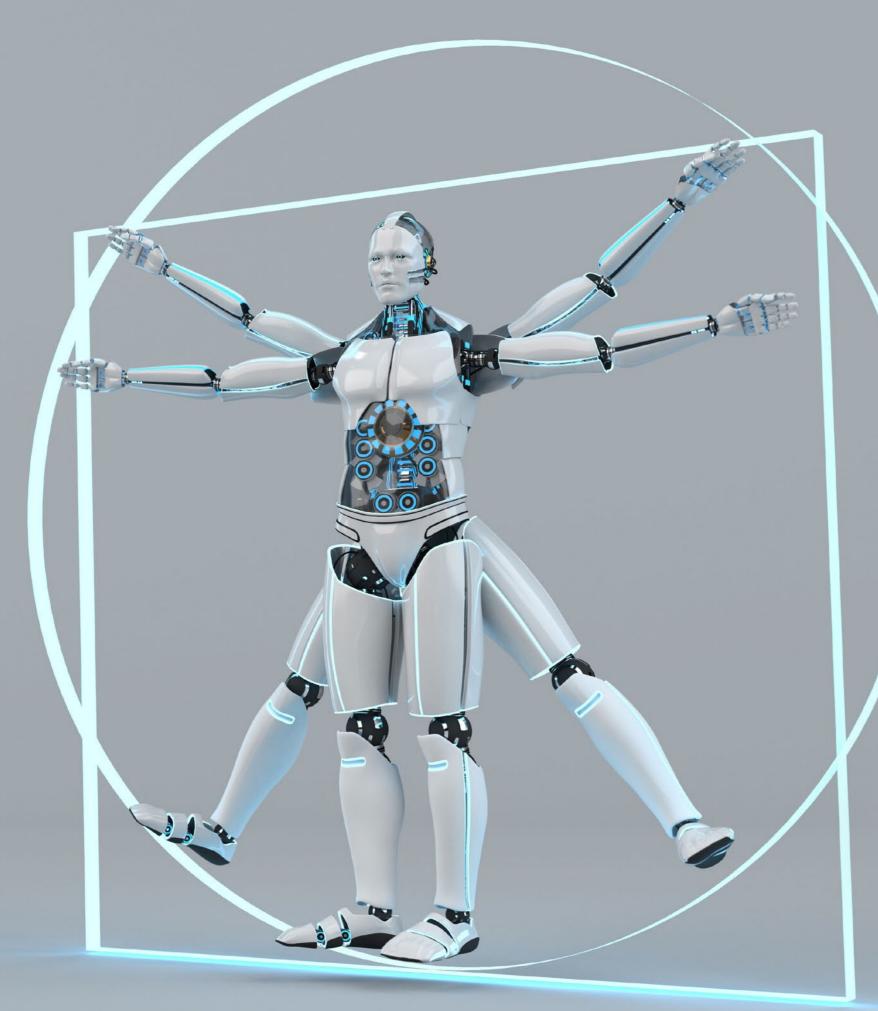
Technologies of the future

keep their fingers on the pulse of time and implement the next steps in line carriers used in port areas. Today's key decision makers will have to deal

Belt) and sea (Maritime Silk Road) of the world's population and about 40% of global trade.

The speed with which the project has the New Silk Road: in 2013 some 80





cal upheavals – and looking at the situation with Russia and resultant traffic and transport complications – fact that countries and communities

What could be more appropriate for the EU than to redirect the focus on itself? In

the EU significantly contributes to economic and social solidarity. Stream-lining the infrastructure of transport

economic) landscape, pushing forward with efficient, well connected and environmentally friendly infrastruc-ture in terms of TEN will be key for

ways of collaborations due to geograph-ical proximity, hardly any differences in time zones, shorter travel distances, etc.

In light of the global political (and

terms of business ethics, and ignore

3D printing – a game changer?

3D printing could become a game-changer. It is already used for medical protheses, toys, shoes, clothing as well as for cars and even for houses recently. 3D printing is a fascinating technology manufacture cars in large quantities. Car bodies and individual parts can already no longer need to be transported over great distances, making them more environmentally friendly while costs are saved and production times shortened.

With Trans-European Networks (TEN) In summary: The rapidly changing geothe Covid-19 pandemic and many

Securing new risks – Protection from new risks

airports and railroad terminals and to ensuring the economic survival of many businesses.



Erne Fittings relies on "The Safe Connection"

For Erne Fittings, the world's leading supplier of butt-weld fittings, "the safe connection" is more than a just a slogan: Passion and perfectionism are put into its safe pipe fittings for permanent welds. Bernd Klemisch, Board Member of Erne Fittings, about this solid foundation in todays' multiple crises.

> What did we learn from supply chains? Single sourcing is dangerous because being heavily dependent on only one supplier does not enable companies to spread the supply risk. The Covid-19 pandemic has also demonstrated that the single sourcing effect on supply chains can also be caused by a dependency on several suppliers from only one country. In China, President Xi Jinping's Zero-Covid approach brought a sudden halt to entire regions of this huge country. Nothing works anymore, no one leaves their home, nobody works or produces things, and no one exports or imports.

We're all in the same boat

Container ship crews – mostly Asian – were no longer allowed to board or leave a vessel. Container ports came to a standstill, and the entire cycle of transporting and shipping goods was bogged down – until today.

> Lockdowns which blocked the global economy ensued. As the restart did not take place simultaneously, the world economy struggled to restore its rhythm. Add to that the war, following Russia's invasion of Ukraine. While Ukraine has



become the main supplier of raw materials and intermedi-ate goods for many industry sectors, the Western world saw itself forced to act by imposing sanctions on Russia. Sanctions, which not only harm Russia's economy in the medium and long term but which negatively impact on the energy supply chains of the Western world in the short term.

The day when Erne's world stood still

In March 2020, the world woke up to a pandemic. A scenario that caught virtually every country and every business unprepared and unaware – Erne Fittings was no exception.

Our customers supply products and services to pipeline engineering and construction companies, so-called EPC companies that are active in the energy industry all over the world, providing products needed to plan and erect readyto-use plants. They focus on power plants in the oil, gas, nuclear, and district heating sector as well as on hydrogen plants, given the agenda for decarbonisation.

With the onset of the energy crisis and the plunging oil price almost all our clients brought their projects to a sudden halt. New projects in the pipeline were stopped as well or no longer pursued. Our suppliers were forced to either reduce their production or cease it altogether. The market came to a standstill overnight. The pandemic, however, also demonstrated that costs alone were not the only decision-making criteria for management. While laying off staff may have reduced staff costs in the short term, this decision would have been toxic as soon as operations were resumed. The same applies to supply chain management.

Even though today, three years later, multiple crises – a seemingly never-ending pandemic, a geo-political apocalypse, the energy transition against the backdrop of the climate crisis – present an array of new challenges, Erne Fittings is on track and fit for the future with its strategic and enterprise risk management.

Turbulent times require thorough planning and a carefully thought-out course of action. Securing raw materials and energy on the supply side for the long term, although customer demand clearly indicates smaller volumes delivered faster in shorter cycles, is a business risk and a challenge for the entire supply chain. A mere mathematical calculation of the risk is in this case not good enough as all players in our market rely and depend on each other like never before. Longstanding, personal and trustworthy relationships have become an essential element of our risk management. The same applies to our customers, our suppliers as well as our partners, such as banks and insurers. What we cannot influence is the geopolitical risk and with it the level of uncertainty that we feel in the global economy. This has drastically increased over the last five years.

