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Study

Swedish companies' experiences of the war in Ukraine

Lessons for businesses and total defence



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Original front page. Swedish civil defence and resilience agency. Advant

Swedish companies' experiences of the war in Ukraine: Lessons for businesses and total defence

Prepared by: Forever Sustainable, translated by AI. Qualitative English translation can be prepared onrequest

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Suggested citation: Nachemson-Ekwall, S., Beser, N., Trane, A., & Davidson, P. (2026). Swedish companies' experiences of the war in Ukraine: Lessons for businesses and total defence. Forever Sustainable, commissioned by the Swedish civil defence and resilience agency. November.

The original report in Swedish can be downloaded from https//rib.msb.se/filer/pdf/31541.pdf
Publication number: MCF0210 – November 2026 ISBN: 978-91-7927-796-3
or Forever Sustainable Svenska-foretags-erfarenheter-fran-krigets-Ukr.pdf

The Swedish civil defence and resilience agency commissioned and funded this research report. The authors alone are responsible for its content.

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About the report

The starting point for this report is the Swedish civil defence and resilience agency's brochure Preparedness for businesses – In case of crisis or war.[1] The brochure advises businesses on strengthening their ability to continue operating during crises, the threat of war and war. Its advice covers business continuity planning, mapping critical dependencies, staffing, crisis management, cybersecurity, training, exercises and cooperation.

Commissioned by the Swedish civil defence and resilience agency, Forever Sustainable has examined Swedish companies' experiences of operating in Ukraine since Russia's full-scale invasion in February 2022. The study analyses how companies' preparedness has worked and developed in practice over several years of war, with simultaneous and recurring disruptions to energy supply, transport, communications and access to staff.

The pressures described by the companies have clear parallels with the threats and disruptions addressed in Planning assumptions for total defence 2025–2030, a joint planning document from the Swedish civil defence and resilience agency and the Swedish Armed Forces.[2] The experiences from Ukraine therefore provide practical knowledge about how critical dependencies interact and how companies' preparedness is tested when several basic functions fail at the same time. They also provide a basis for identifying vulnerabilities and developing preparedness in Sweden.

The report is primarily intended for people who own, lead or work in a small or medium-sized enterprise. It is also relevant to municipalities, regions, government agencies and other organisations concerned with business preparedness and the private sector's role in total defence.

Experiences from Ukraine cannot be transferred directly to Swedish conditions. The security situation, institutions, geography, legislation and organisation of total defence differ. In the survey, 27 of 28 companies, 96 per cent, consider their experiences relevant to preparedness planning outside Ukraine as well. At the same time, 17 of 26 companies, 65 per cent, believe that some lessons are difficult to transfer between countries and contexts. The report therefore seeks to identify the vulnerabilities companies have encountered, understand which solutions have worked and under what conditions, and show how the underlying principles can strengthen Swedish businesses' preparedness.

[1] Myndigheten för civilt försvar, 2026a.

[2] Försvarsmakten and Myndigheten för civilt försvar, 2026.



Kyiv, May 2026. Photograph: Madeleine Filander, Swedish civil defence and resilience agency.

Contents

1. Summary – the main lessons 6
2. Introduction 12
2.1 How the study was conducted 12
2.2 Why Ukraine and the experiences of Swedish companies? 13
2.3 Concepts and research – the role of businesses in crisis and war 15
3. Survey findings 19
3.1 Preparedness for simultaneous and prolonged disruptions 19
3.2 Energy preparedness during prolonged disruptions 23
3.3 Employees and leadership under prolonged strain 27
3.4 Logistics, inventories and alternative flows 30
3.5 IT and cybersecurity – from protection to digital continuity 33
3.6 Repair and reconstruction – restore functionality 35
3.7 Financing and financial capacity to act 39
3.8 Cooperation is part of a company's defence 41
4. Ten Swedish companies' experiences of the war in Ukraine 47
4.1 Sigma Software – eight years of preparation saved the IT company 47
4.2 Synevo – when the Odesa laboratory was damaged, Kyiv took over the samples 50
4.3 Llentab – building premises that allow industry to continue 52
4.4 Mining equipment manufacturer – continuity management outside Ukraine and clear communication 55
4.5 Vandra Rugs – restarting rug weaving in western Ukraine 57
4.6 Väderstad – machinery that keeps agriculture running as the workforce shrinks 60
4.7 Stritex – the clothing factory became a source of stability when the men went to war 62
4.8 Begoma – the freight forwarder that dared to enter when the war began 64
4.9 Scania – trucks strengthen Ukraine's resilience 66
4.10 Export-oriented manufacturing company – keeping a bombed factory alive 69
5. Analysis – what strengthens companies' resilience? 72
6. Lessons for Sweden 76
Appendix 1. Questions and answers on preparedness in your own business 80
References 81

1. Summary – the main lessons

Even during crises and war, food and medicines must reach their destinations, transport must function and essential societal functions must be maintained. Companies' ability to continue operating and restore critical functions is therefore an important part of Sweden's overall preparedness and civil defence.

Russia's full-scale invasion of Ukraine demonstrates the pressures that a prolonged war of aggression can place on business. According to the Swedish Defence Commission, Russia is the threat that determines the scale and design of Sweden's and NATO's defence planning.[3] For several years, Swedish companies in Ukraine have had to manage attacks on infrastructure, disruptions to energy supply and communications, disrupted transport and supply chains, and military mobilisation and staff shortages. Their experiences therefore offer valuable knowledge about how Swedish businesses can strengthen their preparedness for serious crises and, ultimately, an armed attack on Sweden.

The study draws on a survey comprising 31 company observations, ten in-depth company case studies, and interviews and discussions with around fifty people, including business leaders in Ukraine, researchers and other experts. The companies' accounts from summer 2026 show how operations have often continued, but under conditions very different from those before the invasion. Production continues despite recurring interruptions, transport is rerouted and employees work remotely. Generators keep offices and production facilities running. Behind this seemingly functioning daily life are extensive adaptations, investments and repeated changes in priorities. Continued operation does not mean operating in the same way as before.

Meanwhile, the pressures of war have intensified. During the first eight months of 2026, 55 per cent more civilians were killed or injured than in the same period of 2025, according to the UN Human Rights Monitoring Mission in Ukraine.[4] In August, the mission recorded 32 attacks on warehouses, distribution centres and other facilities belonging to six major Ukrainian food, retail and logistics companies, compared with 11 in July.[5]

Mobilisation, staff shortages and recruitment difficulties further complicate operations. After several years of war, psychological strain, uncertainty and pressures on employees' families also affect companies' ability to endure. Companies must manage new disruptions while maintaining critical functions, restoring lost capacity and adapting to a war with no clear end.

Ten lessons summarise the companies' experiences and show how they can help strengthen Swedish businesses' preparedness for serious crises and war.

1. Test preparations and make the lessons last

In summer 2026, 23 of 30 companies, 77 per cent, rated their preparedness for prolonged wartime conditions as fairly or very good. Several had continuity plans before the invasion, but the war has demonstrated the difference between having a plan and being able to put it into practice. Decision-making and communication channels need to be rehearsed, backup solutions tested, and responsibilities and authority clearly defined even when conditions change. In 22 of 30 companies, 73 per cent, crisis management, continuity planning or clearer prioritisation have become permanent ways of working.

[3] Försvarsberedningen, 2026.

[4] HRMMU, 2026a.

[5] HRMMU, 2026b.

Example: IT company Sigma Software had arranged evacuation transport but had to find alternatives quickly when the contracted transport failed to operate. Its experiences in Ukraine have subsequently been used to develop the group's global business continuity planning.

2. Decide what must keep working – and for how long

Experiences from Ukraine show that continuity does not always mean that operations can continue as before. A company needs to identify which functions must be maintained, at what minimum acceptable operating level and for how long. A few days, two weeks or several months place different demands on staffing, backup power, inventories, transport and financing. Planning therefore also needs to cover replenishing resources, reducing the priority of some activities, and moving functions or performing them in other ways.

Example: When Synevo's laboratory in Odesa was damaged, samples could be sent to Kyiv for analysis. Sample collection continued while the damaged facility was repaired. The critical function could therefore be maintained even when normal analytical capacity was temporarily unavailable.

3. Map dependencies and how disruptions spread

Of 30 companies, 23, or 77 per cent, identify at least three disruptions or dependencies as particularly critical to continued operations. Energy supply is the most common individual factor, also cited by 23 of 30 companies. A power outage can simultaneously affect production, water supply, IT, communications and employees' ability to work. Map how the company's critical functions depend on one another and on external actors. Trace dependencies further along the supply chain and examine the knock-on effects that can arise when several systems fail at once.

Example: Logistics company Begoma's Kyiv office uses battery backup for computers and Starlink as an alternative internet connection. Electricity, digital systems and connectivity must function simultaneously for transport to be planned and carried out.

4. Secure staffing, safety and critical skills

Of 29 companies, 26, or 90 per cent, report that mobilisation, military service or other long-term absence has affected their operations. Also, 26 of 29 companies report an increased need for psychosocial or family-related support. Safety, family responsibilities and recovery affect employees' actual ability to work. Workforce preparedness therefore needs to cover both access to people with the right skills and the conditions that enable them to keep working. Broadening skills and transferring knowledge also reduce vulnerability when key employees become unavailable.

Example: Truck manufacturer Scania works with Beredskapslyftet to train women as truck drivers and mechanics. Broadening the recruitment pool helps the company and its customers address shortages of skilled labour.

5. Give local managers authority and prepare substitutes

The war has required faster decisions closer to operations. Of 30 companies, 25, or 83 per cent, report faster and more adaptable decision-making, while 18, or 60 per cent, have increased local decision-making authority. At the same time, local operations need access to support and resources from owners and headquarters. Even in smaller companies, it must be clear who may make critical decisions and who can take over in their absence. A substitute needs not only knowledge but also access to information, system permissions and the necessary powers of attorney.

Example: One company, a mining equipment manufacturer, has established a continuity management team within its regional organisation in a major city outside Ukraine. It has people ready to take over

critical functions in Ukraine, with system permissions, information and legal powers of attorney prepared in advance.

6. Build durable backup solutions and track their dependencies

Companies have gradually built up several complementary alternatives. But backup power needs fuel and maintenance, batteries need charging and inventories need replenishing. Every backup solution therefore has dependencies of its own that must be mapped and secured. Also examine whether the main solution and its backup could be disabled by the same event. For example, two suppliers provide limited redundancy if both depend on the same transport route or subcontractor.

Example: In 2024, workwear manufacturer Fristads bought a large diesel generator for Stritex's clothing factory in Stryi. Stritex added battery backup and uninterruptible power supplies (UPS) for computers and production equipment, because an abrupt stop can damage a cutting machine. Without the generator, the CEO believes production would eventually have ceased.

7. Secure alternative deliveries and prepare to restart

When normal transport routes, suppliers or facilities become unavailable, a company needs to adapt its operations without interrupting critical deliveries. Alternatives must therefore be usable in practice, with known capacity, reasonable lead times and the necessary approvals. Also prepare to restart damaged operations through repair, reallocation or relocation. Access to spare parts, technical skills and contractors may be as decisive as access to alternative premises and delivery routes.

Example: When Scania's main facility in the Bucha area was occupied and damaged, spare-parts deliveries were redirected to Lviv. Supplies could thus continue from another location, and the central warehouse could later be moved back to Kyiv.

8. Finance continued operations and restart

During the war, companies have had to finance emergency measures, ongoing operations and preparedness investments while revenues remained uncertain. Liquidity creates room to act, but the money must also be usable when needed. Calculate the costs of continued operations and restart, establish decision-making authority for critical payments, and explore financing from banks, owners, customers and suppliers. Weigh the costs of inventories and backup solutions against the consequences of interruption, and check the limitations of insurance cover.

Example: When rug manufacturer Vandra Rugs rebuilt production, it received advance payments from its Swedish parent company and 180-day credit from its Spanish wool supplier. Materials could therefore be delivered before normal cash flow had been restored.

9. Clarify what the company and society need from each other

Business and societal preparedness are mutually dependent. Of 30 companies, 28, or 93 per cent, report contributing to Ukraine's societal resilience beyond their own operations. At the same time, companies need functioning energy, transport, communications and other societal functions. Clarify responsibilities, priorities and contact channels with municipalities, property owners, suppliers and other relevant actors. A company needs to know what it must manage with its own resources, what external assistance it can expect and which other operations depend on its deliveries.

Example: When one of Ukraine's largest metal-packaging manufacturers, a Llentab customer, relocated production from the Sumy region, it chose land in the Ternopil region, where the municipality wanted to attract industry and helped with organisational matters. The companies themselves handled investment, design and construction. Production resumed six months after the decision.

10. Develop the business as customers' needs change

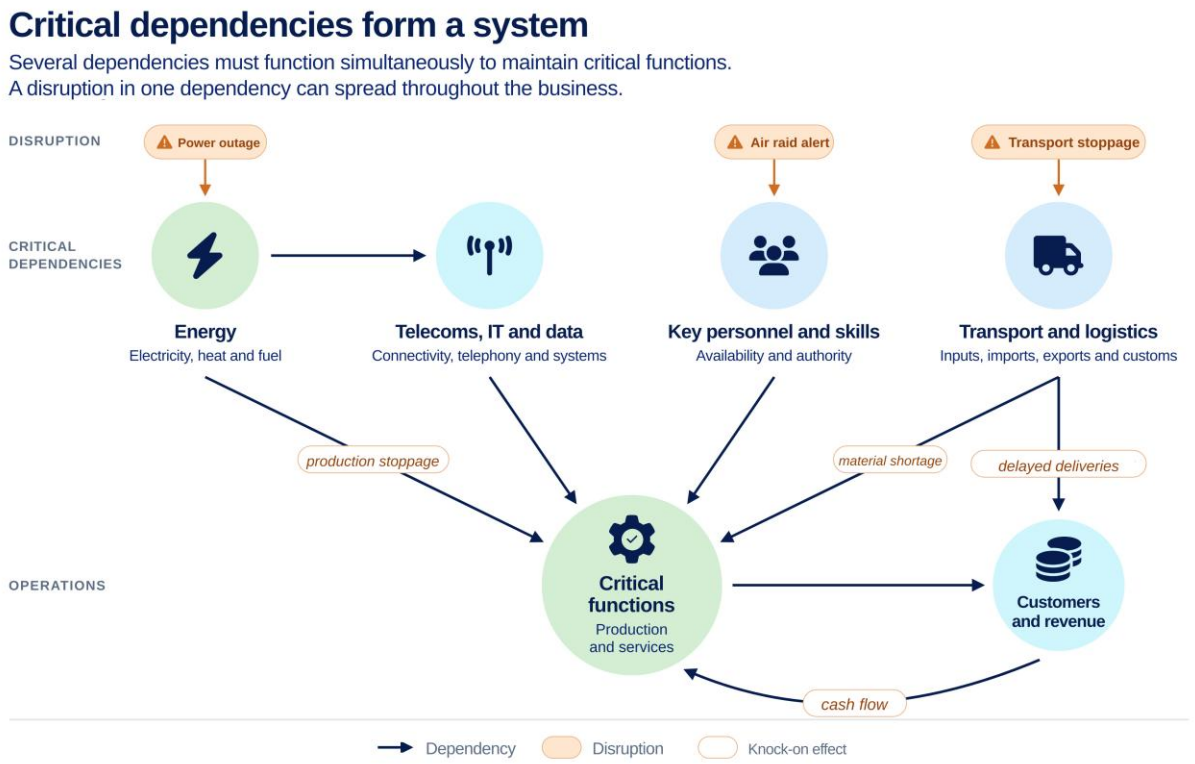
War changes what companies and customers need to continue operating. Energy shortages increase the value of energy efficiency, staff shortages make productivity and automation more important, and recurring damage increases the need for repairs and access to spare parts. Preparedness and business development can reinforce one another. Examine how products, services and working methods can be adapted to customers' changing circumstances. Solutions requiring less energy, fewer specialists or shorter repair times can strengthen both continuity and competitiveness.