> Bernd Klemisch Member of the Executive Board and CFO Erne Fittings GmbH





- matters most are sustainability aspects, guality, and delivery capabilities, not prices. The safe connection is an essential technical and an equally important human factor for our success.
- optimised our entire supply chain and grasped new opportunities as we strongly believe that in the midst of every crisis lies great opportunity. We knew that the world would once again need pipe fittings and that we needed to be ready for this day, being leaner, more efficient, and more productive. Our plan worked. At Erne, we optimally positioned ourselves for our clients' changed needs and behaviour patterns in turbulent times. Today, more than ever, we are both customer and supplier of choice.
- We realised quickly that the high volatility in prices in our business sector changed the behaviour of our customers. While the quantities ordered are smaller, the order intervals have become shorter and more frequent. We adjusted our supply chain accordingly and optimised our production processes. Our stateof-the-art high-bay storage now plays an even bigger role. It enables us to ensure faster deliveries to our customers, despite all the adversities in procurement markets.
- for a well-oiled supply chain. In many cases, it was not the availability of materials that caused problems. Rising costs for both raw materials and energy led to higher purchase prices and in turn to higher levels of receivables while quantities either remained unchanged or were lowered. Credit insurances, however, could no longer provide adequate cover. It came down to a matter of trust – trust that all the goods that were ordered could be paid as well, even though the insurance only provided partial cover. Erne has built up this trust with suppliers and banking partners over the past 120 years. The sold trust basis paid off time and again during the crisis.
- East Co. Ltd as an effective instrument to manage the supply chain in this important market reshoring from our customers' point of view, if you like. Erne Fittings Middle East now manufactures and provides local customers with the entire product portfolio of carbon steel elbows. Aramco, the world's largest oil producing company, honoured our colleagues' efforts with the "LOCAL MANUFACTURERS QUALITY EXCELLENCE AWARD 2021" – a wonderful acknowledgement bestowed upon Erne Fittings Middle East in February 2022.
- certification for our hydrogen-compatible fittings. The 100% hydrogen compatibility allows us to be a first mover in this sector as well a reliable partner for our customers.
- A lot still needs to be done to make the energy transition work. The current crisis forces Western economies to rethink and reposition their energy policies. To be independent of oil and gas, we must quickly build new facilities, such as LNG terminals or gas pipelines. Our biggest risk, however, is the required interim supply of gas which we need to manufacture the products that will ensure our energy supply in the future.

• Our supply chain and procurement management is based on long-term and trustworthy partnerships. What

• Procurement difficulties and the increasing cost pressure forced us to streamline our product portfolio. We

• Today's turbulent times have shown us once again just how important trust and sound relationships are

• Our strategy to pursue a close proximity to customers in Eastern Saudi Arabia served Erne Fit-tings Middle

• Erne is more than ready to tackle the energy transition. We are the first company to have received a TÜV Süd

More procurement & logistics resilience for Donau Chemie

An interview with Gerald Dums, Head of Purchase of Technical Equipment & Logistics at Donau Chemie AG about supply chain problems and procurement and logistics resilience by Krystle Lippert, Strategic Sales Manager at GrECo Austria.

The past years have shed light on the downsides of the very same globalization that has been responsible for stable economic growth for a long time. The consequences of recent negative events are disruptions in trade and supply chains, order backlogs, rising energy and transport costs, and more. Whether earlier events or most recent geopolitical developments nearshoring and so-called "glocalization" are now moving into our focus.

Lippert: Donau Chemie recognised the changing trend long before the pandemic and the supply chain problems that followed suit. Out groundbreaking works for a new plant in Pischelsdorf to expand the product portfolio already began in 2019. It is Europe's first production plant for amidosulfonic acid. What brought about this decision and which role did short distances play for procurement and sales?

Dums: Short distances in procurement and sales and therefore proximity to customers are part and parcel of our corporate philosophy. Besides the quality and availability of our products, our customers really value our other pillars of success: our personal service, the short response and delivery times as well as our solid reliability. Because of our customer proximity we knew that the European market cannot provide amidosulfonic acid and relies on Asia for deliveries. This triggered more research and eventually the erection of a new plant in Pischelsdorf. The ready availability of the raw materials and the perfect storage and distribution opportunity on site in Lower Austria positively impacted the feasibility study.

Lippert: Since there are no similar plants in Europe for this core process, there must have been a huge influx of customers during the pandemic, especially since China still grapples with lockdowns. How important is procurement and logistics resilience for your customers?

Dums: During the feasibility study, we already received positive feedback from prospective European customers who signalled their keen interest in our idea to erect an amidosulfonic acid plant in Pischelsdorf. Increased flexibility due to shorter delivery times, more reliability and security of supply, no loss of quality due to long sea transport and rapid availability have become increasingly important for our customers, over and above a high product quality and more attention being paid to ecological aspects. Furthermore, an additional European supplier also increases the procurement and logistics resilience of customers. The recent lockdowns showed the negative impact in a most dramatic way. Within days, goods were no longer available, means of transport became a scarce commodity, container vessels

jammed harbours, and transport routes were closed. Customers desperately searched for goods and alternative transport facilities, at times to no avail.

Within weeks, the prices for the "white powder" skyrocketed. Building up new procurement and logistics resilience becametheorderoftheday. Theobvious dependence on producers and logistical flows supported our decision to plan and erect Europe's only amidosulfonic acid plant in Austria.

Lippert: What is your experience with international competitors from Asia? How do your customers rate short-term availability vs. price?

» Increased flexibility, more reliability, no loss of quality and rapid availability have become increasingly important.«

Dums: The pandemic and the war between Russia and Ukraine have shown that the global flow of goods can quickly come to a halt, causing existential crises among customers. In the medium term, such crises will continue to have a significant impact on our world economy and dictate prices. That is why customers have shifted their focus on short delivery distances and a more stable (European) framework. We have used our strength as a local producer to our advantage and continued to provide our customers with important industrial chemicals despite tough conditions. Of course, product prices play an

important role but reliable quality, supply security, flexibility, and short delivery distances have become crucial and decisive factors for customers.

Lippert: At the GrECo Risk Day we learned that logistics experts expect the complexity of supply chains to trigger a bullwhip effect. Do you share this view?

Dums: Yes, indeed. The global production and transport sector's current complexity and dependency need an optimal setting to work. Any change or deviation in the system will cause a ripple effect at all levels. The consequences have already become visible and may hold more surprises in store in the years to come. Planning, transparency, and the implementation of resilient systems coupled with forward-looking management qualities will certainly be helpful.

Lippert: If we consider that globalisation and the search for increasingly cheaper alternatives were placed higher on the agenda than local added value and short delivery distances, do you think this behaviour is a conscious decision made by customers or is it rather driven by politics?

Dums: The principles of a free market economy and globalisation have undoubtedly contributed to the wellbeing of our society. It has its merits and still applies. However, in my opinion, a critical evaluation and an adaptation to solve the global existential survival crisis – and thus protect our planet - are desirable and necessary. Political decision makers are key in determining the course for future economic areas and the habitat we live in. The creation of long-term sustainable wealth must be our common top priority. The restructure of economic areas,

transport routes and supply chains can contribute a lot in this regard. Our project for a new amidosulfonic acid plant serves as a prime example.

Lippert: Considering Europe's energy crisis, does Donau Chemie also plan to erect new plants at new locations, and is Europe still an attractive manufacturing market?

Dums: Donau Chemie relies on organic growth. Over and above that, we are evaluating possibilities to expand our portfolio – like we did when we decided to bring the amidosulfonic acid production back to Europe – and tap into new markets. Alone in the last two years, we invested about 35 million EUR in our plant in Brückl in Carinthia. We erected a new distribution warehouse and filling facility, a new synthesis with heat extraction as well as a salt treatment facility for solar-dried sea salt.

Gerald Dums Head of Purchase of Technical Equipment & Logistics Donau Chemie



Krystle Lippert Strategic Sales Manager GrECo Austria



Supply chain managers as crisis managers

In the last two years, supply chains were exposed to unforeseen risks. The impact of the pandemic, Evergiven's blockade of the Suez Canal, or the recent disruptions as a result of Russia's attack on Ukraine, to name a few. What else must we prepare for?

We live in turbulent times, and our world is changing. While change is important and a good thing, we are now facing a whole new dimension and new dynamics of change. Companies are challenged to find ways to manage these dynamics and their impact.

Globalisation is undergoing a reorganisation In Europe, we rely on globalisation. Europe is the world's largest exporter. It has brought us prosperity. Our value and supply chains also rely heavily on countries in the global South. They are our raw material suppliers. They are not only rich in raw materials, minerals and metals, they also offer the advantage of low costs of energy and labour. The ability to collaborate on a global scale – and tackle systemic risks, such as climate change – is thus a most decisive factor.

The big nations in the South, such as India, are gaining in economic strength. India is an alternative to China and benefits from the current geopolitical tensions. Investments made by multinationals in India are on the rise, and analysts are already predicting a decade of strong economic growth. Naturally, developments like these come with risks and opportunities for us as well as our value and supply chains. Our task is to anticipate both risks and opportunities.

The same applies to the effects of geopolitical constellations, such as sanctions, import restrictions or changes in legal frameworks, e.g. the EU Supply Chain Act. More and more supply chain managers have to act now also as crisis managers. Cost efficiency in procurement is becoming less important. Besides quality and delivery reliability, supply chain management increasingly addresses geographical, geopolitical and ESG criteria. These developments pose a particular challenge to the small and medium-sized business sector.