Example: Agricultural machinery manufacturer Väderstad initially expected financially pressured farmers to choose cheaper or used machines. Instead, demand for productive and reliable machinery increased as fewer skilled employees had to farm the same areas.

Figure 1. Overview of the main lessons.



Figure 2. Critical dependencies form a system. The diagram illustrates relationships described in interviews and open-ended responses. Disruptions affect dependencies and may spread to critical business functions; the dependency structure varies between companies.



What the study shows overall

The ten lessons illuminate different aspects of companies' experiences of the war in Ukraine. Together they point to an overarching conclusion: continuity during prolonged disruption often requires change. Companies have continued operating by moving production, rerouting transport, reallocating tasks and changing decision-making channels. Preparations have created options, but the ability to use and develop them has been decisive when normal solutions have no longer been sufficient.

A central insight concerns the interaction between the disruptions, vulnerabilities and dependencies that companies identify as critical to continued operation. Critical dependencies are the resources, services and relationships essential to maintaining a company's critical functions and deliveries. Energy, water, communications, key personnel, transport and suppliers often form interconnected chains in which a disruption can have consequences far beyond the area first affected. A power outage can affect IT systems, warehouse management and deliveries even if production still functions. Backup solutions can also create new dependencies. A generator needs fuel and maintenance, an alternative supplier needs functioning transport, and a substitute needs skills, access rights and authority.

There is also a time dimension. A solution that works for a few hours or days may not be sufficient for weeks or months. Inventories are consumed, equipment wears out and people need recovery. Continuity planning therefore needs to start from which critical functions must be maintained, at what minimum acceptable operating level and for how long.

The experiences also show that technical and financial resources are not sufficient in themselves. They must be translated into action through people with the right knowledge, access to information and authority to make decisions. Companies' ability to endure therefore depends on both their own organisation and the surrounding society.

It is this combined understanding that makes the experiences from Ukraine valuable for Sweden. Individual solutions cannot always be transferred directly, but the vulnerabilities companies have faced and the principles that have enabled them to manage those vulnerabilities have wider relevance.

The study's overall conclusion is that preparedness is not a completed state achieved once plans have been written and backup solutions acquired. It is built through preparation, developed through experience and tested when normal operating conditions no longer apply.

2. Introduction

2.1 How the study was conducted

The study examines how Swedish companies with operations or business connections in Ukraine have managed the consequences of war and which experiences can help strengthen business preparedness in Sweden. The companies differ in size, sector and geographical presence. Some are manufacturers; others work in sales, distribution or services. What they share is experience of the war's effects on business through their operations or commercial relationships.

The study combines a company survey with in-depth company case studies, interviews, background discussions and published material. The survey was conducted online using LimeSurvey between 23 June and 21 August 2026. Companies were identified with support from Business Sweden. After checking consent and removing duplicates, the survey material comprises 31 company observations: 29 completed and submitted questionnaires and two partial responses. The partial responses have been included for the questions actually answered.

The survey is complemented by ten in-depth company case studies. Around fifty people were interviewed in total, including business leaders in Ukraine, researchers and other experts. The case-study companies were selected with support from the project team's existing contacts and recommendations from people with a good knowledge of business in Ukraine. The selection aims to illustrate companies with different activities, conditions and experiences. The case studies and other interviews provide qualitative evidence and are not counted as additional observations in the survey material.

Survey results are presented as counts and percentages. Because not all companies answered every question, the number of relevant responses varies between questions. The number of responding companies (n) is therefore stated for each result. Some questions allowed multiple responses. The sample is purposive and is not statistically representative of all Swedish companies with operations or business relationships in Ukraine. The results are therefore used to identify recurring patterns and differences, rather than to draw general conclusions about the prevalence of different experiences among all Swedish companies in the country.

The survey provides an overview of companies' experiences, disruptions and measures. The interviews and open-ended responses deepen our understanding of how companies made decisions, adapted operations and managed critical dependencies. The ten case studies provide a closer and more personal picture of how the war has affected individual businesses and how business leaders and employees have handled difficult decisions, changing circumstances and prolonged strain.

The analysis compares patterns in the survey with interviews and company case studies, relating them to previous research on organisational resilience, studies of businesses during the war in Ukraine and relevant public reports. Combining different sources makes it possible both to identify recurring patterns and to deepen understanding of why certain solutions worked, what limitations they had and how companies' room for manoeuvre changed over time. Open-ended survey responses are presented anonymously.

Structure of the report

The report begins with an account of the war in Ukraine and a review of key concepts and previous research on business preparedness and the ability to manage prolonged disruption.

The survey findings are then presented by theme and explored through interviews, case studies and previous research. Each theme addresses one aspect of companies' experiences of maintaining and

adapting operations during war and concludes with one or more of the report's ten lessons and their implications for Swedish business preparedness.

The ten in-depth case studies are also presented together. They provide a closer picture of how individual companies have managed the consequences of war and how preparation, decision-making and adaptation have worked in practice. The report ends with an integrated analysis and conclusions for business preparedness in Sweden.

The chapters are designed to be read independently. Readers can therefore explore a particular theme, move to a company case study or read the report's overarching conclusions.

2.2 Why Ukraine and the experiences of Swedish companies?

Since Russia's full-scale invasion in February 2022, businesses in Ukraine have had to cope with several simultaneous pressures: attacks on infrastructure, power outages, staff losses, disrupted transport and communications, cyber threats and changing markets. What began as an acute crisis has become a long-term operating condition. Companies need to keep operating while new disruptions occur and previous damage is repaired. This makes Ukraine particularly relevant to understanding how business preparedness functions under prolonged strain.

A survey published by the United Nations Development Programme, UNDP, in 2024, and also cited by the OECD, shows that 64 per cent of the Ukrainian micro, small and medium-sized enterprises surveyed had at some point temporarily suspended or ceased operations after the invasion. Among those that temporarily suspended operations, 84 per cent had resumed at least some activities within six months. A quarter relocated all or part of their operations or opened additional operations in western Ukraine. Companies in eastern and southern Ukraine were most exposed.[6] Restarting does not, however, mean that previous capacity or turnover has been restored. Continued operation may require substantial changes, while companies develop in different directions.

The duration of the war also exposes the limitations of backup solutions. Fuel must be replenished, equipment maintained and people given time to recover. These experiences therefore make it possible to examine both companies' prior preparations and how they have had to change as disruptions have continued.

Sweden and total defence

Using experiences from Ukraine is an explicit part of the development of Sweden's total defence.[7] Businesses account for large parts of society's production, supply and services, while also depending on energy, water and sewerage, transport, communications, labour, childcare and functioning payments. Business and societal preparedness meet in these mutual dependencies.

For an individual business, this needs to be translated into practical questions. Which interruptions could stop deliveries? Which resources can be secured internally, and which contacts need to be established in advance? The analysis also needs to cover the customers and societal functions affected if the company's deliveries cease.

Swedish companies in Ukraine

Swedish companies in Ukraine offer a particular perspective through their connections to both Ukraine and Sweden. They encounter the consequences of war in their own operations and through local

[6] UNDP, 2024, p. 25; OECD, 2024.

[7] Regeringskansliet, 2023; MSB, 2024b.

customers and suppliers. These relationships also give them insight into how other parts of Ukraine's business sector are affected, including small and medium-sized enterprises.

At the same time, Swedish companies have varying degrees of access to international capital, specialist expertise and group resources. A small operation in Ukraine may therefore have more capacity to act than its size suggests. The study's value lies in understanding the vulnerabilities companies have encountered, what made their responses possible, and which underlying principles can be adapted to the circumstances of businesses in Sweden.

The material includes companies in industry and manufacturing, agriculture and food, construction, transport and logistics, trade, IT, pharmaceuticals and diagnostics, and financial services.

Figure 3. Companies in the study; a majority are present in the Kyiv region.



Of the 30 companies reporting employee numbers in Ukraine, 15 have up to 50 employees, ten have 51–250 and five have more than 250. However, the size of the Ukrainian operation does not fully describe a company's resources. A smaller local operation may belong to a large international group and therefore have access to capital, specialist expertise and other resources from the organisation outside Ukraine.

Most companies have extensive experience in the country. Of 30 respondents, 26 have operated in Ukraine for more than ten years. Their geographical presence is also broad. The Kyiv region is the most common location, with 24 of 31 companies, but operations are conducted in several parts of the country. Sixteen companies are present in more than one of the geographical areas used in the survey.

Operations have developed in different ways since February 2022. Twelve of 31 companies report that their operations have contracted but continued, ten that they have expanded, and seven that they are largely unchanged. Two companies report a temporary suspension of operations. Four have relocated operations within Ukraine and three have moved parts of their operations outside the country. Multiple responses were possible.

2.3 Concepts and research – the role of businesses in crisis and war

Research on crisis management and organisational resilience provides a starting point for understanding how companies prepare for disruption, maintain critical functions and adapt operations when conditions change. Studies from Ukraine show how these capabilities are tested during war.

Here we follow the definitions used by the Swedish civil defence and resilience agency.[8] Preparedness refers to an organisation's preparations for managing serious disruption, crises and war. Preparedness planning clarifies the situations an organisation needs to handle, how responsibilities are allocated and which resources need to be prepared. Continuity refers to the ability to continue delivering prioritised products and services at a predetermined capacity during disruption. Continuity planning involves identifying the functions that must be maintained, how long interruptions can be tolerated and which alternatives are required. The minimum acceptable operating level is the level that operations need to maintain when they cannot proceed as usual. Three further concepts are central to this report: robustness, redundancy and resilience.[9]

Robustness refers to the ability to withstand disruptions and limit their impact. Redundancy means having alternative resources or solutions when a normal resource, channel or location becomes unavailable. Resilience describes an organisation's broader ability to anticipate and manage disruption, recover and adapt its operations.

The concepts complement one another. Robustness and redundancy can support continuity, while resilience also includes learning and changing when existing solutions are insufficient. Resilience is used at both company and societal level.[10]

From crisis management to organisational resilience in war

Crisis management is an organisation's systematic effort, in interaction with relevant external actors, to prevent and manage crises.[11] Organisational resilience has a broader time horizon and also encompasses the ability to recover, learn and adapt operations.[12] Research now connects these two perspectives to show how they complement each other before, during and after a serious disruption. During a prolonged war, these processes may also overlap. Companies manage new disruptions while earlier damage is repaired and operations change.[13]

Studies from Ukraine show how business leaders faced profound uncertainty and a war with no clear end during the invasion's first months. Context-sensitive crisis management, improvisation, communication and leadership became highly important. As the war persisted, responses changed. After the initial emergency reactions, large companies developed longer-term adaptations and greater redundancy. Preparation and improvisation thus emerge as complementary ways of working. Planning creates options for action, while adaptation is needed when events depart from the plan.[14]

Small and medium-sized enterprises' preparedness: local capacity to act and cooperation

Companies' resources and dependencies can be examined at several levels. Resilience is shaped through the interaction between employees, the organisation and society, but also through the company's position in a network of customers, suppliers and other actors. Strategy research describes how

[8] Myndigheten för civilt försvar, 2026a.

[9] International Organization for Standardization, 2019 (ISO 22301); MSB, 2024a, pp. 8, 26 and 28.

[10] MSB, 2018, p. 15; Regeringen, 2024, p. 130; International Organization for Standardization, 2017 (ISO 22316).

[11] Pearson and Clair, 1998.

[12] Weick and Sutcliffe, 2007.

[13] Williams et al., 2017; Duchek, 2020.

[14] Opatska et al., 2024; Obłój and Voronovska, 2024.

companies create value and competitive advantage through their resources and their ability to use them.[15] This perspective can be applied to operations facing recurring wartime disruptions, where protecting and restoring critical business resources are central. These may include staff expertise, capital, equipment, digital systems and business relationships.[16]

In this report, critical dependencies are the resources, services and conditions essential to maintaining a company's most important functions and deliveries. A dependency is critical when its loss seriously restricts operations and cannot be managed using available alternatives within the required time.

These may be internal resources, such as key personnel and equipment, or external functions, such as energy, transport, digital communication and payments. The study's survey also examines disruptions and vulnerabilities that companies consider particularly significant. The report uses critical factors as a collective term for these and the dependencies.

Dependencies extend throughout the value chain. Upstream, a company needs inputs and services from suppliers that have dependencies of their own. Downstream are customers who need the company's deliveries, while the company depends on their demand and payments. An interruption may therefore have knock-on effects across several stages, affecting both deliveries and cash flows. Research on critical infrastructure shows how disruptions spread between electricity supply, telecommunications and IT, for example.[17]

Small and medium-sized enterprises operate under different conditions from large groups. An international group can transfer production between facilities and mobilise capital or specialist expertise internally. A smaller independent company often needs to create equivalent alternatives through cooperation with others. At the same time, short decision-making chains, trust and local relationships may enable smaller companies to adapt quickly. Adjusted payment terms, good banking relationships and supplier contacts can create room to act. A study of Swedish textile and clothing companies highlights liquidity, networks, flexibility and learning, but concerns economic crises rather than war.[18] Studies of Ukrainian exporters show that relationships with foreign business partners have helped them manage wartime disruptions, because communication, trust and mutual commitment can provide support when their own resources are limited.[19]

Companies' continuity capabilities are also affected by the society around them. Employees need safety, functioning housing, childcare and opportunities to recover in order to work. A power outage may therefore affect both production and employees' daily lives. Contacts with energy companies, property owners, municipalities and suppliers influence how disruptions are managed and operations restored. Rules, permits and public decisions affect which resources and alternatives are available. Societal-level studies emphasise the institutional and economic conditions under which Ukrainian companies operate.[20]

Learning recurs in several studies of Ukrainian companies that have survived years of continuous war.[21] Learning connects preparation and adaptation, but experience does not automatically strengthen preparedness. Management needs to prioritise and coordinate the work so that experiences lead to changed routines, clearer responsibilities, investment and exercises. When knowledge spreads and working methods change, preparedness becomes less dependent on individual people.