Delving into supply chains In light of the above, it is essential to examine supply chains in two steps:

- first, one's direct suppliers,
 - their suppliers.

and second, the risk potential of

Analysing and evaluating one's direct suppliers is often difficult enough. Taking the second step means delving into the supply chain. In doing so, at least one's direct supplier must be sensitized and his supplier systems and audits be checked to identify any blank spots, make reliable risk assumptions, and develop coping strategies.

This can be a "diversification strategy to avoid", i.e. selecting new suppliers, seeking new markets and market opportunities, or using alternative technologies to reduce the dependence on a certain raw material. An essential feature is a step taken towards an acceptable risk, for example via a traditional risk transfer with respective insurance solutions, despite the insurability of systemic risks being limited. In terms of the supply chain, this means "security comes first, before insurance". One should be aware of one's acceptable risk and its evaluation. Similarly, one should also keep monitoring this risk on an ongoing basis. "Transparency" thus becomes a decisive success factor in supply chain management.

Systemic risks and black swans

Managing systemic risks and black swans in the supply chain means one must also answer the question of whether one can influence the potential danger. If the answer is "yes", the route to take includes appropriate risk management, guality, safety and environmental management or a risk transfer using insurance management. If the answer is "no", preventive measures are called for, including crisis management, emergency planning, business continuity management as well as resilience management to optimally prepare for unexpected and to date unknown events. Flexibility is thus a key success factor.

> Johannes Vogl General Manager GrECo Risk Engineering



The dynamics of multiple crises drive **ENGEL's risk** management forward

Max Pernsteiner, Vice President Global Purchasing & Supply Chain at ENGEL Austria GmbH, spoke with Johannes Vogl, Managing Director at GrECo Risk Engineering GmbH, about supply chains and their risks.

Vogl: Which role does supply chain management play nowadays in a global business like ENGEL Group? Are you able to keep your supply chains up and running despite the current situation? Which role does pricing play in procurement?

Pernsteiner: To cut a long story short, yes, we managed to keep our delivery promises. That has always been our top priority. And, prices continue to play a role in procurement – to a possible extent. We produce injection moulding machines which are used in the manufacture of plastics parts and components as well as products for daily use. We are market leaders in Europe and the USA for machines with more than 1000 tons clamping force and are active all over the world. We have nine

production plants in Europe, Asia and North America as well as subsidiaries and

representatives in over 85 countries. Our procurement is centrally organised, which means that all strategic decisions are made at our headquarters in Schwertberg, Austria. My team and I are working in tandem with our international offices in Asia. Turkey and Mexico to ensure optimal service in these supplier markets.

Sales continue to do well, which means we need smooth supply chains. Our advantage is the energy efficiency of our machines.

Our customers have stepped up replacement investments to save more energy and operate sustainably. As injection moulding makes up about 25% of the production costs, our machines can reduce this proportion by about 30%. That is why both delivery capability and delivery reliability are key factors for our business.

Vogl: How does ENGEL identify risks in the existing supply chain?

Pernsteiner: We conduct supplier assessments and hold supplier performance meetings for our main suppliers whether improvements must be made (yellow). In case of every year. Besides the hard facts, we also look at all other a lack of stability or a supplier reorganisation, the supplier relevant factors, such as quality, technology, logistics, prodoes not receive any requests for quotation (red). curement as well as customer service. We evaluate the performance, document deviations from the "mean value". Our RPA approach has been successfully used, has the "best of" of our suppliers as well as those concerning increased guality, and has reduced risks. It features five the "commodity". For us, transparency is not a lip service characteristics: but part of our everyday reality. Of course, we communi-1. It is simple to use and delivers fast and effective results. 2. Pictures are used for visual assessment and comprecate the results of our assessments with our suppliers and show them where there is room for improvement. hensible documentation.

During our performance review meetings with our suppliers, we jointly agree on the measures that will be binding for the next year. At ENGEL, risk management is at the top of the agenda, which is why it also defines the way how we collaborate with our suppliers.

Vogl: How do you select new suppliers?

Pernsteiner: We differentiate between procurement parts and engineering parts. We select suppliers for procurement parts via a market enquiry. Suppliers for development parts provide components, such as control units which have been defined in year-long development processes. Following a concept competition and a strict selection process, we jointly carry out further engineering work. When it comes to these types of components, we cannot simply change from one supplier to another, which is why we carefully select our engineering suppliers. However, including sub-suppliers in the engineering phase is currently difficult. We have therefore adopted a dual and multiple supplier strategy with global diversification almost everywhere to protect ourselves against supply chain risks and we try to follow the same strategy for engineering parts. We know that this may come to an extra cost. It has, however, paid off during the crisis. We are consciously spending more money to secure our supply chains and maintain customer promises. That is why we also buy semiconductor chips from the secondary market.

A diversified procurement strategy via several continents usually comes with a cost advantage as well. An example is the sheet metal we purchase in China: Despite high transport costs and tariffs, buying sheet metal from China is sometimes cheaper than buying it in Europe.

Vogl: Which methods do you use to evaluate suppliers?

Pernsteiner: We conduct on-site assessments to evaluate quality capabilities - so-called Rapid Plant Assessments (RPA) - irrespective of the location of our suppliers. It is a simple and effective method that was developed in 2007. Only a few pages are needed to show nine topics for the on-site inspection. They range from maintenance and service, order and cleanliness, parts and logistics, material and process flow to quality management, governance and compliance criteria. Nowadays, our assessments also include ESG criteria, such as environment and humane working conditions. The result of the RPA (based on a traffic light system) determines whether the supplier receives an unrestricted release for quotation requests and nominations (green) or

- 3. Evaluation is done according to a +/- system with no percentages.
- 4. The result is an assessment of the supplier regarding quality capabilities.
- 5. It can and will be applied for assessing sub-suppliers as well.

Vogl: Does this also mean that the multiple crises have improved the maturity level of ENGEL's risk management, and especially that of its supply chain management?

Pernsteiner: We have been well positioned for years and have implemented a group-wide enterprise risk management system. But, yes, the dynamics of the multiple crises somewhat drive our group's risk management forward. Already back in January 2020, before the first Covid pandemic lockdown, we set up a task force. Today, this task force is permanently active in anticipating changes in the risk landscape and helps us to flexibly adjust to changes in the market.

As part of our strategic focus, we are setting up our digitally networked production with facilities in Austria, Asia and the US and are using our global data base with matching numbers, key figures, and standards. Our production takes place where quality, time and costs are best met. The availability of materials, punitive tariffs, transport routes and costs, our competitive advantage, and the availability of skilled labour are some of the factors we consider as well.

> Max Pernsteiner Vice President Global Purchasing & Supply Chain ENGEL Austria



Johannes Vogl General Manager GrECo Risk Engineering



Geopolitics and energy are close intertwined

For the past years and certainly since 24 February 2022, we have had many opportunities to witness the power of geopolitics, its decisive impact on domestic and international politics and the supply of energy throughout the world.

The geopolitical flow of energy

As far as the sources of energy are concerned, we must take a closer look at their primary and secondary dimension:

Primary sources of energy are those that are extracted (such as natural gas) or captured (such as solar energy), whereas secondary sources of energy refer to the products that derive from the transformation of primary sources. Electric energy is a typical secondary source as it is the product of transformative processes such as controlled combustion of natural gas in a thermal power plant or conversion of solar energy into electric current within a photovoltaic power panel.

Then there are the facilities that ensure the production and supply of primary and secondary energy – for example, refineries, power plants, electricity grids for transmission and distribution. The infrastructure for production and delivery must be built and maintained in good order. This requires parts and machinery to be produced from raw materials, most of which are available only in certain parts of the globe, and which need to be extracted, processed and shipped (often through many different countries) to factories (some of them being located in other parts of the world) and then transformed into OEM parts and equipment, which are shipped to the final destination (crossing once again many state boundaries).

This constant flow of various forms of energy, raw materials, intermediate products, parts and machinery as well as the security of energy is dictated by physical and human geography - and its barriers.

Case in point: Coal vs. **Clean Energy**

An interesting example is Europe's import of coal on a mass scale. Under immense pressure from the European Union, financial institutions and a vast number of generously bankrolled activist pressure groups, many governments decided to scale down coal production, effectively not allowing any investment in developing new production infrastructure. As with most extractive industries, the lead time from the investment decision to the commencement of commercial operation is several years, especially when public procurement is required.