[15] Barney, 1991; Porter, 2000.

[16] Hamberg and Drobovych, 2026b; Chaikova et al., 2026; Obłój and Voronovska, 2024.

[17] Seppänen et al., 2016; Gong et al., 2023.

[18] Pal et al., 2014.

[19] Kantaruk Pierre et al., 2025.

[20] Dligach and Stavytskyy, 2024.

[21] Duchek, 2020; Hamberg and Drobovych, 2026a.

Lessons for business preparedness

Research shows the importance of understanding which resources operations require and how they can be protected and restored during disruption. It also shows how companies' resilience is shaped by the interaction between employees, the organisation and society. Learning can strengthen capabilities over time when experience is translated into changed working methods and preparations.

Swedish companies' experiences in Ukraine make it possible to examine how these relationships work in practice during a prolonged war. For a smaller company, they provide a starting point for reviewing actual capabilities and setting priorities. Conditions vary according to factors such as dependence on individuals, suppliers and financial margins.



April 2024. Photograph: Pexels.

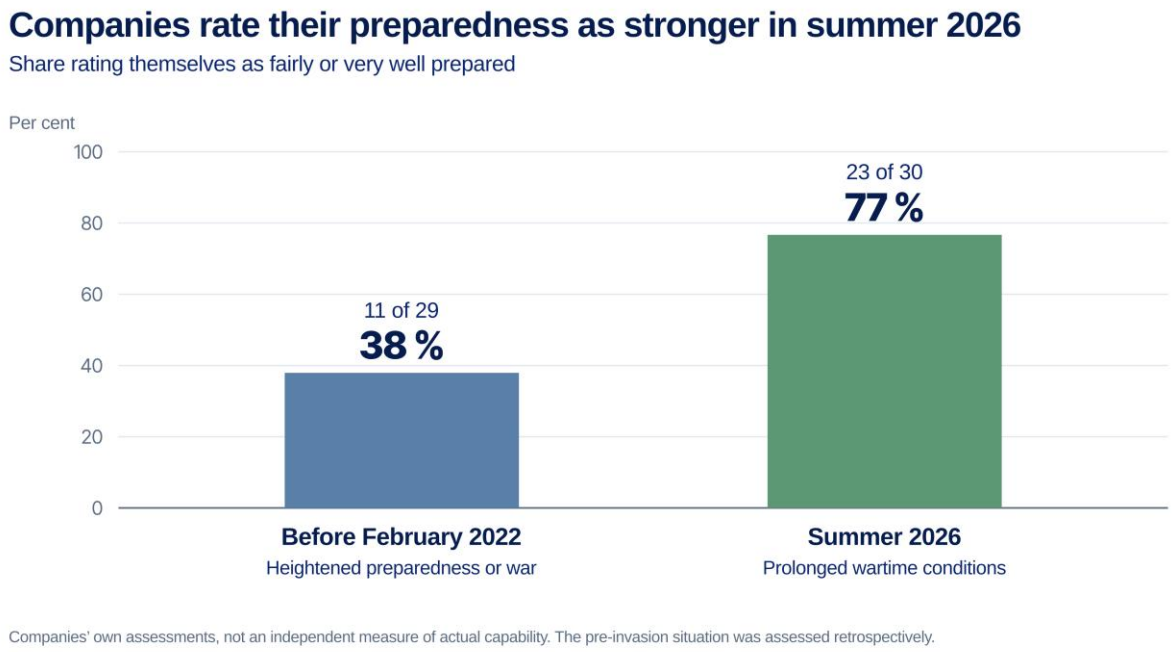
3. Survey findings

3.1 Preparedness for simultaneous and prolonged disruptions

Companies consider their preparedness stronger after several years of war. Their experiences also show that plans, resources and decision-making capabilities need to work together when several disruptions occur simultaneously and continue for a long time.

Eleven of 29 companies, 38 per cent, report that before February 2022 they were fairly or very well prepared for heightened alert or war. In summer 2026, 23 of 30, or 77 per cent, consider themselves fairly or very well prepared for prolonged wartime conditions. The situation before the invasion was assessed retrospectively, and the questions and numbers of respondents differ somewhat.

Figure 4. Companies' self-assessed preparedness before February 2022 and in summer 2026. The pre-invasion assessment was made retrospectively.

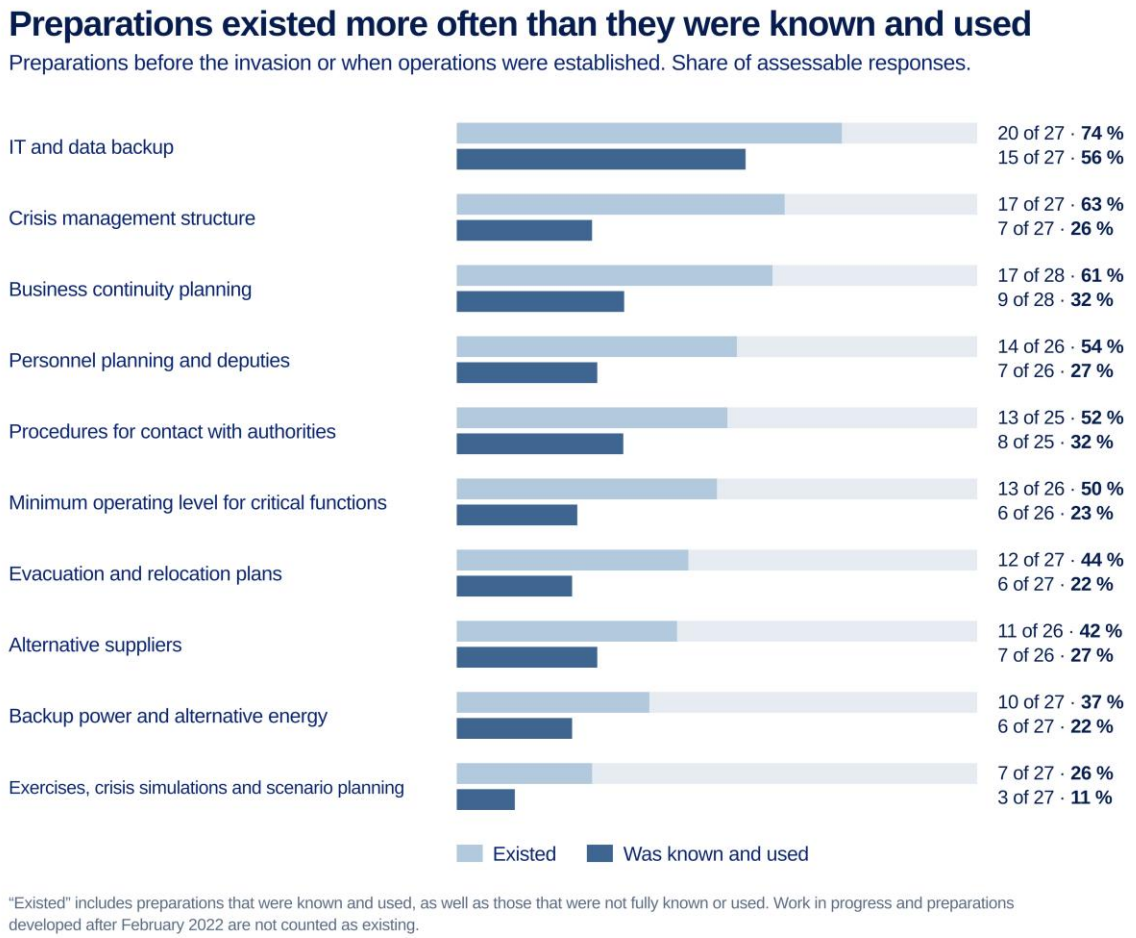


Plans existed but were not always embedded in the organisation

Before the invasion, or on establishment for companies that arrived later, 17 of 28 companies had some form of continuity planning. Nine described it as known and used within the organisation.

IT and data backup was the most established preparation: it existed in 20 of 27 companies and was known and used in 15. Exercises, crisis simulations and scenario planning were least developed: seven of 27 companies reported having them, and three said they were known and used. There was therefore a difference between having preparations in place and embedding and testing them within the organisation.

Figure 5. Preparations before the invasion or on establishment. Percentage of assessable responses; the number varies between preparations.



The interviews describe how plans needed to change. They had mainly been designed for shorter, more limited disruptions. During the war, companies had to manage security threats, power outages, mobilisation, staff fleeing and disrupted transport at the same time. As the pressures continued, solutions also needed to last longer. Companies therefore had to reassess priorities and working methods continuously.

Väderstad illustrates the difference between having preparations in place and testing them. The company had a continuity plan known internally and extensive practical preparations. Generators, fuel, medical equipment and basic supplies were in place in December 2021. However, the company had not rehearsed different scenarios, determined a minimum operating level or decided which functions should take priority.

Operations with more employees rate their preparedness higher

Among companies with at least 51 employees, 13 of 15, or 87 per cent, report being fairly or very well prepared for prolonged wartime conditions. Among companies with up to 50 employees, this applies to nine of 14, or 64 per cent. The same pattern appears for disruptions such as those during winter 2025/26: 13 of 14 and eight of twelve, respectively. Larger operations also identify energy and transport as critical factors more often: energy, 15 of 15 versus eight of 14; transport and logistics, nine of 15 versus four of 14. The group with higher self-assessed preparedness is therefore also the group that more frequently identifies these external dependencies. The groups are small, and the differences should be read as patterns rather than causal relationships.

Several critical factors operate at the same time

A preparedness plan needs to start from what a company must be able to continue doing and the resources this requires. Energy is the most common critical factor in the survey: 23 of 30 companies, 77 per cent, cite electricity, heating or fuel. Next come air-raid warnings, shelter and interrupted working time, cited by 17 of 30 companies, or 57 per cent. Key personnel and skills are cited by 16 companies, telecommunications and IT by 14, and transport and logistics by 13. In total, 23 of 30 companies identify at least three critical factors, and 14 identify at least four. Operations are therefore affected by several disruptions and dependencies simultaneously. Figure 6 presents counts and percentages for each factor and the number of factors identified by companies.

Figure 6. Critical factors identified by companies and the number of factors per company. Multiple responses were possible (n = 30).



Interviews and open-ended responses show how disruptions can spread from one dependency to another and onwards into operations (Figure 2). A power outage may affect production, water, heating, IT and employees' ability to work. A transport stoppage may cause material shortages, delay customer deliveries and affect cash flow. These examples show that disruptions upstream in the supply chain can affect a company's ability to deliver to its customers.

Several companies describe having backup power but still needing to stop work when staff take shelter. Production may also be functioning while finished goods cannot be transported to customers. These examples show that a functioning individual resource is not always enough to complete an entire delivery. A disruption can therefore have consequences far beyond the function where it began.

Backup solutions also have critical dependencies

Before the invasion, Sigma Software had contracted buses for evacuation. When the invasion began, several drivers were unwilling to enter dangerous areas. The company had to find other transport and pay considerably more. The example shows that the contracted solution was affected by the same security threat as the company, and therefore did not provide the availability assumed in the planning.

Backup solutions themselves depend on resources and access to other functions. A generator needs fuel and servicing. A substitute needs skills, access rights and decision-making authority. An alternative supplier provides limited protection if it uses the same subcontractor or transport route as the main supplier.

Open-ended responses and case studies also show how the significance of dependencies changes over time. A generator can keep operations running during a short power outage. During prolonged or recurring outages, access to fuel, servicing, spare parts and staff becomes decisive. Backup power reduces dependence on the electricity grid but makes other resources necessary for continued operation.

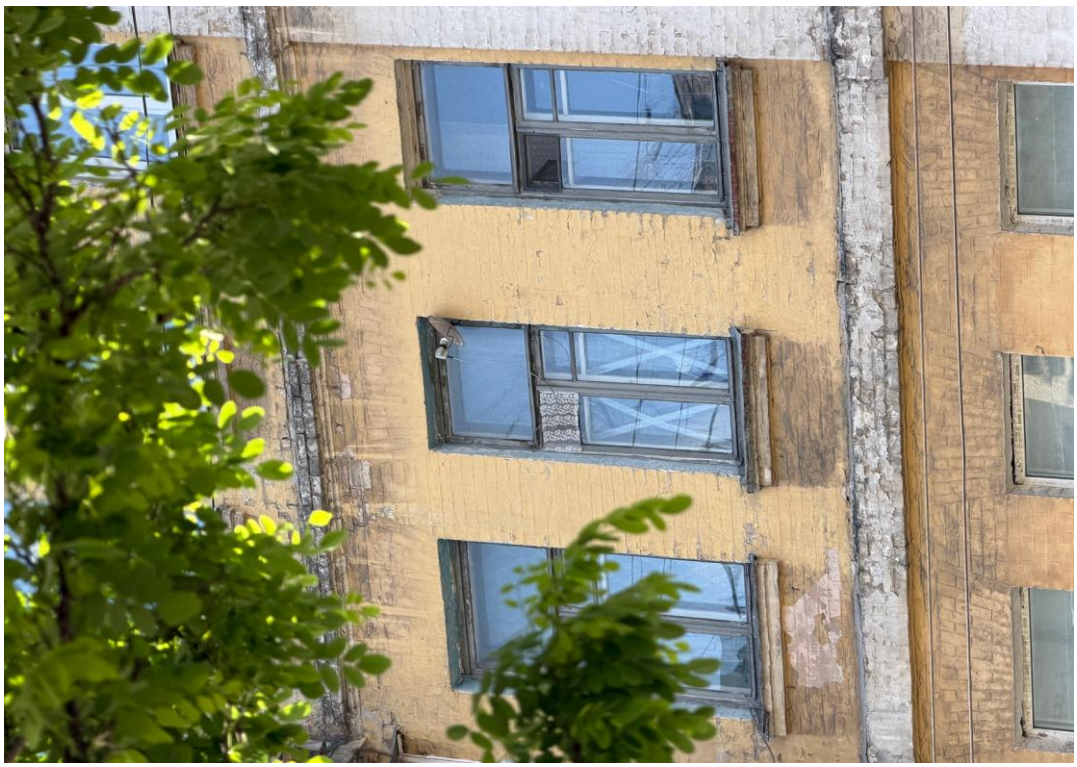
Preparations in place were not always known and used. As disruptions became simultaneous and prolonged, companies needed to reassess their priorities and working methods. The survey shows that companies identify several critical factors. The interviews show how they are connected: backup power is insufficient when staff must take shelter, and functioning production is insufficient when goods cannot reach customers. Even prepared alternatives may be affected by the same disruption. The following sections explore how companies have prepared, adapted and restored operations.