» The constant flow of energy, raw materials, intermediate products, and machinery is dictated by physical and human geography and its barriers. «

Russia's military invasion of Ukraine prompted a sharp increase in wholesale gas prices (approximately by a factor of three within several days). The ensuing uncertainty then prompted an increased demand for coal (a natural gas substitute for heating and power generation) both from businesses and private households as the demand could not be met by the decreasing domestic production.

At the same time, several widely used coal transport routes become inaccessible because they originated in or passed through Russia or the war zone in Ukraine. Wholesale coal price indices rose sharply as a result

of skyrocketing global demand and contracting supply. For example, the ARA index often used by EU traders rose by about 140% in seven days since 23 February 2022 and in December 2022 traded at approximately a 30% premium from that day. But that was just the beginning.

The additional demand from Poland alone, estimated at around 10 billion metric tons in 2023 (the equivalent of around 170,000 Panamax or up to 50,000 Capesize carriers), is putting significant stress on the existing transport infrastructure, including seagoing vessels, inland transit carriers, port terminals, transhipment and storage. This infrastructure is generally finite and cannot quickly be scaled up: for example, there is a limited number of available dry cargo vessels or sea terminals capable of unloading and handling large amounts of coal.

As is always the case, the vastly increased global competition for finite extraction and transportation resources translates into price increases and high levels of volatility until a new equilibrium is reached.

The security behind energy

supply security As far as the security of the supply of energy is concerned, we must consider two aspects.

First, there is the physical availability, which in simple terms answers the question whether a requisite amount of energy can be delivered to the destination in the required form and quantity. For example, in December 2022, a large part of Ukraine was deprived of electric energy because both power plants and the delivery infrastructure (transmission and distribution grids) were, to a large extent, destroyed or captured by Russian military.

Second, even if physical availability can be assured, the cost at which energy can be obtained by end users can be very expensive, making the use of energy either uneconomical (for businesses that cannot pass on increasing costs to end users) or

adding an undue burden on the cost of living, eroding living conditions, causing poverty and social unrest which, in the end, might bring about political changes both locally and on a large scale. For example, because of the Russian aggression against Ukraine, the Western world is moving away from purchasing and using Russian hydrocarbons. The resultant sharp increases in market gas prices through 2022 have caused many energy-intensive businesses across Europe to fail or to temporarily scale down production, as has already happened to the fertilizer industry.

Because of complex value and supply chains linking geographically remote points of production and delivery of energy to the end user in requisite form and at acceptable cost, the entire global energy system is subjected to forces that themselves are the product of many geopolitical vectors. Notably, the situation in Ukraine has not only negatively affected the energy security and energy supply in many countries, especially in Europe, it may also cause profound ripple effects in the entire world.

One of the victims of rising energy prices is the fertilizer industry. The concentrated production of fertilizers and its increase in prices will eventually affect food production around the world. In the short term, this will lead to possible food shortages. Add to this the limited number of crop exports from Ukraine (before the war Ukraine was the world's major producer of foodstuffs) which could have far-reaching effects in poor countries that rely on cheap imports.

Bleak future?

What seems to be a local event might easily have global consequences and energy, being the equivalent of the pulsating human blood stream, is the means that can spread and exacerbate negative consequences around the globe.

> Pawel Kowalewski Practice Leader Power & Renewables GrECo Specialty



6 ways how geopolitics shapes the world to come

Our multipolar world and its myriad of geopolitical forces presents us and our clients with a vast, multidimensional array of risks. As bleak as this may sound, geopolitics and its impact on energy also offers a number of opportunities.

Poverty, unemployment and social strife

Energy price increases readily translate into increases in consumer and producer price inflation. This prompts households to cut down on spending, businesses to shut down as they cannot sell their products and services at sustainable prices, and rising unemployment levels perpetuate the vicious circle of recession and inflation.

What may be seen as healthy belt tightening in affluent countries of the Western world, can in lesser developed countries reduce access to food supplies, electricity or running water. Eroding living conditions could lead to large-scale social unrest and profound changes on the political scene, challenging international relations and shaking the world order even more than currently experienced. Energy supply has been used by countries such as Russia as a vector for power projection for many years now and is currently used as a weapon of war not only against any single country, but to challenge the global status quo.

An increased volatility of energy prices and resulting volatility of virtually all price indices that are impacted by energy prices) means increased levels of business risks for all entities undertaking any kind of business activity. From oil traders through manufacturers to crop farmers, everyone can suffer or benefit from this as the maxima for both upside and downside will increase.

This development will raise the demand for risk management services and all kinds of hedging or risk transfer instruments. To some extent, this will require the assistance of modern technologies, such as artificial intel-

Energy asset prices

If the increases in energy prices are not a temporary feature but are there to stay (which might also result from factors other than geopolitical forces), it follows that price of assets used for energy generation, transmission and distribution will increase as well to in line with cash flows, they generate until a new cost-benefit equilib. rium is reached. The side effect will be increased competition for raw materials, parts, equipment, services and labour as everyone will be rushing into the energy sector to benefit from rising asset prices. This effect can already be seen to a large degree in the field of renewable power genera.

Global development

It is estimated that the global scale decarbonization effort requires capital expenditures worth USD 1 billion every day until 2050. This does not include the cost of responding to geopolitical challenges which, as far as energy is concerned, have been briefly outlined above. This presents a huge challenge for businesses, governments, financial institutions, and individuals who all form a kind of global labour force tasked with making this change happen. It also offers tremendous opportunities for growth and development, for making the world a better place, more pros-perous and healthy, and one that can offer more benefits to more people.

Technological advancement
The challenges of energy security in the
light of global geopolitics, compounded
by the demands of decarbonization to
thwart adverse climate change present
a vast spectrum of opportunities for
innovators who can advance new tech-
nologies in energy production, delivery,
storage, management and saving. Whilst
the invention of a breakthrough tech-
nology that could be deployed on a
large scale to change the way the entire
world operates is unlikely (although not
impossible), there is a lot of room for
incremental advances that, given increas-
ing energy prices, will make research and
development expenditures worth-
while for successful entrepreneurs.

Making change happen

Geopolitics will still be a major factor impacting global energy markets and energy security across the world. However, if the world population manages to turn these challenges into opportunities, then increased prosperity and improved distribution of wealth across the planet could turn geopolitical forces into everyone's favour.

As all these processes will be impacting the global risk landscape in a major, perhaps unprecedented way, the years to come will be a challenging and hopefully rewarding time for the risk management and insurance community worldwide. Our role during this time of change in the global economy and technology, prompted to a large degree by energy geopolitics and climate change, is to help make the transition process smooth and predictable to the fullest extent possible for those entrepreneurs and institutions that will be responsible for making this change happen.

> Pawel Kowalewski Practice Leader Power & Renewables GrECo Specialty



"Energy Autonomy Frastanz" is taking shape

Plans are underway to construct a new power plant fuelled by waste material on the premises of Rondo Ganahl AG as part of the Initiative "Energy Autonomy Frastanz".

The new plant in Austria's most western province will cover the future thermal energy demand of the Rondo paper mill and corrugated board plant and will also supply other businesses and private households.

Achieving independence from fossil fuels

The challenging situation in the energy and gas market persisted during summer and autumn, and prices continued to rise. The demand for gas is expected to increase again in Austria and Europe in the winter months. The project "Energy Autonomy Frastanz" was launched at the end of June 2022 to counteract soaring prices and take a big step towards independence from natural gas, particularly from Russia. Its core element is the construction of a waste material power plant on the premises of Rondo Ganahl AG.

Project progress on schedule

The plans for the project were finetuned during the last months for submission as scheduled at the beginning of 2023. At the same time negotiations are being held with the Municipality of Frastanz and the Federal State of Vorarlberg to rezone the company car park as part of the project. Hubert Marte, Chairman of the

Board of Rondo Ganahl AG, highlights the significance and necessity of the project: "It is high time that we put our energy supply on a new footing and assume responsibility for our employees and customers. The new power generating plant is our response to the uncertain supply of gas. More importantly, it will make us self-sufficient with regard to energy and will boost our gas independence."

Clean energy for paper manufacturing and local heating

"Energy Autonomy Frastanz" is a joint initiative of Rondo Ganahl AG, the community of Frastanz, the Frastanz Brewery and the E-Werke Frastanz Electricity Company. The parties involved in the project are creating new impulses for the local energy supply. Rondo's new in-house power generating plant will supply the paper mill and corrugated board plant with process heat. Until now, the required thermal energy, could only be obtained from gas. In addition, the power generating plant provides the opportunity to expand the local bio-heat network of Biowärme Frastanz. The recyclable and residual waste resources available in the Federal State of Vorarlberg can be used as valuable sources of energy directly in Frastanz itself.



Frastanz waste material power plant

Capacity:

Share of Rondo paper mill:

Total performance (output):

Required area:

Height of building:

Planned investment sum:

Realisation:

"The time has come to no longer rely on oil and gas for local waste disposal specialists. At any rate, approximately heating, which is why we want to offer private house-100,000 tonnes of such residual waste products accrue holds and businesses a sensible alternative", says Walter in Vorarlberg every year. Currently, these products are Gohm, Mayor of Frastanz. Other companies besides processed into energy in neighbouring countries. Rondo should also benefit from heat from the power generating plant, such as Frastanz Brewery, Rondo's closest **Risk Management** neighbour and project partner. Up to 500 private house-The power generating plant in Frastanz will be built holds could receive thermal heating once the Frastanz according to state-of-the-art technology standards and local heat network has been expanded and the new power will benefit from the high-quality plant and filter systems plant integrated into the network.

Turning valuable residual waste products into energy

Currently, Rondo requires approximately 14 million standard cubic metres of gas or 150 GWh of thermal energy every year. This corresponds to the average annual demand of about 10,000 households in Vorarlberg. The waste material power plant, fuelled by waste products from commercial production, has been designed for an annual volume of around 200 GWh of thermal energy. A total of 35,000 tonnes of waste material can be converted into energy every year. A good third are residues from Rondo's own paper manufacturing that can no longer be further processed into recycled paper but may still be used as a source of energy. The remainder comes from

- 35,000 tonnes of residual waste (material input) each year
- 11.000 tonnes
- 200 GWh of thermal energy each year
- 3,600 square metres on the company premises of Rondo
- approximately 32 metres
- 80 million Euros
- by 2025

used to limit emissions. An area on Rondo's premises currently used as a car park has been earmarked as the location for the plant. During planning attention has also been given to the objective to smoothly incorporate the new building into the cubature of the current buildings and blend it harmoniously into the townscape. According to current plans, the power generating plant will be completed by 2025.

> Udo Nachbaur Rondo Ganahl



Supply chain risk management in the food and agriculture sector

Keeping flexibility and financial resilience in an ever-changing economical and geopolitical environment.

Covid, the war in Ukraine, the gas crisis and more have exposed the fragility of many industries. Our food supply chain is no exception. What does the future hold for us and are we ready to successfully face new challenges? The more immediate question we have to ask ourselves is: "How can we increase flexibility and financial resilience in an ever-changing economical and geopolitical environment?" Let's take a closer look at this issue and how to better deal with it.

The food supply chain covers agricultural upstream and downstream sectors from the supply of agricultural inputs (such as seeds, fertilisers, feeds, medicines or equipment) to production, post-harvest handling, processing, transportation, marketing, distribution, and retailing

A sustainable food supply chain should be profitable throughout all its stages (economic sustainability), has broad-based benefits for society (social sustainability),

- has a positive or neutral impact on
- Sustainability in the food supply chain

The Food and Agriculture Organization of the United Nations defines the food supply chain as consisting of all stakeholders who participate in the coordinated production and valueadding activities that are needed to make food products.



the natural environment (environmental sustainability).

Spotlight on supply chain disruption risk management

The recent agitation in societies caused by Covid-19, Russia's aggression in Ukraine, the gas crisis, climate change, etc., have prompted governments and corporations to pay more attention to supply chain disruption risk management. This is due to its obvious negative consequences, such as loss of net profit and increased costs for restoring supplies to normal.

The complexity of the supply chain requires that risks be Step 4: Develop a supply chain continuity plan (determine grouped as follows:

- Supply Risks: Impacts inbound supply, implying that a supply chain cannot meet the demand in terms of quantity and quality of parts and finished goods (supply disruption).
- Demand Risks: Impacts elements of the outbound supply chain where the extent or the fluctuation of the demand is unexpected (demand disruption).
- Operational Risks: Impacts elements within a supply chain, impairing its ability to supply services, parts, or finished goods within the standard requirements of time, cost, and quality. Transportation disruptions are one of the most considerable operational risks.

In order to effectively manage the risk of disruptions in the supply chain, special risk management procedures should be implemented in companies:

Step 1: Assess the risks (suppliers, buyers, weather-related events, foreign economic instability, raw material shortages, blackouts, military actions, actions of the government, social unrest, etc.) Step 2: Quantify the risks (likelihood and severity, risk mapping) Step 3: Build a response plan to contingencies ("If X happens, then we will respond with Y.") and define roles and responsibilities in this action plan.

critical and major suppliers and logistics routes, qualify alternative suppliers and shipments)

Step 5: Further monitor supply chain risks, carry out supply chain continuity plan modifications and reporting

Stay agile in the food supply chain

One of the key questions nowadays is how to stay agile in an ever-changing supplier and customer environment? In other words: How to get the right product to the right customer at the right time in the right place while continuing to be profitable, environmentally and socially compliant?

Here are some practical key points and ideas for increasing the flexibility of the food supply chains:

- Go digital wherever possible: collect, process and display in-time data
- Ensure optimum levels of visibility and transparency across the organization by providing more information to optimise operations
- Automate the less time-consuming manual processes
- Hold extra inventory
- Make shorter-term plans
- Reduce the variety of products
- Switch to new packaging smart packaging, large multi-serving formats, modular packaging solutions
- Buy from domestic or local suppliers where possible to increase the ability to transport goods in an efficient and cost-effective manner
- Establish and foster solid relationships with strategic suppliers.

Insurance – Key element to counteract food supply chain disruptions

and the second

Insurance is a tool that limits financial losses when a risk has become reality and has disrupted

the supply chain, resulting in a loss of net profit, an increase in its mitigation costs and contractual penalties.

As a rule, standard property insurance covers business interruptions, caused by physical damage to the enterprise or physical damage to its suppliers or buyers (extended coverage). In any case, it should also contain an "on-site element", i.e. the damage should arise at the site of the party specified in the insurance contract.

In order to partially fill this gap, clients are advised to consider investing in special tailor-made solution. Combined stock-throughput and trade disruption cover the entire value chain: from the delivery of goods from suppliers, through their processing at the insured party's premises, to their delivery to buyers, including both transit and storage periods. A stock-throughput placement provides compensation for material damage to the transported or stored property.

The additional trade disruption insurance covers loss of net profit, increased expenses and contractual penalties resulting from direct damage to property and unexpected events that impacted logistics and/or happened to goods along the way.

» How to get the right product to the right customer at the right time in the right place while continuing to be profitable, environmentally and socially compliant? «

> This includes fire, lightning or explosion, natural disasters, blockage of waterways, harbours, airports, roads or



railways; breakdown of a vessel; confiscation, expropriation, deprivation, embargoes; sanctions; political interference; strikes, riots and civil commotion, terrorism border closures; or other triggers subject to the agreement of underwriters.

Parametric insurance insures a specific weather or statistical parameter, which should correlate well with the quantity or quality of the goods one buys or sells. For example, to produce a planned amount of vegetable oil, an oil-crushing plant needs seeds to be processed. The factory relies on farmers who grow such crops. In the event of a drought, there will be a shortage of harvested seeds, which, in turn, results in a reduced production of vegetable oil. To mitigate and balance such losses, the oil crushing plant will be insured against soil moisture deficiency (drought index) or an area yield index. The insurance contract is triggered when the insured index reaches a certain value.

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Social Workplace giving people a sense of belonging

From an HR perspective, the past three years were predominantly shaped by the challenges and crises that have influenced our activities since the beginning of the pandemic. The impact of volatility, uncertainty, complexity, and ambiguity – the VUCA world – has become more pronounced with each crisis that has hit both the economic environment of organisations and people's personal lives.

Our world is marked by rapid change, continuing disruption, and instability. Geopolitical risks that boost this uncertainty add to the challenges in the global labour market. Organisations find themselves in a seemingly ongoing struggle to attract, retain and manage talent. But what implications does this have on our HR work?