Lessons for business preparedness

- #1 Test preparations and make the lessons last.
- #2 Decide what must keep working – and for how long.
- #3 Map dependencies and how disruptions spread.

For companies in Ukraine, having plans and reserve resources has not been enough. A plan needs to start from critical functions and the resources they require. Preparations also need to be usable when several conditions change at the same time.

A company therefore needs to embed and test its preparations, understand which resources together sustain critical operations, examine whether backup solutions function when several disruptions occur simultaneously, and determine how long resources must last.



Kyiv, May 2026. Photograph: Madeleine Filander, Swedish civil defence and resilience agency.

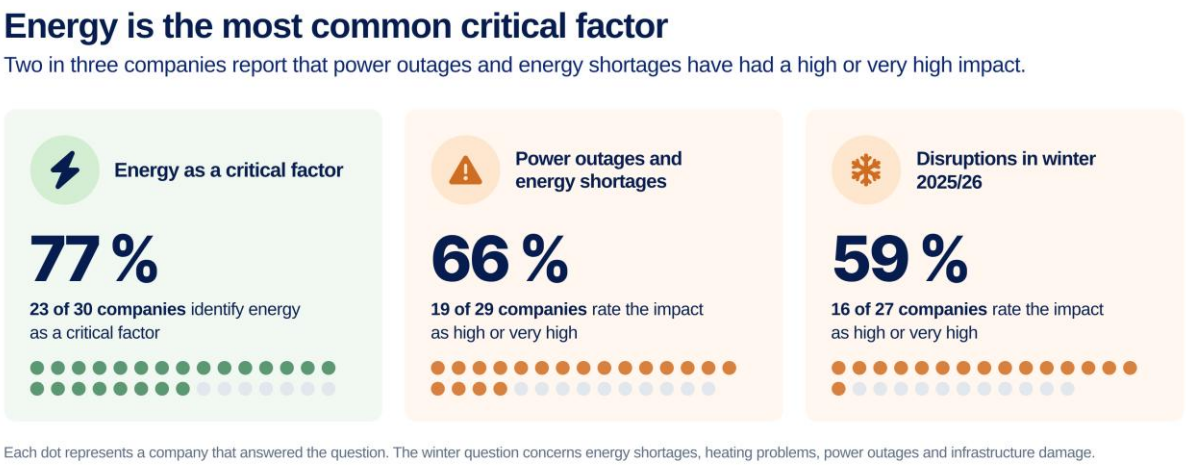
3.2 Energy preparedness during prolonged disruptions

Attacks on Ukraine's energy system have made electricity, heating and fuel recurring constraints on business operations. Companies have expanded backup power and combined more solutions. Their experiences show that continued operation also depends on replenishment, maintenance and which functions must keep running.

Energy is the critical factor identified by the most companies in the survey. Of 30 companies, 23, or 77 per cent, identify electricity, heating or fuel as particularly critical to continued operation. Power outages or energy shortages have had a high or very high impact on 19 of 29 companies, or 66 per cent.

Energy matters because several functions need it at the same time. Energy preparedness therefore needs to consider the whole operation that is to continue, rather than a single function.

Figure 7. Energy as a critical factor and companies' assessment of the impact of disruptions. Respondent numbers vary between questions.



One company describes how electricity disruptions exposed dependencies:

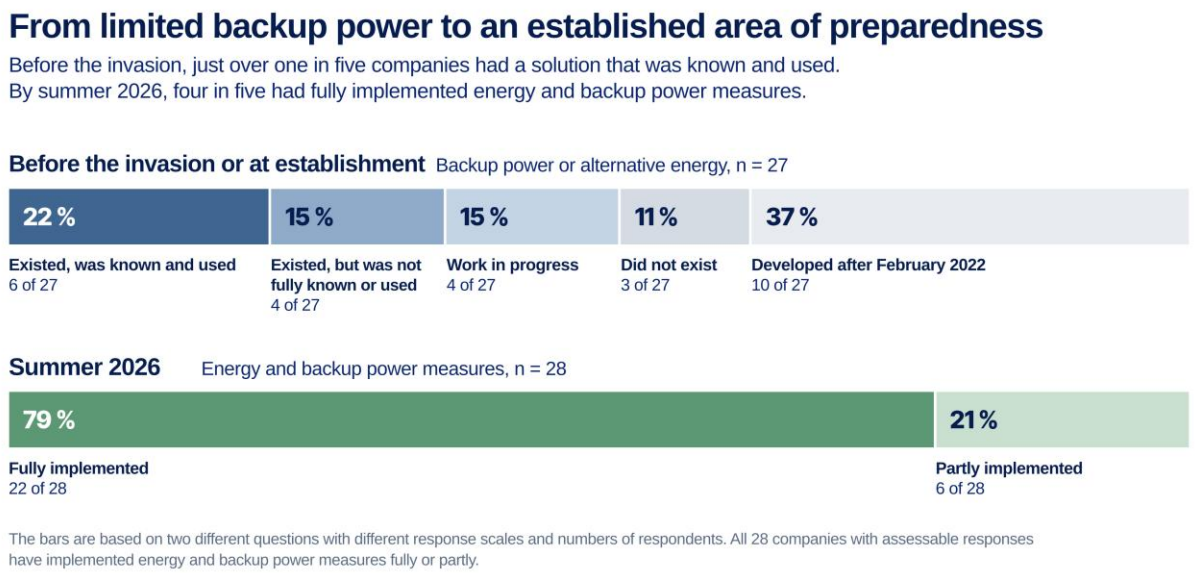
> *"Disruptions to the electricity supply are probably what we have learned most from. They showed how many other functions depend on a reliable energy supply – communications, IT systems, logistics and employees' ability to work."*

Companies have expanded their energy preparedness

Before the invasion, or on establishment for companies that arrived later, six of 27 companies had alternative energy solutions that were known and used within the organisation. Ten report that these solutions were developed only after February 2022. In summer 2026, 22 of 28 companies, or 79 per cent, report that energy and backup-power measures are fully implemented. The remaining six report partial implementation. The responses describe the extent of implementation but do not provide a common measure of how long operations can continue during an outage.

In its report Energy System Resilience, the International Energy Agency, IEA, describes how the resilience of an energy system rests on several simultaneous capabilities: diversified supply, decentralised production, the ability to isolate damaged sections, repair capacity and alternative supply routes. Reserve capacity is only one part of this capability.[22] The same pattern is evident among the companies in this study, which have combined several solutions to keep operations running.

Figure 8. From limited backup power to an established area of preparedness.



Companies combine several energy solutions

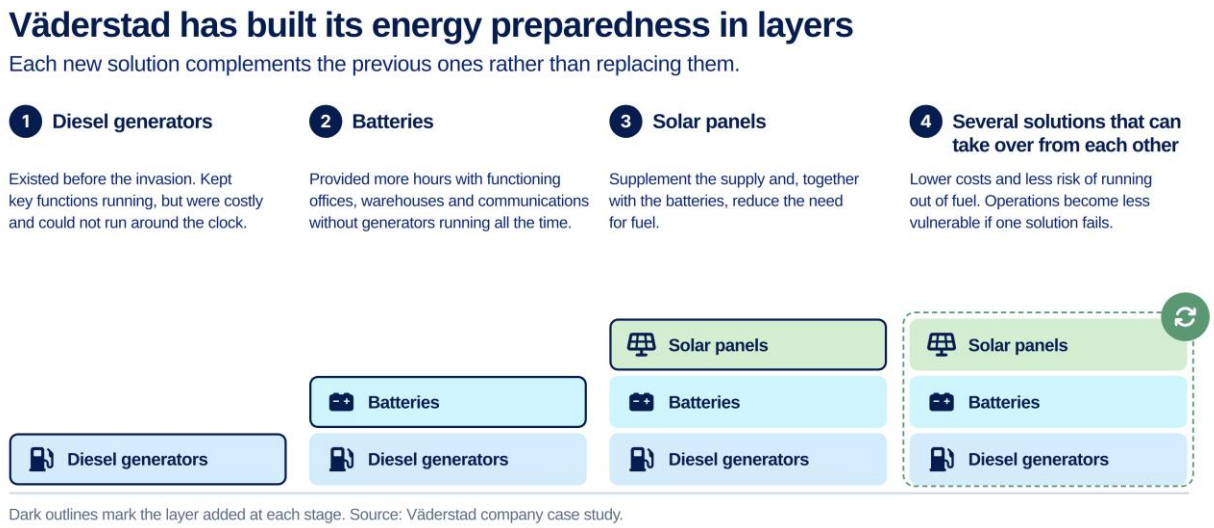
For companies, an initial backup solution has often been followed by further layers of capacity as new weaknesses become apparent. Väderstad had generators and fuel before the invasion. However, as electricity disruptions became prolonged, diesel generators proved to be only the first layer of preparedness. They kept important functions running but were costly and could not run around the clock.

The company therefore added batteries and solar panels. During winter 2025/26, batteries provided more hours of functioning offices, warehouses and communications without continuous generator use.

[22] IEA, 2026.

Batteries can bridge shorter outages and solar panels supplement supply. Combined with backup power and adjusted consumption, they can reduce fuel requirements and provide more ways to keep operations running. Figure 9 shows how Väderstad has expanded its energy preparedness step by step.

Figure 9. Väderstad has gradually supplemented generators with batteries and solar panels.



Reserves last for different lengths of time

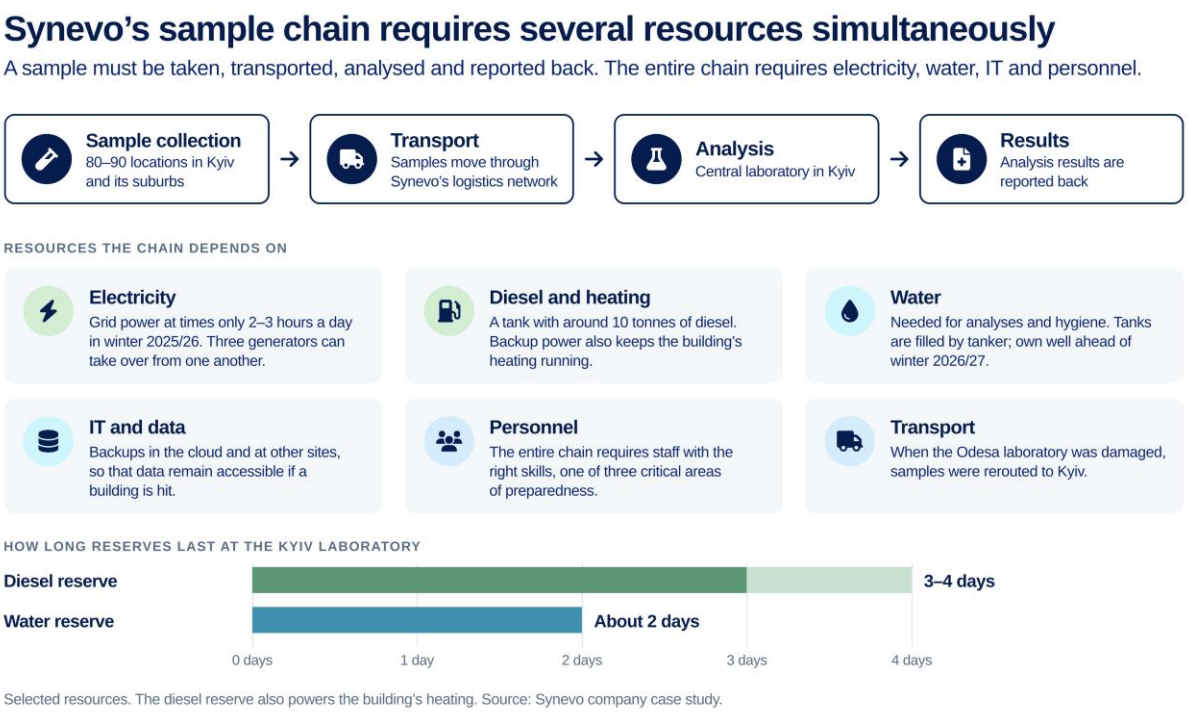
There is a major difference between keeping a critical function running for two hours, two days, two weeks, several months or several years. In an open-ended response, one company describes keeping its operations running during a two-month period in winter 2025/26 using power banks, portable batteries such as EcoFlow units, and a diesel generator. Longer disruptions require replenishment, servicing, alternative energy sources and the ability to reduce the operation's energy requirements.

During winter 2025/26, Synevo's central laboratory in Kyiv sometimes received grid electricity for only two to three hours per day. The generator in place before the invasion had no backup of its own. The company therefore installed two additional generators that can take over from one another.

The fuel reserve supports around three to four days of operation. The laboratory also needs water for analyses and hygiene and has established a reserve for approximately two days. Tanks have been replenished by tanker when municipal supply failed. Ahead of winter 2026/27, the company also had its own well drilled.

Electricity and water reserves therefore have different endurance. Continued operation depends on replenishing resources and maintaining equipment. For the laboratory, the critical function covers the whole sample chain: a sample must be collected, transported, analysed and its result reported. Electricity, water, heating, transport, IT and staff form part of the same chain.

Figure 10. Synevo's sample chain depends on electricity, water, fuel and transport.



Energy dependence varies between operations

Energy is more often identified as a critical factor in larger operations. All 15 companies with at least 51 employees in Ukraine cite energy, compared with eight of 14 companies with up to 50 employees. The groups are small, and the difference should be read as a pattern. One possible explanation is that a larger production operation needs to supply machinery, ventilation, lighting and several shifts, whereas a smaller service business can relocate work more easily. Open-ended responses and case studies describe how preparedness starts from which functions must continue, how much energy they require, and what can be reduced, rescheduled or shut down safely.