A new approach

The pandemic has taught us to work in hybrid environments that connect co-workers mostly virtually. As a result, social interaction has decreased. Multi-channel communication has become part of our daily work routines. However, Eurostat statistics¹ show that in 2021 only 13.5% of employees in the EU performed work from home on a regular basis. Even if 2022 shows a slight decrease in the area, remote work has come to stay, and yet another upward trend is expected for future years². Although the flexibility of the workplace enables individuals to better balance work and personal life, the downside of remote work is the lack of social interaction. That being ascertained, leadership teams and HR have recognised the importance of moving their people into the centre of their attention.

Creating social work environments

As ESG (environmental, social, governance) topics are gaining importance throughout organisations, HR must

focus on creating socially sustainable work environments. The first step in this process is to create awareness and a common understanding of how the most relevant factors of social sustainability are linked to the corporate vision and mission. In this dynamic framework, organisations must seize the opportunity to rearrange their corporate DNA, create sustainable and secure workplaces and build a work culture that puts people first, focussing on individual needs. More and more candidates are now screening potential employers' efforts towards climate protection, diversity, equity, and inclusion as well as ethical decision-making. Especially the generations X, Y, and Z want to contribute towards making the world a more liveable place again.

Sustainable Human Resource Management also considers future generation workforces and seeks to achieve long-term strategic alignment in human resource planning. However, the latter seems to be an increasingly challenging task. The much-cited and increasing shortage of skilled personnel as well as an ever-ageing workforce constitute the main obstacles.

Different generations – different values

The generation mix from baby boomers to generation Z on the labour market and within organisations creates a blend of values and relevant cultural features. The critical assets professional experience and expertise meet young academic knowledge and ambition. Digital natives and digital immigrants team up to achieve corporate goals. Whereas this may seem obstructive at first glance, the dimension "age" as outlined in the Diversity Charta³ offers numerous chances for individual development, skills transfers, sharing of knowledge and experiences as well as mentoring and sponsoring of talent. Putting the generation issue aside, the focus must be on merging the different values of each generation to create a common work culture.

But who are those talents and where can they be found?

Identifying, promoting, and managing talent

According to a Deloitte survey⁴, more and more organisations are beginning to redesign working environments to attract and retain top talents regardless of their age. It is important to acknowledge that what differentiates talents from any other member of the workforce are their relevant performance potential, their competencies, and their commitment towards achieving organisational goals. While talent is often associated with external resources, screening the workforce for potentially dormant talent within the organisation should become a permanent feature in the recruiting and people development processes.

Having identified talents, HR must regularly verify whether the skills and competences meet the requirements of the future workforce. Comparing current and possible future roles is part and parcel of a well-structured talent and succession management scheme to facilitate people development within the organisation.

Learning & Development Strategy

In the future, the focus will be on high-value human work, where upskilling and reskilling constitute the main objectives of talent strategies. Rapid change in knowledge and skills lifecycles demand a Learning & Development Strategy that provides learning modules that help identify and develop future skills and, more importantly, enable regular reviews. Learning programmes that foster education and individual development, opportunities that promote transparent and flexible career paths and broaden the range of tasks, rank high among talents. People want to

be part

of this transformation where busi nesses evolve into learning organizations. They want to play a role in the development of future skills as this provides them with orientation and the key to unlock innovation and creativity. However, this development needs a framework that allows a balanced error and feedback culture as well as trust in new work approaches.

Creating a sense of belonging

Undoubtedly, HR has moved away from the lockdown-induced standstill of the recent past. HR is now trying to best counteract today's crises of inflation, war, and energy shortages. It needs to move into the new year with a healthy portion of optimism. Whereas little can be done about these crises, HR can be instrumental in building work environments that employees feel connected to. People who feel a sense of belonging are more likely to identify with and stay in the organisation. For HR this means: To move the organisation forward, the first huge step in the right direction is creating a sense of belonging.

> Gabriele Andratschke Head of Group Human Resources GrECo Group



¹ https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-

²⁰²²¹¹⁰⁸⁻¹

² https://www.eurofound.europa.eu/publications/report/2022/the-rise-in-telework impact-on-working-conditions-and-regulations

³ https://www.charta-der-vielfalt.de/en/diversity-charter-association/about-the-diversity-charter/ 4 https://www2.deloitte.com/us/en/insights/ focus/technology-and-the-future-of-work/redesign

The world is changing, enter a new world order!

Employees expect more from their employer than ever before. Meeting these expectations will involve more personalisation of the health and benefits offering.

In February 2022 the unthinkable happened: a war in Europe! Further significant disruptions aggravated the already fragile and near-breaking healthcare and financial systems across the globe. Many believe these disruptions have permanently altered the world order. Managers and business owners have made it their top priority to protect the health and safety of their employees.

A new world order ...

History tells us that Woodrow Wilson and Winston Churchill introduced the term "new world order" to global politics, describing a new era of history marked by a profound shift in world political philosophy and the worldwide balance of power. Over the years, it became a factor in domestic and international relations and in legislation. It also sent out a clear message that change to the status quo was on the cards. As a result of the global consequences to the war in Europe, "a new political world order" has come about, again.

Rapid change and shifting trends have also found their way into companies. In response to the economic crisis employers are taking steps to support their staff, arguably much more than we have seen in recent memory, but this can only go so far as it is not just individuals who are affected. Employers also need to address their short, medium, and long-term strategies simply to remain in business.

The cost of living has risen significantly. Levels of inflation across the globe have spiked. Talks of recession and warnings of energy price increases have become reality. The war in Europe, which many thought would be over quickly, still rages on, with terrible human loss.

The news presents a gloomy outlook – yet, still, employers continue to uphold both health and benefits in their companies, whilst at the same time they are facing increasing insurance premiums and crippling energy bills. Why? Their employees are important, as are the families. With this, we are seeing a shift in how employers are looking at their future benefit programmes - a steady wise in employers

ripping up the "benefits blueprint" and looking at how to restructure their benefits to be more sustainable; more

package could better support their employees.

is welcomed by all, this is only one part of the solution. Employers with voluntary-style benefits, discount schemes Nowadays, employees expect more working environment. Besides that, etc can also signpost employees to these as they can offer real-time savings for every-day-expenditure. In view of the current economic backdrop where pressure on salaries has started to impact, we are seeing more employers incorporating this into the wider offering, been well-received by employees.

We need to better listen to our people

People typically don't like to admit it they are struggling or ask for help! The same applies to financial difficulties, where many people struggle silently when faced with the next household bill, rising energy bills, dental costs, etc. Hence, employer attractiveness has long since ceased to be defined by just the daily fruit basket or a water cooler. Corporate culture and wider wellbeing must therefore be placed permanently on the leadership agenda to enable employers to better support employees and promote financial, mental, physical and social Wellbeing.

a complex dynamic between the culture of the company, the work environment, external factors, and the physical, social, psychological & mental health of employees – it also perfectly dovetails into the wider ESG conversation and the key sustainable development goals!

As the Human Sustainability Index, a new way to track Wellbeing and performance, gains momentum, we're seeing more and more organisations wake up to how they can decrease burnout and build performance and Wellbeing at the same time.

the individual; however, they first need to listen to what their employees are employee "benefit" just because it may be a good idea for the company. Over for their pension.

fit for purpose to assess how the wider the years, I have seen many employee "benefits" introduced (sometimes at significant cost to the company) only to hear the end recipients, the Whilst some level of financial support employees, say that it isn't something which is needed or wanted.

from their employer than ever before. Meeting these expectations will involve more personalisation of the benefits offering: Employers reviewing what benefits are offered, restructuring leave and working policies, bringing forward salary and anecdotal evidence shows this has reviews to help those who need it most, and perhaps even shaping a position to suit the skills, experience, and ambitions of the individual they want to recruit. Ultimately, employees are expecting employers to work hard(er) to attract and retain them. Those that do can expect to gain the very best talent. Those that don't will face an uphill struggle in getting the right people, achieving employee loyalty, and of course engaging their people!

Do Health & Benefits really matter to an employee?

Absolutely yes, but with different emphasis. A recent report by edays showed that 75% of employees are more likely to stay with their employers because of a great Health & When it comes to Wellbeing, it is Benefits programme. Considering a new political world order, employee cross-border migration and decreased standards of living, employers need to recognise that their Health & Benefits, together with corporate culture, are ways to differentiate themselves, to compete for talent, retain staff and better engage their workforce.

At the same time, employers need to keep in mind that the success of any benefits programme largely depends on benefits being tailored to the needs of a diverse workforce. As no workforce is the same, benefits that matter to one group of employees Employers also need to focus more on may not matter to another. Millennials for instance may be most concerned about the debt they have saying, and not simply push forward an to pay; older employees will focus more on whether they have enough

What role can an adviser play?

The first step is for employers to better understand their working environment, culture and people. Culture plays a key role. It provides employees with a solid foundation, helps build trust and a safe employers have started to recognise that the value of an effective Health & Benefits offering goes far beyond the traditional objective of recruitment and retention. It also goes far beyond traditional insured benefits, rather it focuses on wellbeing, flexible leave policies as well as wider fringe or lifestyle benefits.

The right benefits strategy, a clear direction as well as practical solutions, will help employers attract the best people and look after the needs of their workforce. Health & Benefits will become more employee-led. More and more employees are wanting to select the benefits that suit them, meaning employers need a multilevel benefit system where people can pick and choose – hence the need for the right technology and digital solutions.

Employers are already looking beyond insured benefits at other factors which are fast becoming part of the wider HR and organisational strategy. Factors that impact decisions concerning benefits design and strategy, such as ESG (climate, DE&I and Governance), alignment of benefits with corporate objectives, employee value proposition and achieving work-life harmony across their domestic and international workforce.

The time is now for employers to invest their benefit budgets wisely and in areas where the impact will be felt most! A one-size-fits-all Health & Benefits package is no longer appropriate, presenting HR with one of their biggest challenges!

> Adam Riley Group Practice Leader Health & Benefits GrECo Specialty



Risk management 4.0 shields against volatile risks

Why insurers should partially block out the past and why forward-looking companies should take charge of their future – because one thing is certain: Nowadays, risk management is more in demand than ever.

Whenever insurers decide whether to provide coverage for specific risks, they turn towards the client's past claims experience. That is how the first insurances came into being hundreds of years ago, and the same principle is still applied today

When negotiating annual renewals 99% of the cases. That is why investinsurers turn towards the client's claims history and include it in their new offer. If an insurer backs out of a contract with a particular sector or an insurance line, it's because topic. The quality of risk has improved negative experiences with claims in considerably as a result. the past have earned him no money. Similarly, any required risk improvement measures also derive from the *»* Industrial companies past claims experience

In times when risks develop gradually at a slow pace, this principle of assessing the past claims history works quite well. Insurers know what to expect, they consider and calculate appropriate provisions, set prices accordingly and include these in their conditions.

What happens if the risk landscape changes in a snap or new risks seem to appear out of nowhere?

The steps insurers then take are best explained by looking at the recent cyber insurance examples. The pandemic boosted digitisation and in turn changed the cyber risk landscape. In response, prices skyrocketed, capacities were reduced, levels of excess increased, risk dialogues became even more laborious and new demands were made. Some businesses received no offer at all for their cyber insurance, and some insurers publicly questioned the future of the product. Many reacted in needed to manage the risk landscape. an almost panic-stricken manner.

Would such radical measures also There's a need for Risk have been taken if there were no pandemic? We doubt it. Cyber risks Businesses are cautioned to not only were on the rise even before the rely on industrial insurers as some, pandemic and were treated as an to date insurable risks, could suffer accumulation risk.

But why should insurers block out Just think about climate change or some of the past in such cases? It's quite simple: insurers react as quickly as risks change, but so do businesses. If you ask the management of a company whether it would prefer "no damage" over "full damage cover", the reply would be "no damage" in ments into cyber security have been stepped up in many companies over the past months. At least now all management levels are highly aware of the

must come to grips with future risks, strengthen their risk management and place it at the top of their agenda. «

Unfortunately, some international insurance groups struggle with a moderate approach as loss events affect them globally. The countermeasures they take (in their panic) often tend to be an overkill for the individual company. But it is precisely the responsibility of industrial insurance to balance this volatility. Insurers should rather stay calm, work hand in hand with their business clients and moderately shape and make the changes This builds trust - and customer loyalty.

Management 4.0 the same fate as cyber insurance.

coverage against natural disasters. Besides, there are many – often new – risks which cannot be insured and which change just as rapidly.

Industrial companies must increasingly come to grips with future risks, strengthen their risk management in the process and place it at the top of their agenda. This, however, means more than just implementing the risk improvement measures which insurers impose upon them something which almost all market players have propagated at an inflationary level, and which only addresses the past. It is rather a matter of defining future risk changers, deterg their possible consequences for one's company and preparing accordingly – a forward-looking risk management 4.0, so to speak.

A partner who not only focuses on mere risk transfers but acts as a risk adviser, who sends out the right signals and provides expertise through a know-how pool can create real added value for industrial companies. By working in tandem with clients the insurance partner can help to meaningfully shape the future in an ever more complex, interconnected, and fast-moving world.

> Andreas Schmitt Member of the Executive Board GrECo Austria



"Natural gas seems to be the new gold."

Michael Kolb, Board Member at Acredia, Austria's leading credit insurer, talks with Lisbeth Lorenz, GrECo's Group Practice Leader Credit & Political Risk, about the political effects of the energy crisis and the macroeconomic situation of the former Yugoslavian countries.

Lorenz: On top of the already acute crises, new blocs are emerging between the EU and USA on the one side and Russia and China on the other side, exacerbating the threatening situation from both sides. Do we need to fear, that countries such as Hungary or Turkey will be caught under the wheels?

Kolb: The accelerated formation of blocs poses a huge challenge to both Turkey and Hungary. Turkey relies heavily on Russia for its import of energy, while being one of the largest investors in Ukraine at the same time. Reconciling both interests will be difficult. The situation in Hungary is slightly simpler. While Hungary imports about 8.2% of its goods from China, its largest trading partner in terms of import and export is Germany. Besides that, the basis of Hungary's economy is more stable than that of Turkey as the country is heading towards a balance of payments crisis.

Lorenz: From a credit insurance point of view Serbia presents itself as an interesting market. The country is not clearly positioned between Russia and Europe and has recently approached both the IMF and the UAE for financial support. How do you assess the current situation? In which direction will the pendulum swing?

Kolb: That is difficult to predict. Fact is that the political situation has somewhat stabilised over the last years - with positive effects on the economy. While Serbia strives to become part of the EU, the Kosovo conflict remains unresolved.

Lorenz: We currently find ourselves in the middle of a crisis cocktail: war, inflation, energy crisis, climate catastrophe, nuclear threats, pandemic, cyber war, blackout – we are facing all these issues at the same time.

What is your opinion on this crisis mix by looking at Austria on the one side and CEE countries on the other side?

Kolb: Global crises such as a war, the pandemic or climate change affect all of Europe. The real question is: How resilient are the individual nations? There is a strong economic interdependence between the European countries. For example, should Germany slide into a recession, this would have great implications for Austria, the Czech Republic, Croatia, Slovenia, and Poland.

Lorenz: The market failures in the energy sector appear to have a positive side effect -a boost for the energy transition. Are the CEE countries well positioned for this, given the fact that most of them rely heavily on Russian gas? How will it affect the competitiveness of the individual countries?

Kolb: Natural gas seems to be the new gold. In view of the complexity of the problem, collaborating countries are at an advantage. In terms of the energy transition, a recent World Economic Forum study shows that the countries in the CEE region have varying positions. On the one side are the role models with Croatia, Slovenia, Hungary, Slovakia, and the Czech Republic. They have the necessary capital, the technologies required to tackle the transition as well as an open access

to the market. On the other side there are Montenegro. Serbia, and Moldova.

These countries come in last in terms of the willingness to transform.

Lorenz: Acredia is responsible for the former Yugoslavian countries which experienced vastly different developments. How would vou rank the macroeconomic outlook of these countries? Where do opportunities outweigh risks and vice versa?

Kolb: There are opportunities in almost all countries. When it comes to risks, however, there are huge differences. Our experts have assessed the individual differences in the current Country Risk Report published by Allianz Trade.

A positive business environment exists in Croatia and Slovenia, with political stability and manageable economic risks (B2 and BB2 respectively). Both countries though are struggling with high national debt and unemployment. Especially Croatia's tourism was hard hit by lockdowns during the pandemic. Joining the European Monetary Union on 1 January 2023 could boost economic activity.

Serbia also demonstrates a moderate risk level (B2). Companies benefit from an economic growth potential, a stable currency and strong national demand. On the downside, there is poor infrastructure, a perceived high level of corruption as well as a high level of foreign debt.

The risks in Macedonia are slightly higher (C2). However, the country enjoys good relationships with the EU and a relatively low inflation rate. Unfortunately, the implementation of much needed economic reforms is sluggish, and the rate of both unemployment and foreign debt is high.