The workplace may also become important when energy supply at home fails. One company, a mining equipment manufacturer, prepared its offices to provide employees with heating, hot water, charging and communications. Energy preparedness thus also supported staff's ability to work.

Companies' energy preparedness is connected to the energy system

Companies' investments in backup power, batteries and solar panels form part of a broader transformation of Ukraine's energy supply. The IEA describes how rebuilding the electricity system can be combined with expanded local generation and battery storage.[23] The OECD describes how investment in small-scale backup power and decentralised generation has helped Ukraine manage the loss of domestic electricity generation.[24] The United Nations Development Programme, UNDP, is implementing a four-year project for decentralised and renewable energy in 2025–2028 with Ukraine's Ministry of Energy. The project is funded by the Korea International Cooperation Agency, KOICA.[25] The Ministry of Energy in turn identifies five investment priorities: gas and fuel infrastructure, distributed and flexible generation, renewable energy and hybrid systems, electricity grids, and hydropower and storage. Grid

[23] IEA, 2024.
[24] OECD, 2025.
[25] UNDP, 2025.

modernisation also includes automation, digital control, cybersecurity, mobile transformers and backup infrastructure for operation under attack.[26]

Backup solutions give companies room to act, but dependence on the surrounding environment remains. Fuel must be delivered, equipment repaired and electricity grids restored. In the survey, 17 of 30 companies, or 57 per cent, identify energy, infrastructure or supply support as one of the most important forms of external support. Companies' own preparedness therefore needs to be coordinated with shared infrastructure and the resources of other actors.

Lessons for business preparedness

- #2 Decide what must keep working – and for how long.
- #6 Build durable backup solutions and track their dependencies.
- #9 Clarify what the company and society need from each other.

Experiences from Ukraine show a progression from disruption and backup power to new constraints, multiple solutions, prioritisation and greater flexibility. Backup power buys time but needs to suit the operations that are to continue. The decisive issue is whether energy and other necessary resources can be supplied before reserves run out.

At company level, flexibility means combining energy sources, storage, reserve capacity and prioritised consumption. Backup solutions also need to work alongside the shared energy supply. At system level, it means distributing generation and storage across more locations and being able to adapt operations when parts of the energy system are damaged. These experiences closely resemble discussions in Sweden about local energy solutions. A company's own preparedness can be supplemented by shared solutions, such as backup power and local generation and storage of electricity and heat. This requires contact with property owners, electricity network companies, municipalities, fuel suppliers and other businesses.

3.3 Employees and leadership under prolonged strain

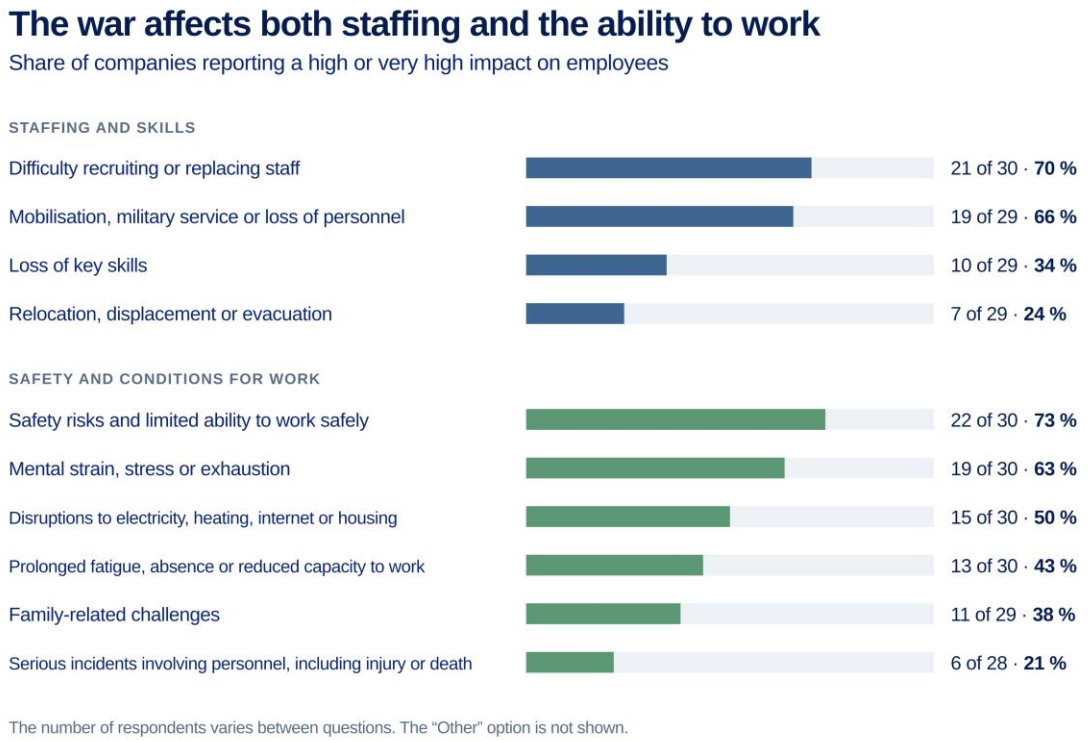
Mobilisation, staff shortages, psychological strain and family circumstances affect both how many people are available and how much they can manage. Companies have changed tasks, broadened skills and strengthened staff support. Leadership has involved greater local authority, more frequent communication and faster decisions.

Labour shortages affect the entire Ukrainian economy. According to the fourth Rapid Damage and Needs Assessment, RDNA4, more than 60 per cent of companies reported labour shortages and recruitment difficulties during September–November 2024.[27] In the survey, 16 of 30 companies, or 53 per cent, identify key personnel and skills as particularly critical to continued operation. Security risks have had a high or very high impact on employees in 22 of 30 companies, or 73 per cent, and difficulties recruiting or replacing staff in 21 of 30, or 70 per cent. Figure 11 provides an overview of the pressures.

[26] Ministry of Energy of Ukraine, 2026.

[27] World Bank et al., 2025, p. 127.

Figure 11. Staff-related factors with a high or very high impact. Respondent numbers vary between questions.



Work changes when fewer people are available

In a separate question, 26 of 29 companies, or 90 per cent, report that mobilisation, military service or long-term absence has affected operations. The interviews describe difficulties replacing technicians, installation workers, mechanics and drivers. Llentab also describes how changing conditions for exemptions from mobilisation have made workforce planning more uncertain.

Staff shortages have led companies to change the way work is done. They reduce the amount of work requiring a particular specialist, move tasks, standardise processes and use technology to increase productivity with the remaining staff. At Llentab, around 30 per cent of employees in the installation department have been mobilised. The company has changed design and installation methods to reduce the need for skilled labour on site. Väderstad supports farming customers with mechanics when their own staff are insufficient. Customer staff shortages thus increase demand for the supplier's services.

Companies broaden skills and recruitment

Staff shortages have increased the need to recruit from groups previously underrepresented in certain occupations. Scania works with the non-profit organisation Beredskapslyftet to train women as truck drivers and mechanics. Stritex has broadened skills and invested in machinery and lifting aids that enable women to take over more production-critical tasks. Its status as critical to the local economy has also made it possible to exempt six men in key functions from mobilisation. Veterans are becoming part of long-term workforce development: Scania has hired veterans and works with the TYTANOVI rehabilitation centre.

The composition of the workforce determines the needs companies face. Stritex, Vandra Rugs and Synevo have a high proportion of women employees, which has limited mobilisation's direct impact. At the same time, many have husbands or sons at the front. Synevo has around 30 per cent additional staffing to cover parental leave and other absences.

Skills also need to be transferable between people. When companies identify the human and organisational capabilities most important to continuity, experienced local employees rank highest, with

22 of 30 responses. Only six of 30 cite training to cover one another's tasks. Meanwhile, open-ended responses describe a need for faster retraining, broader job descriptions and more people able to perform critical tasks.

Life outside work also affects the ability to work

In 15 of 30 companies, or 50 per cent, problems with electricity, heating, internet or housing have had a high or very high impact on employees. Family-related challenges are cited by 11 of 29, or 38 per cent.

Vandra Rugs illustrates the close connection between family life and production. When operations moved from occupied southern Ukraine, the weavers needed both housing and functioning daily lives for their children. New production premises were only one part of the conditions required. Around 50 people work in Kosiv, approximately 15 of them internally displaced. Together, employees have nearly 60 children under 14.

During the first phase of the war, the focus was on physical safety, evacuation and financial security. As the war continues, the need grows for support that people can rely on over time. Psychological strain and stress have had a high or very high impact in 19 of 30 companies, or 63 per cent. The same number identify psychological resilience and motivation as one of the most important capabilities for continuity. In 26 of 29 companies, the need for psychosocial and family-related support has increased.

The export-oriented manufacturing company in the study offers anonymous psychological support and has trained staff in psychological first aid. It also describes how returning from military service may require longer recovery, new tasks or an adapted workplace, and has prepared managers and colleagues for how to support that return.

The workplace can also provide stability. Stritex's CEO describes the factory as "a little home", where work provides a livelihood, everyday routines and colleagues with whom to share experiences. Llentab describes how returning to work provided practical tasks and social relationships during the initial crisis.

Staff support has become an enduring way of working. Of 30 companies, 24, or 80 per cent, report that stronger staff support and workforce planning have become permanent changes. Preparedness therefore needs to cover both how a company replaces staff and how it helps those who remain sustain their ability to work over time.

Leadership combines presence, clear authority and speed

Trust between management and employees is identified by 20 of 30 companies, or 67 per cent, as one of the most important capabilities for continuity. Several managers remained in Ukraine; others returned after leaving the country. Begoma, Stritex and Vandra Rugs describe the value of visits from headquarters.

The mining equipment manufacturer emphasises clear communication about what management knows and what remains uncertain. It has also prepared who can take over when a key person can no longer act. A continuity management team is based within the regional organisation in a major city outside Ukraine. Designated people have system access and powers of attorney to take over functions including financial management, accounting and HR.

Of 30 companies, 25, or 83 per cent, report faster decisions better adapted to the situation. Eighteen have given local managers and teams greater authority, while 16 report increased coordination and communication with headquarters.

Figure 12. Companies' reports of changes in leadership and decision-making during the war. Counts and percentages of 30 responding companies.



Research on Ukrainian companies points in the same direction. A study of crisis management in 20 Ukrainian companies describes how rapid decisions, open and honest communication and support for employees became decisive. Leaders also had to manage a crisis with no known end.[28]

The Swedish companies' experiences also demonstrate the importance of local capacity to act and support from headquarters. Managers need to act quickly when the security situation, energy availability or staffing changes. In a smaller company without group support, the owner or management needs to clarify who may make urgent purchases, change working arrangements and maintain customer contact. Responsibilities, substitutes, and access to money and systems need to be prepared in advance.

Lessons for business preparedness

- #4 Secure staffing, safety and critical skills.
- #5 Give local managers authority and prepare substitutes.

Mobilisation and migration reduce staff availability, and shortages of certain skills make some functions particularly difficult to replace. Caring responsibilities, public services and psychological strain also affect the ability to work. Companies have therefore changed work through retraining, simpler tasks and technical solutions. This is about skills redundancy: more than one person having the knowledge required to keep a critical function running.

The war has also changed leadership. Rapid decisions under uncertainty require clear local authority. Critical tasks need to be transferable to substitutes with the right skills, access rights and powers of attorney.

3.4 Logistics, inventories and alternative flows

War has made logistics and inventories central to companies' continuity capabilities. Driver shortages, closed transport routes and delayed border crossings affect access to inputs and the ability to deliver to customers. Companies have rerouted transport, built buffers and dispersed inventories. Supply also depends on functioning infrastructure, trade and contacts with authorities.

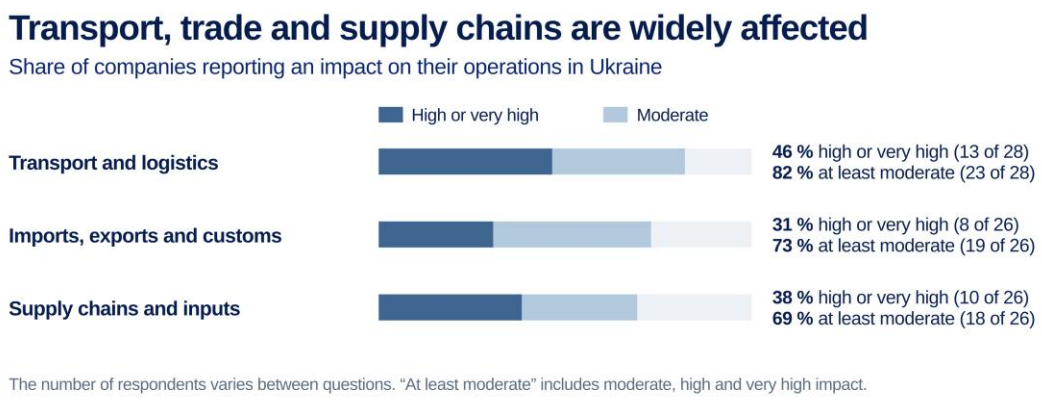
Russian attacks damaged warehouses and logistics facilities during the invasion's first weeks. After Russia withdrew from the grain agreement in July 2023, a campaign followed against ports and grain stores in

[28] Opatska et al., 2024.

the Odesa area and along the Danube. During summer 2026, attacks expanded to warehouses and distribution centres for food, retail, post and e-commerce.[29]

In the survey, 23 of 28 companies, or 82 per cent, report at least a moderate impact on transport and logistics. Thirteen companies, or 46 per cent, report a high or very high impact. Imports, exports, customs and access to inputs have also been affected.

Figure 13. Transport, trade and supply chains are widely affected. Respondent numbers vary between questions.