We find a more delicate situation in Bosnia and Herzegovina due to the country's high political risk (D3). The economic environment is weak and characterised by poverty and unemployment. On the positive side, the exchange rate is stable and the country's inflation rate is low.

The EU candidate Montenegro currently poses the biggest risk for companies (D4). Despite a strong growth potential in tourism, the economy is unstable. There is a perceived high level of corruption and foreign debt has been high for years.

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"Be more agile!" How to anticipate a transforming risk landscape

An effective risk management process is a basic requirement for tackling transformation risks. In most cases, the risk analysis that goes with identifying risks focuses on actual risks. Abstract risks, which are currently hard to assess and thus difficult to evaluate, yet which in essence derive from systemic change or resultant strategic decisions, are often overlooked. However, to master the ever-increasing speed of change we are challenged to adjust the pace with which we tackle the associated risks. Agile risk management plays a decisive role in this process.

> Unlike the tangible assets in former years, it is now the intangible assets which increasingly influence the transformation of companies' risk environment. The major challenges for a forward-looking risk management are posed less by the concrete individual risks at an operating level but more by the abstract systemic risks which are caused by global events and external developments.

- Primary transformation risks derive directly from the risks associated with systemic change. For example, the impact of the war in Ukraine on the supply of energy and the development of prices in Europe are a result of geopolitical transformation.
- Secondary transformation risks are typically speculative. They include both risks and opportunities and derive from the metamorphosis which companies have undergone because of systemic change. The aim is to emerge from the crisis stronger than before and/or take advantage of the new opportunities presented by this change. The resultant new risks – despite being abstract – are of great significance and cannot be ignored. They must be viewed from a holistic perspective.

How systemic change affects insurance

Primary and secondary risks tend to increase during a transformation process. They evolve over time. In the beginning, these transformation risks can only be identified with great difficulty. Most of the time we tend to pay less attention to them. Only when they reach a specific threshold, when we become aware of "soft signals", can they be identified as such and dealt with by risk management.

When developing suitable risk management strategies, the attempt to transfer these risks to the insurance market as part of the development of suitable risk management strategies is bound to fail in most cases. The principle of insurability applies. This means, a risk must be measurable for the insurance market to secure adequate capacities. If there is no measurability – as opposed to the maximum loss calculation in the case of fire risks, where the possible maximum loss (PML) represents the maximum expected damage caused - it will be determined based on data modelling of historical risk and claims as well as on actuarial assumptions.

Since new risks and transformation risks lack the required historical data, there is usually also a lack of availability of insurance capacities, especially in their uncertain early stages of development. Adequate insurance solutions (can) only come into being over time.

The current systemic transformation leads to numerous new and changing risks which cause companies' risk landscapes to change permanently and at an increasingly rapid pace. These dynamics now result in less and less insurance for operational risks, which in the past were adequately and successfully insured.

Thus, as the gap between the lack of insurability and company risks continues to widen, there is an urgent need for the implementation of new methods in risk management.

A transforming risk landscape is often ignored

In practice, many risk management systems that have been implemented

only manage concrete risks which already exist. Due to a lack of both early-warning mechanisms and the outside perspective on systemic change and its global events, the risk analysis focus is still on the known and assessable risks. The attention is on the actual situation of the risk environment.

Today's abstract risks, i.e. risks which still evolve as a result of the changing business environment or new risks arising from strategic changes in the business model that aim at seizing new opportunities, are often ignored. In practice, the resultant transformation of the risk landscape is hardly ever anticipated. It is only dealt with once risks manifest themselves because that is when they can be identified and assessed accordingly.

So, how can risk management help to tackle increasing volatility, uncertainty, complexity, and ambiguity and, in turn, boost the resilience of companies? An effective approach that facilitates an agile management of abstract transformation risks needs to be implemented. Existing risk management processes must widen their scope and perspective with some type of risk forecasts, enabling risk managers to anticipate risks at an early stage and allowing them to better prepare themselves.

Agile approach to anticipate transformation

Quite often, we encounter situations where a company's risk management is organised in closed administrative departments which function like silos that were put in place to comply with legal requirements. Because such risk management deals with risks at an individual level only, its benefit as a company-wide tool to effectively manage risks often fails to achieve its full value.

The agile management of risks and opportunities is based on a corporate culture that is open-minded towards such risks and opportunities and is organised around transparency, dialogue, trust, and constant feedback cycles.

It comprises interdisciplinary teams whose members act with utmost flex-

ibility as and when needed and who are an integral part of strategic and operative decision-making processes.

That way, transformation risks can be anticipated and acted upon at an early stage. This boosts the resilience of companies, enabling them to make the most out of future opportunities.

Anticipating transformation risks at an early stage means viewing the world from a future perspective and interpreting the inherent risk situation in the best possible way. Paying attention to soft signals, like new and shifting trends, as well as an open-minded attitude towards strategic considerations helps the establishment of effective early-warning indicators to manage risks.

Agility drives insurability and strengthens resilience

As a risk specialist, it is our vision to manage the risks of our clients in such way that they can rest assured and focus on their core business.

As a loyal and trustworthy partner, we work for and with our clients in flexible, interdisciplinary teams where we prove our transparent, dialogue-driven culture every day.

We anticipate systemic change and proactively direct our organisation towards the future needs of our clients. Agile risk management plays a key role for us.

In future, our progressive service approach will focus even more strongly on anticipating any change and resultant risks at an early stage.

HORIZON — "Risk Thought » Fast Forward" is our platform for riskthought leadership. It follows our ambition to anticipate systemic change at an early stage, drive the insurability of a transforming risk landscape and create value through tailored solutions that strengthen our clients' resilience and protect their future ventures.

GrECo, matter of trust.

Georg Winter CEO GrECo Group



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Gerald Dums heads the purchasing and logistics division at Donau Chemie AG. In addition to these responsibilities, he coordinates the Group's insurance services and manages the sustainability efforts for his divisions. Gerald has 25 years of international experience with large Austrian industrial companies and is an active member of Pro Danube Austria, the Federal Association of Materials Management Austria and strengthens the management committee at VPI Austria.

Donau Chemie is a Viennese based company and counts among the largest in the chemical sector. It produces and distributes base chemicals such as clorine, sodium hydroxide solution, hydrochloric acid or calcium carbide, manufactures application-specific compounds, and produces and distributes activated carbons. Donau Chemie products are mostly found in consumer goods in the field of cosmetics, household and technology.

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Erne Fittings, founded in 1920 in Vorarlberg, Austria's most Western province, is the world's leading manufacturer of top-notch butt-weld fittings for the approved market, focusing on the energy in-dustry. Erne Fittings employs about 350 people at its production facilities in Schlins, Mürzzuschlag (Austria) and Jubail (Saudi Arabia) and achieves an annual turnover of about EUR 70 million <u>www.ernefittings.com</u>

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Acredia, Austria's leading credit insurer, is a subsidiary of the Oesterreichische Kontrollbank AG and Euler Hermes AG. As per 31st December 2021, Acredia's total liabilities amounted to EUR 29 billion and the solvency ratio was at 268.5%. www.acredia.at

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Mariana Kühnel has been Deputy Secretary General of the Austrian Federal Economic Chamber since September 2018. Her area of responsibility includes not only European policy and international affairs, in particular ADVANTAGE AUSTRIA, but also future-oriented topics of education policy, innovation and digitization, as well as target groups (including startups and creative industries) and crisis management. From 2010 to 2018, she worked in various senior positions at Erste Group Bank AG, such as Head of Group Board Support & Stakeholder Management. She applied her European expertise and experience as Head of European Affairs at Erste Group Bank AG and as Chief Policy Advisor to an Austrian MEP in the European Parliament in Brussels. She holds a Master of International Relations and Diplomacy from the College of Europe in Bruges and studied Economics at the Vienna University of Economics and Business. Since May 2022, Mariana Kühnel is a member of the Supervisory Board of Erste Group Bank AG.

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ENGEL is one of the leading manufacturers of plastic injection moulding machines. The Group today provides all technology modules for plastics processing from a single source: injection moulding machines for thermoplastics, elastomers, and automation, including individual components which are equally competitive and successful on the market. With nine production plants in Europe, North America, and Asia (China, Korea) as well as subsidiaries and representatives in over 85 countries, ENGEL provides customers all over the world with optimal support, new technologies and cutting-edge production plants and is a driving force for their competitiveness and success. <u>www.engelglobal.com</u>

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