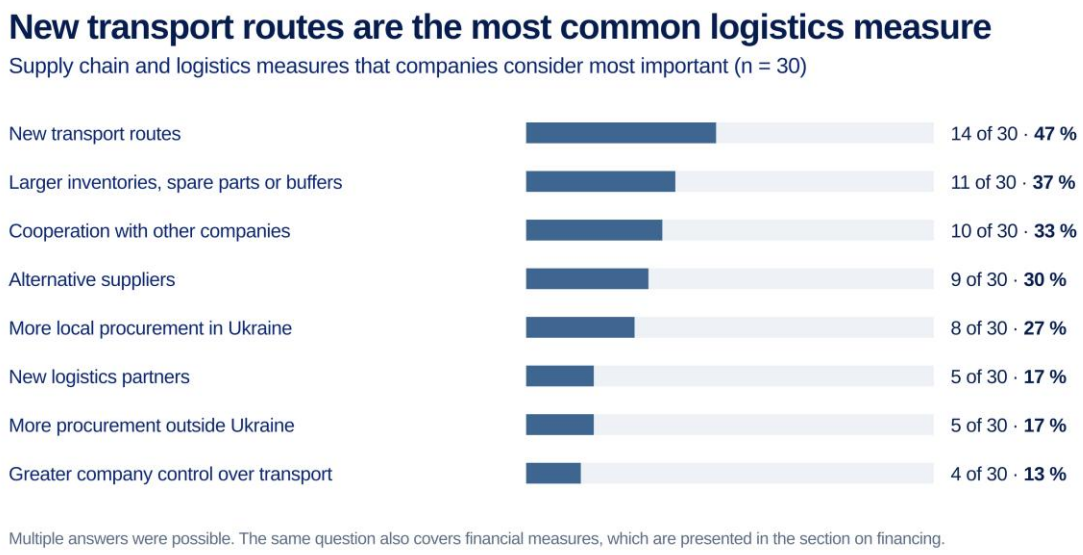


Companies have changed transport routes and purchasing

Blocked ports and damaged infrastructure changed Ukraine's trade flows after the 2022 invasion. More freight moved by road, rail, the Danube and EU land borders. The EU's Solidarity Lanes, launched in May 2022, helped keep imports and exports moving. A new Ukrainian corridor in the Black Sea opened in 2023. At the same time, congestion at land borders, limited port capacity and shortages of specialised equipment have raised transport costs and reduced efficiency.[30]

New transport routes are the most common logistics measure in the survey: 14 of 30 companies, or 47 per cent, have introduced them. Eleven, or 37 per cent, have built larger inventories or other buffers. Companies also report increased cooperation, alternative suppliers and more local purchasing in Ukraine.

Figure 14. New transport routes are the most common logistics measure. Multiple responses were possible (n = 30).



[29] Reuters, 2026.

[30] World Bank, 2025, pp. 1 and 5; European Commission, n.d.

In its open-ended responses, one Swedish-owned agricultural company describes how exports depended entirely on seaports before the invasion and inventories were centralised. The company has since established an export route towards the western border and bought its own railway wagons. Fuel and critical inputs have been placed at more locations. Diesel generators and larger buffers allow operations to continue when an individual flow is interrupted.

Bakeries have also had to find new supplies of salt and yeast, now imported from Romania and Türkiye.[31] Customs, permits and contacts with authorities also affect the movement of goods. One company describes how regional differences and changing administrative requirements make transport harder to plan. Others describe how several suppliers or warehouses may depend on the same border crossing, electricity supply or carrier. If that shared link is broken, several alternatives may disappear at once.

Begoma describes how blockades at the Polish border have periodically caused queues and sharply increased prices. The company has managed disruptions by combining carriers and routes through different countries. Access to alternatives rests on a network of subcontractors in Ukraine, Poland and Czechia, among other countries.

Larger buffers and dispersed warehouses have supported deliveries

During prolonged disruption, inventories buy time. Open-ended responses describe how small just-in-time inventories left too little margin when transport became unpredictable, and how companies instead built larger raw-material buffers. Warehouses at several locations have also enabled distribution to continue after attacks. The necessary inventory size depends on what it must cover: two days of spare parts, two weeks of raw materials and three months of medicines solve different problems, and each level has a cost.

At the end of 2025, several pharmaceutical warehouses in Kyiv and Dnipro were destroyed. Distribution nevertheless continued because distributors had warehouses in several parts of the country. According to one interview in the study, lost volumes could also be replaced quickly through functioning land-based supply chains. Both dispersed stocks and new deliveries helped sustain distribution.

There is a clear connection here to Sweden's security of supply. In Sweden, pharmaceutical distribution is handled mainly by two large actors with central warehouses and regional depots. The loss of major warehouses could have serious consequences. The Swedish Association of the Pharmaceutical Industry, LIF, advocates stronger security of supply and highlights the need for clear responsibility for stockholding, compensation for increased inventories, transport infrastructure and functioning international trade.[32]

Preparedness stockpiles in Sweden and Finland

Finland combines national emergency stockpiles, mandatory stocks held by companies and other actors, and contractual stockpiles. The National Emergency Supply Agency, NESA, is responsible for national emergency stockpiles. Material preparedness is financed through the National Emergency Supply Fund.[33]

In Sweden, the Act on Preparedness Stocks of Goods in the Food Chain entered into force on 1 July 2026. The state is to own the goods, while companies may manage storage under contracts with the responsible authority.[34] The Swedish Board of Agriculture is building stocks of grain and critical agricultural inputs. Grain planning covers three to six months of consumption, depending on the international situation and the budget. Companies are compensated for storing and rotating the state's

[31] Shyrokykh and Lindahl, 2026.

[32] LIF, 2026.

[33] National Emergency Supply Agency, 2026a, 2026b.

[34] SFS 2026:837.

goods within normal operations. Stockpiles also need to be linked to functioning mills, bakeries and distribution.[35]

The Swedish civil defence and resilience agency's brochure Preparedness for businesses emphasises mapping dependencies, suppliers and supply chains. For essential activities, the starting point is the ability to maintain the most important societal functions for at least two weeks, primarily using the organisation's own resources, individually and in cooperation with others. This concerns operational endurance, not two weeks' stock of every item.[36]

Lessons for business preparedness

- #6 Build durable backup solutions and track their dependencies.
- #7 Secure alternative deliveries and prepare to restart.

Small inventories, concentrated flows and few suppliers can be efficient under stable conditions. War has exposed the cost of that vulnerability for companies of all sizes. Preparedness therefore needs to start from which goods, spare parts and inputs could stop operations, and how long replacing them takes. A company needs to weigh inventory costs against the consequences of interruption and the time required to adapt and restore deliveries. For small companies with limited resources, it is particularly important to explore available alternatives and opportunities to share resources with other local businesses, suppliers and carriers.

3.5 IT and cybersecurity – from protection to digital continuity

During war, companies need to protect information and systems against cyberattacks and ensure that digital functions remain usable when electricity, internet, mobile networks, staff or the normal workplace become unavailable. Their experiences show how information security, communications and access to systems need to work together.

In the survey, 14 of 30 companies, or 47 per cent, identify telecommunications, internet, IT systems or data services as particularly critical to continued operation. In a separate assessment of disruptions experienced, nine of 28 companies, or 32 per cent, report that telecommunications or internet problems have had a high or very high impact. The US National Institute of Standards and Technology, NIST, describes cyber resilience as the ability to anticipate, withstand, recover from and adapt to disruptions and attacks on systems that use digital resources.[37] Ukraine faces an extensive threat environment. Its national incident-response organisation CERT-UA reported 5,927 cyber incidents in 2025, 37.4 per cent more than in the previous year.[38]

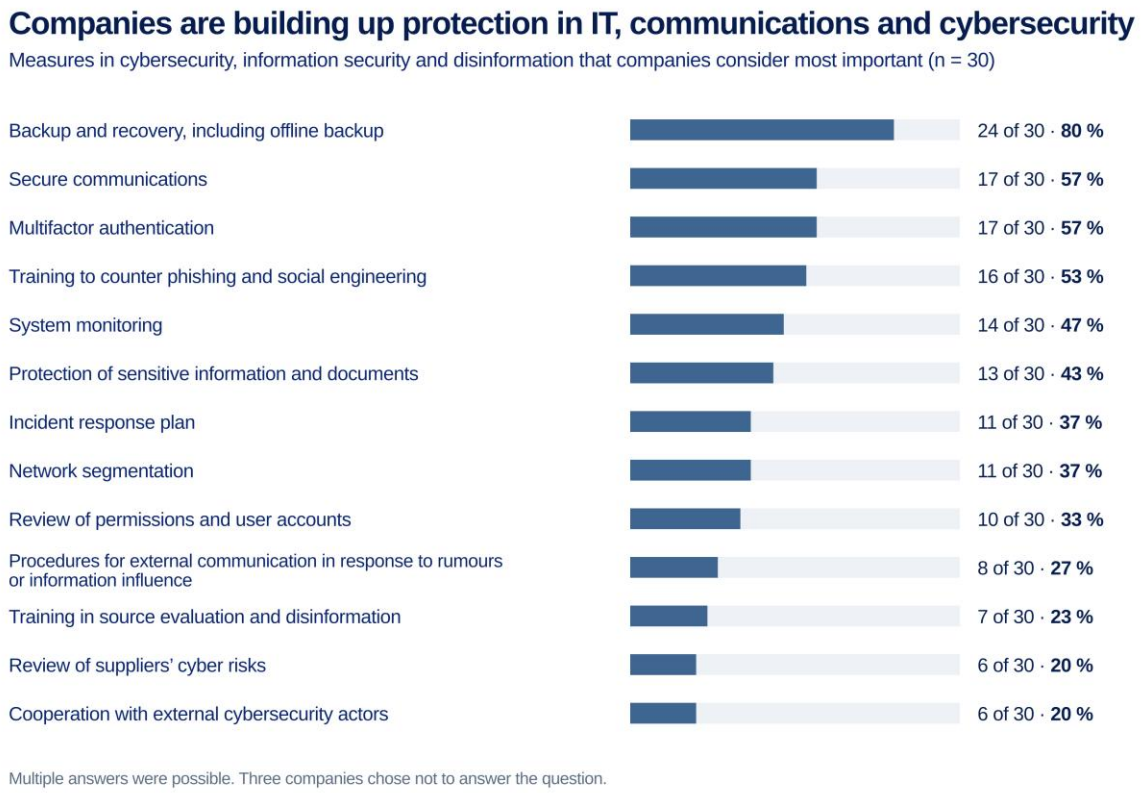
[35] Jordbruksverket, 2026.

[36] Myndigheten för civilt försvar, 2026a, pp. 9 and 11.

[37] Ross et al., 2021, pp. 1, 6–7.

[38] State Service of Special Communications and Information Protection of Ukraine, 2026.

Figure 15. Companies are building protection in IT, communications and cybersecurity. Multiple responses were possible (n = 30).



Companies have built several layers of digital resilience

Backup and recovery, including offline backup, is the most common measure in the survey, cited by 24 of 30 companies, or 80 per cent. Secure communications, multifactor authentication and anti-phishing training are also among the most common measures. Measures involving external actors are less common: six of 30 companies, or 20 per cent, assess their suppliers' cyber risks, and the same number cooperate with external cybersecurity actors. Eight of 30, or 27 per cent, have external communication procedures for rumours, incidents or information influence operations.

Information must be recoverable and usable

A backup needs to survive damage or an attack. Using the information afterwards also requires electricity, equipment, connectivity, the right permissions and people able to carry out recovery. The high proportion of companies with backups in the survey therefore does not in itself show how quickly they can restore a critical function.

Sigma Software began building this capability after Russia's annexation of Crimea in 2014. Servers and development environments were moved from Kharkiv to other parts of Europe. The company also developed a more systematic approach to information security and met ISO 27001 requirements in 2018. Ahead of the full-scale invasion, it prepared several communications channels and satellite communications. Its experiences also demonstrated the value of paper copies of contract information that could be used without internet access.

Communications need to work when the plan does not

When the normal communications channel fails, a company still needs to reach staff, management, customers and suppliers. One open-ended response shows what communication meant when preparations met reality: "Almost everything we had prepared in the continuity plan failed. The

communication plan was the only thing that worked. It was decisive." The company used parallel WhatsApp, Viber and Telegram groups to maintain daily contact with staff.

Electricity, connectivity and IT need to work together

Begoma uses battery backup for computers in Kyiv and Starlink as an alternative internet connection. For the freight forwarder, access to information about goods, routes and delivery times is essential to coordinating transport. Information must be accessible from several locations and protected against unauthorised access.

Backup solutions address different failures. Cloud services reduce dependence on a local server, satellite connectivity on the normal internet connection, and batteries on the electricity grid during shorter outages. But satellite connectivity also requires power. As with energy and logistics, companies therefore need to examine the dependencies of backup solutions and whether they could fail alongside the normal solution.

SEB and the mining equipment manufacturer describe digital access rights as an important part of planning to replace key personnel. An interim chief financial officer or country manager needs to be able to log in, access information, make payments, sign documents and represent the organisation. Skills, system access and decision-making authority therefore need to be prepared together.

External digital dependencies need to be managed

Failure at a cloud service, telecommunications operator or IT supplier can stop operations even when a company's own systems are functioning. Buying external services is convenient, but the company then needs to understand which supplier relationships affect digital continuity. If it has no in-house IT staff, testing and responsibility for backup solutions need to be clarified with the IT provider. These risks are also addressed in the EU's NIS2 cybersecurity directive, which requires affected organisations to manage cyber risks in their supply chains.[39] The European Union Agency for Cybersecurity, ENISA, provides guidance for this work.[40]

Lessons for business preparedness

- #1 Test preparations and make the lessons last.
- #3 Map dependencies and how disruptions spread.

Digital continuity connects several of the report's central dependencies. The outbreak of war showed companies that simply confirming the existence of a backup or alternative connection is insufficient. Companies need to test the entire chain: can information be recovered, can employees access systems, and can substitutes take over? Planning needs to cover loss of electricity and connectivity, appropriate permissions and disruptions at external suppliers. Backup solutions also require resources to build, test and maintain.

3.6 Repair and reconstruction – restore functionality

Ukraine's experiences show that repair preparedness involves more than repairing what has broken. When new damage occurs while restoration is under way, companies need to decide which function must be restored first. Some functions can be maintained with temporary solutions; others need to be relocated.

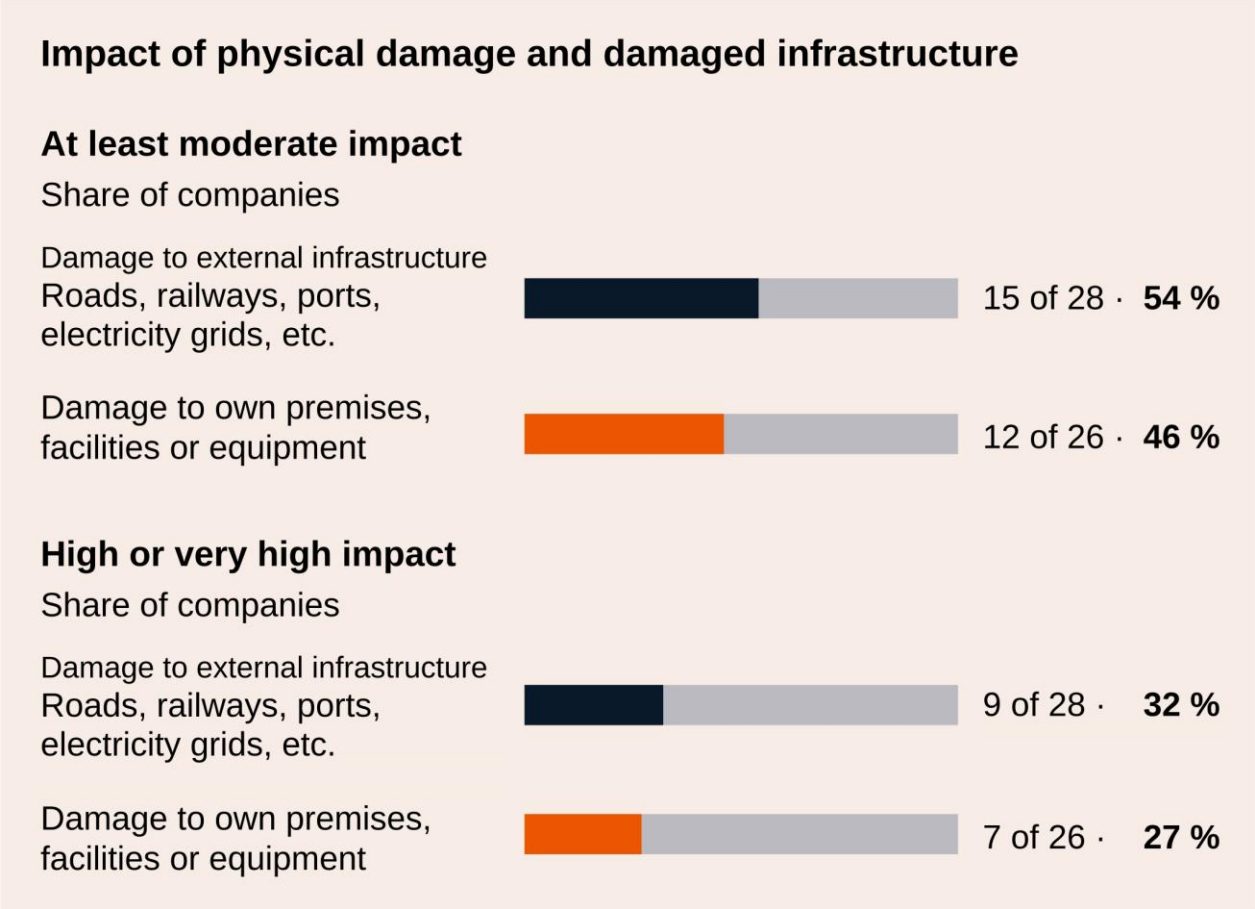
[39] European Parliament and Council, 2022, Article 21.2(d).

[40] ENISA, 2025.

At the end of 2025, direct physical damage in Ukraine was estimated at USD 195 billion. Recovery and reconstruction needs for 2026–2035 were estimated to exceed USD 588 billion, almost three times Ukraine's GDP.[41] For the companies in this study, restoration takes place while the war continues, often with the risk of further damage to the same operation.

In the survey, 12 of 26 companies, or 46 per cent, report at least a moderate impact from damage to their own premises, facilities or equipment. For damage to roads, railways, ports, electricity grids and other external infrastructure, the corresponding figure is 15 of 28 companies, or 54 per cent.

Figure 16. Half of the companies feel the effects of damaged infrastructure.



Restore the function before the building

When an OKKO service station in Korotych outside Kharkiv was bombed in November 2025, the building was severely damaged, but underground fuel tanks and parts of the fuel system survived. After inspection by the emergency services, the company arranged a temporary sales point, and two days after the attack fuel and coffee were being sold again. Two things made this possible: the fuel system was protected underground, and headquarters had delegated decisions to local management. The case has been documented in a study of organisational resilience and crisis management.[42]

Synevo shows how the same principle can be applied by moving the function. When its Odesa laboratory was damaged by a Russian drone attack, samples were redirected through the company's existing logistics network to its central laboratory in Kyiv. Restoration in Odesa began at the same time. After the emergency services' inspection, employees cleared the premises, technicians checked the analytical

[41] World Bank et al., 2026.

[42] Seijts and Opatska, 2026.

equipment and private contractors carried out the heavier repairs. The laboratory reopened after one week.

The restart thus followed two parallel tracks. Patient samples could be analysed elsewhere while damaged capacity was repaired. A functioning operation required both access to capacity in the network and the ability to organise work at the damaged site.

The export-oriented manufacturing company in the study illustrates the same principle in industry. When its factory in western Ukraine was hit by a Russian missile in 2023, production stopped. Alternative supply chains enabled manufacturing to be transferred quickly to other factories in the group, limiting the consequences for customers. In both cases, access to capacity within a network made it possible to continue delivering when one facility became unavailable.

Even undamaged premises can become unusable

SEB's Kyiv office shows how the usability of premises depends on technology and services outside a company's control. The bank had backup power, but when municipal water supply failed, sanitation became a bigger problem than electricity after half a day.

SEB and the property owner installed a water tank with a pump that can run on the generator. The tank provides water for sanitation for one to two days, while drinking water is stored separately. Sewerage and pipes, however, remain the property owner's responsibility. Restoration capability therefore also depends on the property owner's resources and what the tenant can influence directly.

Restart depends on others' capacity

Restoration requires technicians to assess equipment, contractors to start work and spare parts to arrive. At the same time, someone must be able to commission and finance the work. After major attacks, several operations may need the same electricians, contractors and specialists. Prepared contacts and agreements then encounter a practical constraint: the amount of repair capacity actually available.

Public actors can secure damaged sites, facilitate permits and support new establishments. Vandra Rugs received premises from the municipality but arranged production installations itself. Llentab's customer received municipal support when establishing its operation, while the companies themselves handled design and construction. The period from decision to completed facility was six months.

Ukraine has also developed financial support for war-damaged companies. Manufacturers can apply for restoration grants, and small and medium-sized enterprises can apply for specific restoration loans under the 5–7–9 programme.

Reconstruction also changes the market

The need to repair, replace and relocate operations also creates demand. Of 24 companies, 19, or 79 per cent, report an increased focus on reconstruction, critical infrastructure or essential services since 2022. Begoma sees growing transport flows associated with construction, technology and equipment.

Repair preparedness in Sweden

Sweden's preparedness system rests on the principle of responsibility: whoever is responsible for an activity under normal conditions has the corresponding responsibility during disruption. The extended principle of responsibility also requires actors to support and cooperate with one another. For example, property owners are responsible for civil defence shelters.

On 2 September 2026, the government announced an assignment for the Swedish civil defence and resilience agency to develop a basic national capability to coordinate and direct construction and repair

preparedness, BRB, for total defence needs. The aim is to enable the clearance, repair and restoration of essential infrastructure during heightened alert and war.[43]

Debris can become a new supply chain

Restoration creates material flows that both need to be managed and can provide raw materials. In June 2026, UNDP estimated that around 17.2 million tonnes of debris had been generated by damaged and destroyed housing in government-controlled areas up to September 2025. Up to 8.2 million tonnes of secondary raw materials were considered recoverable.[44]

In Irpin, a project combines safe demolition, sorting and recycling with the development of local skills. It is managed by Nefco and financed by a Swedish grant of EUR 5.9 million. Scania has supplied trucks and Volvo Construction Equipment excavators. Debris management thus becomes part of security of supply.[45] For Sweden, this raises the question of how material from damaged buildings can be recovered when access to new raw materials and transport is also restricted.

Lessons for business preparedness

- #2 Decide what must keep working – and for how long.
- #7 Secure alternative deliveries and prepare to restart.
- #10 Develop the business as customers' needs change.

Experiences from Ukraine show that critical functions can be restored while the damaged facility is still being repaired. Rebuilding takes place gradually, with a risk of new disruptions and damage. Preparedness therefore needs to cover flexibility in business operations as well as repair, temporary operation and relocation. A smaller company with only one site can explore temporary premises or capacity at other companies in advance. Prepared contacts with property owners, contractors and public actors make it easier to access the resources required for restart.

[43] Regeringskansliet, 2026.

[44] UNDP, 2026.

[45] Nefco, 2026.



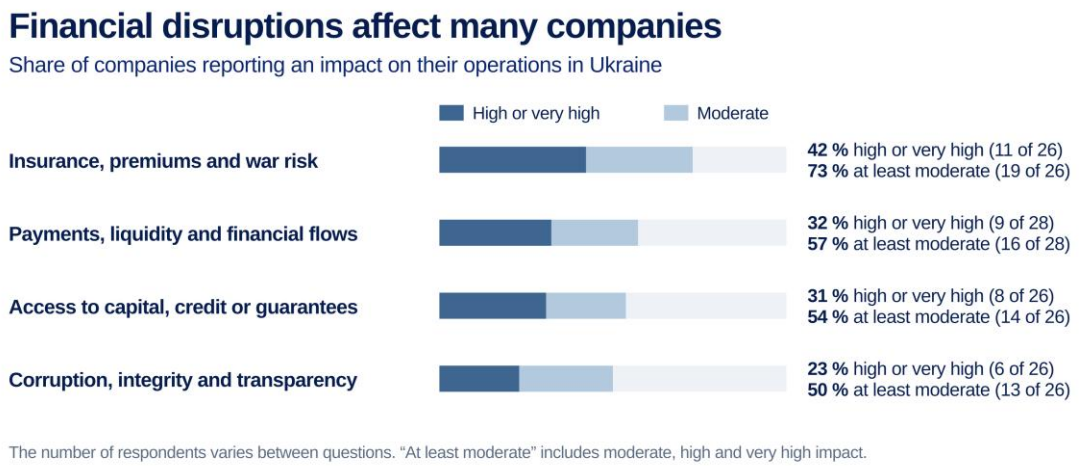
Kyiv, March 2022. Photograph: Pexels.

3.7 Financing and financial capacity to act

A functioning payments and banking system has been a fundamental condition for business operations in Ukraine. When the invasion began, companies immediately needed to pay for wages, evacuation, housing and transport. Subsequently, capital has been required for backup power, larger inventories and restart following physical damage.

The survey shows that insurance and war risk have had the greatest financial impact. Of 26 companies, 19, or 73 per cent, report at least a moderate impact from insurance availability, premiums or war-risk coverage. Eleven companies, or 42 per cent, describe the impact as high or very high.

Figure 17. Financial disruptions affect many companies. Respondent numbers vary between questions.



Corruption remains a significant institutional challenge in Ukraine. Half of the survey respondents report encountering it. At the same time, companies say that it has not worsened during the war; if anything,

the opposite is true. Transparency International's Corruption Perceptions Index, CPI, which measures public-sector corruption, gave Ukraine 33 out of 100 points in 2022 and 36 in 2025.[46]

Payments and lending could continue

As early as 24 February 2022, Ukraine's central bank decided that cashless payments would continue and banks would receive liquidity support. At the same time, foreign-exchange transactions, cash withdrawals and many cross-border payments were restricted to stabilise the system. It worked.

During the invasion's first weekend, SEB moved parts of its payment operations from Kyiv to Lviv. Later, parts of the operation were run remotely from Warsaw. Corporate customers could draw on approved credit lines, and the bank provided new working-capital loans, in several cases backed by guarantees from customers' parent companies outside Ukraine. Foreign-exchange controls kept liquidity in the country while also restricting its use across borders.

Operating conditions have also changed more broadly. In the survey, 16 of 30 companies, or 53 per cent, report an increased administrative burden since 2022, and 15 of 30, or 50 per cent, increased regulatory uncertainty. Nine of 30 companies have changed payment procedures, six have introduced new financing solutions, and the same number have adapted contracts, for example by adding war clauses.

Business relationships financed restart

The first days required decisions before companies knew how long the disruption would last. Llentab paid wages and earned bonuses in advance. Other companies used credit lines, owners' capital and group resources for evacuation, housing and restart.

For Vandra Rugs, business relationships became decisive when production was to be rebuilt in Kosiv. Its own reserves were limited, but the Swedish parent company made advance payments and customers continued placing orders. The Spanish wool supplier provided 180-day credit and sent yarn to the new production site. Materials were therefore in place before normal cash flow had been established.

Continued operation requires investment

Once the acute phase passed, companies needed to finance operations amid recurring disruption. Backup power, alternative premises and larger inventories required both investment and ongoing expenditure. At Stritex, Fristads has financed machinery, wage increases, backup power, battery backup and shelters, among other things. Capital has been used to secure production and retain staff.

Customers also need financing. Väderstad's customers have used bank loans, government lending programmes and guarantees to invest in agricultural machinery. Scania has financed customers' vehicles through its own balance sheet and Scania Credit Ukraine. Capital that could not be transferred out of the country because of currency restrictions has been reinvested locally. Customers' financing options therefore also affect their suppliers' business.

When operations restart after physical damage, a bank needs to assess the company's remaining assets, restoration costs, customers, revenues and equity. Interviews with banks show how a concrete restart plan can support lending decisions by describing how and when the company can earn revenue again. Ukrainian companies have been quick to prepare such plans. Banks describe, for example, companies that received help from competitors to supply customers after being bombed while their own operations were rebuilt.

[46] Transparency International, 2026.

Insurance and public risk sharing

Companies' own resources are insufficient to bear all war risks. The OECD describes how an underdeveloped domestic insurance market and limited international reinsurance impede investment in Ukraine. After the invasion, capacity declined further as international reinsurers withdrew. Public support and international guarantee arrangements have therefore become highly important.[47]

New insurance solutions cover parts of the risk. The European Bank for Reconstruction and Development, EBRD, and insurance broker Aon have developed an arrangement for certain transport-related war risks.[48] Guarantees and grants serve other functions. A guarantee shares credit risk and facilitates bank lending, while a grant reduces investment costs.

The EU's Ukraine Investment Framework combines guarantees and grants to mobilise investment.[49] Under Ukraine's state 5–7–9 programme, banks provide interest-subsidised loans for activities including production, energy solutions and restoration of war-damaged property.[50] For Swedish exporters, the Swedish Export Credit Agency, EKN, can reduce the risk of non-payment.

International support may matter to Swedish companies both in their own operations and on the customer side. Financing that enables a Ukrainian company to buy machinery or restore a facility also creates business for Swedish suppliers.

Lessons for business preparedness

- #8 Finance continued operations and restart.

Financial preparedness needs to be included in the preparedness plan. During war, continuity costs increase while access to insurance and credit becomes more limited. Good relationships with owners, banks and suppliers therefore need to exist in advance. A company also needs to assess quickly which costs arise immediately during disruption, how long available funds will last, what insurance covers and how continued operations or restart will be financed.

3.8 Cooperation is part of a company's defence

War has increased companies' cooperation with authorities, business partners and local communities. Their experiences show a mutual exchange in which companies and public actors use their different resources to keep operations and communities functioning. Cooperation thus gives businesses a broader role in society.

In the survey, 19 of 29 companies, or 66 per cent, report increased cooperation with Ukrainian authorities since 2022. Many also report increased cooperation with local communities, civil society, other companies and international donors. The case studies show how cooperation develops around shared needs: functioning production, jobs, infrastructure and protection.

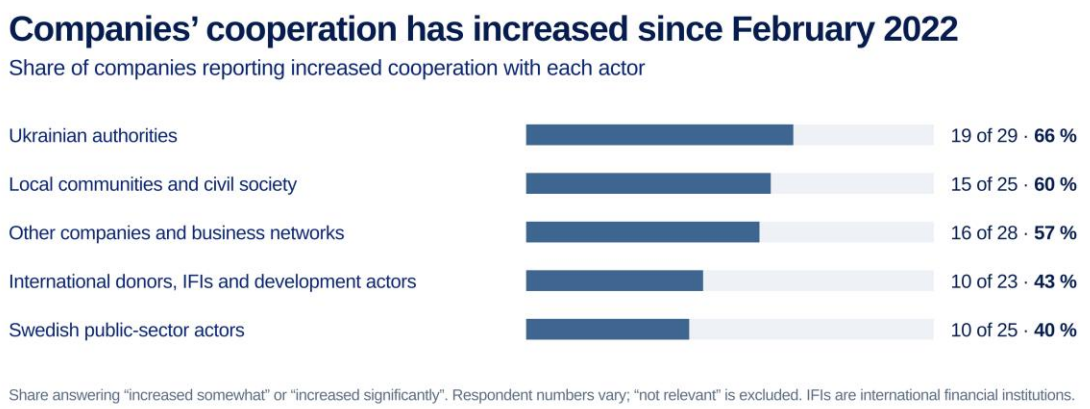
[47] OECD, 2026, pp. 107, 113–114.

[48] Mirbabaeva, 2024.

[49] European Commission, 2026.

[50] OECD, 2026, pp. 107, 113–114.

Figure 18. Companies' cooperation has increased since February 2022. IFI refers to international financial institutions.

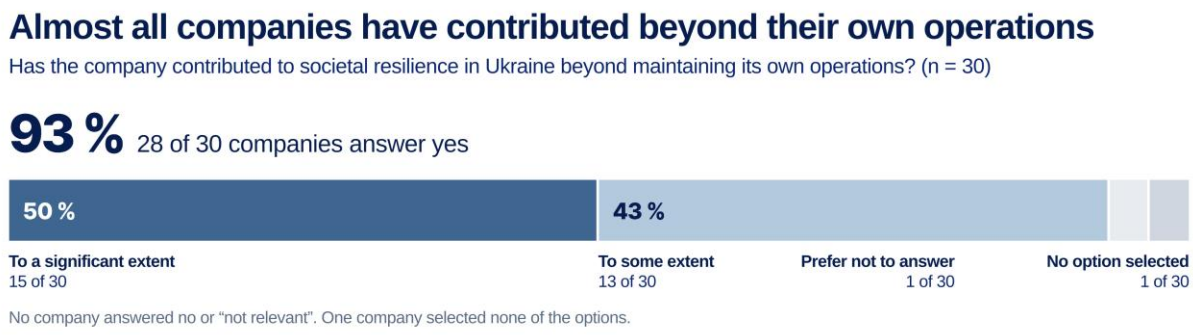


Companies' operations take on wider significance

Their fundamental contribution is to continue delivering, paying wages and paying taxes. Scania's workshops and spare-parts supply keep customers' trucks on the road, thereby supporting the transport of food, fuel and other essential goods. A workplace or repair workshop can become highly important to a local community during a prolonged war.

Companies' contributions also extend beyond normal operations. Of 30 companies, 28, or 93 per cent, report contributing to Ukraine's societal resilience beyond their own operations. They have opened shelters, organised humanitarian transport and provided equipment and support to local communities. One pharmaceutical company has supported non-profit mobile healthcare teams and medicine supplies in areas near the front. For several companies, the decision to remain has also been about responsibility for Ukraine's future.

Figure 19. Companies' contributions to societal resilience.



A particular example of companies' role in Ukraine's defence is that companies meeting security requirements can now form air-defence groups, including to protect critical infrastructure. They may purchase or gain access to air-defence equipment under military decisions and approved procedures. Since March 2026, the air force command may also decide on the temporary transfer of equipment and ammunition not used by combat units. These groups form part of Ukraine's integrated air defence and operate under military command.[51]

Municipalities and companies help each other continue

Cooperation takes place at several levels. Municipalities can facilitate establishment, regional administrations handle matters concerning critical activities and key personnel, and national authorities decide on rules affecting entire sectors.

[51] Ministry of Defence of Ukraine, 2025; Cabinet of Ministers of Ukraine, 2026.

Ukraine's public system is not organised in the same way as Sweden's. The decentralisation reform begun in 2014 merged almost 12,000 local communities into 1,469 territorial municipalities, known as hromadas. Responsibilities, budgets and decisions moved closer to the local level. When the invasion came, many municipalities could quickly arrange support for internally displaced people, healthcare, schools, shelters, water and heating. Directly elected mayors have a strong position. SALAR International, part of the Swedish Association of Local Authorities and Regions, has supported the reform. In an interview for the study, its Ukraine programme director describes how regular dialogue with business has developed in several municipalities, and how the structure of strong mayors simplifies decision-making.

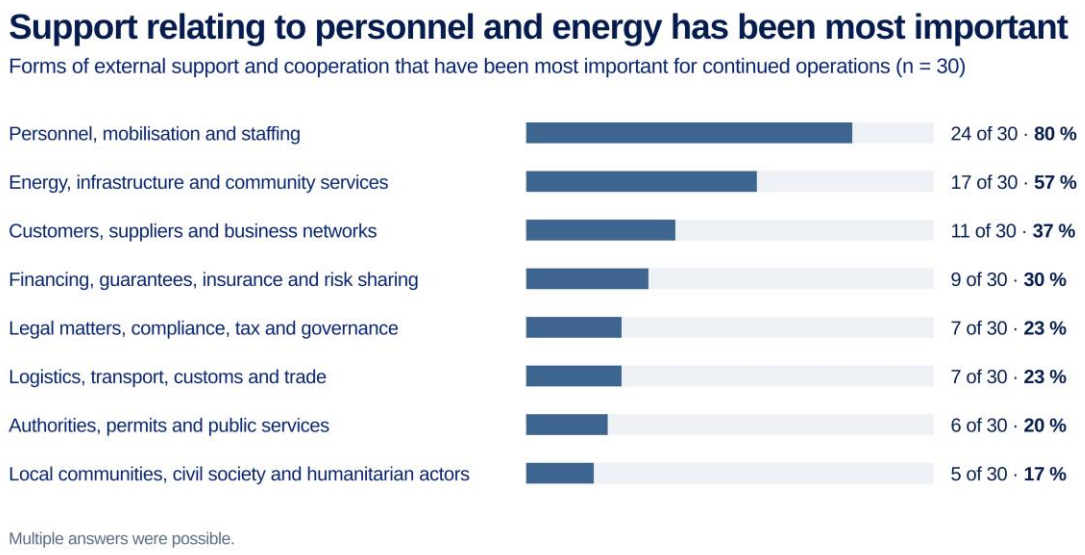
When Vandra Rugs established itself in Kosiv, the mayor and municipality offered a building and support with registration, permits and practical matters. The company arranged the installations needed for production. Municipal support facilitated restart, and the company created jobs.

Stritex has worked with Stryi's city administration and the local electricity company to schedule planned outages outside production hours. In return, the company has refurbished a shelter that opens to nearby residents during air-raid warnings.

Cooperation informs decisions

When companies identify the most important forms of external support or cooperation, personnel, mobilisation and staffing rank first, cited by 24 of 30 companies, or 80 per cent. Energy, infrastructure and public services follow.

Figure 20. External relationships and cooperation most important to continued operations. Multiple responses were possible (n = 30).



Public decisions affect several categories. Mobilisation is regulated by the state, access to electricity is influenced by energy-system priorities, and goods flows depend on customs processing. The six companies that specifically selected authorities, permits and public services therefore capture only part of a broader dependence on the public sector.

Industry associations make it possible to bring shared issues together. SEB held regular meetings with other international banks within AmCham Ukraine. One pharmaceutical company is represented on the European Business Association's healthcare committee, which engages with the Ministry of Health on medicine supply, reimbursement and clinical trials. The company's medicines have been included in publicly funded programmes, and clinical trials have resumed. Llentab describes both the Swedish business community and a local business club in western Ukraine as important points of contact.

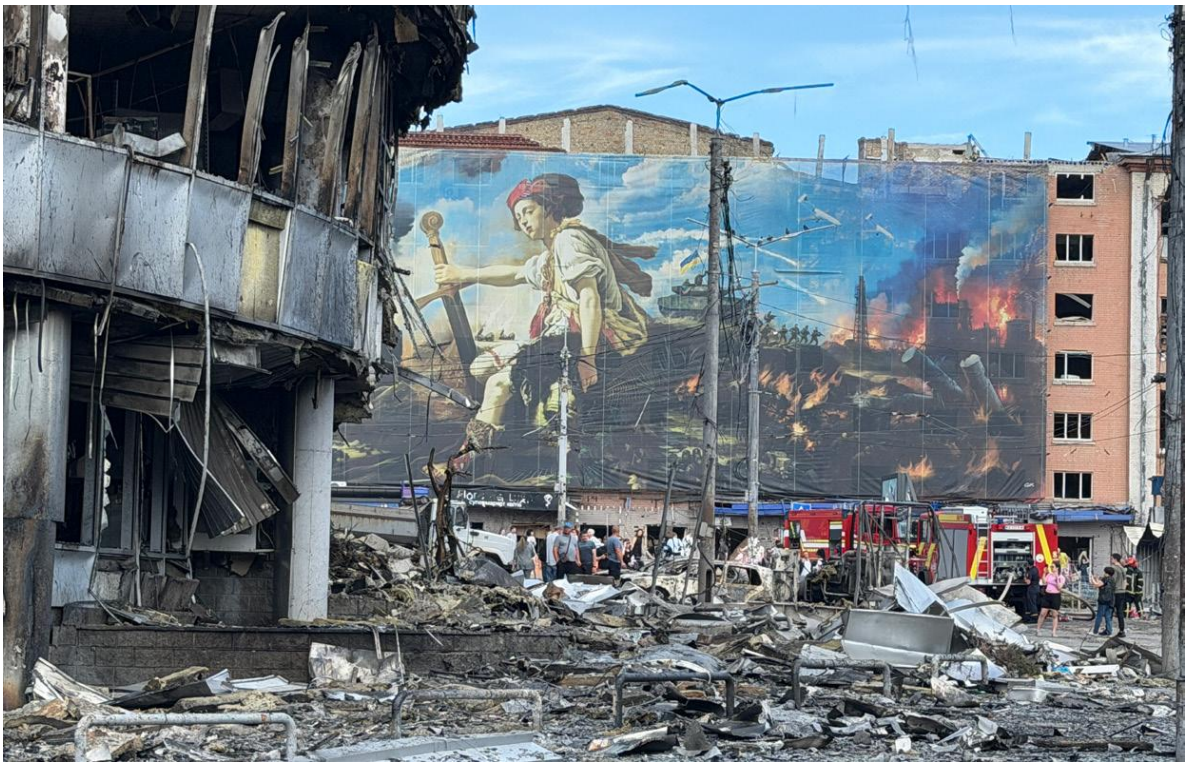
Ongoing information sharing also matters. The export-oriented manufacturer describes how information from the electricity network company about power restrictions enables it to reschedule shifts and prepare safe shutdowns. Business planning therefore needs to be coordinated with priorities in the shared energy system.

Ukraine's digital infrastructure complements these contacts. Diia.Business brings together advice and support for businesses, while Diia.City is a legal and tax framework for technology companies. eRobota offers government grants for businesses and new jobs. DREAM is used for public investment projects and Prozorro for public procurement. Brave1 brings together actors in defence innovation. Contact with the public sector therefore also takes place through organised routes to support, contracts and joint development.

Responsibilities and expectations need to be clear

This broader societal role does not mean that companies or public actors have unlimited resources. During the invasion's first weeks, public efforts focused on defence and the most critical societal functions. Companies had to organise and pay for measures themselves while infrastructure was restored.

Open-ended responses also describe regional differences in how rules are applied and difficulties finding the actor able to make a decision. Cooperation therefore requires both clear contact channels and realistic expectations about the help available. This includes simplifying rules so that production can be maintained despite disruption. Swedish imports of sunflower oil from Ukraine fell at the outbreak of war and were replaced by rapeseed oil, which the Swedish Food Agency approved without requiring manufacturers to replace preprinted packaging.[52]



Kyiv, May 2026. Photograph: Madeleine Filander, Swedish civil defence and resilience agency.

[52] Strömer, 2026.

Trust is built before a crisis

Research on corporate crisis management shows the value of building relationships and trust before a crisis. Relationships expand access to resources and options for action. This is also how cooperation emerges in this study.

Swedish preparedness sectors and agencies supporting businesses

Sweden's civil preparedness structure comprises twelve preparedness sectors. The Swedish civil defence and resilience agency has overall responsibility for coordination and development. Each sector is led by a sector-responsible agency, for example the Swedish Energy Agency for energy supply, the Swedish Transport Administration for transport, the Swedish Post and Telecom Authority for electronic communications, the Swedish Food Agency for food supply and drinking water, the National Board of Health and Welfare for health, healthcare and social care, and the Swedish Agency for Economic and Regional Growth for industry, construction and trade.[53]

County administrative boards coordinate between municipalities and local business in crisis preparedness and civil defence. Industry organisations such as the Confederation of Swedish Enterprise, the Swedish Federation of Business Owners, LRF, the Swedish Construction Federation, Teknikföretagen, LIF and Swecare provide guidance and support for members' continuity planning. In May 2026, the Swedish civil defence and resilience agency published guidance on public–private cooperation to support preparedness agencies' engagement with business.[54] For small and medium-sized enterprises, a municipality's business-development function or an industry network can provide an entry point into the dialogue.

The European Commission has proposed a new regulation on public procurement. If adopted, procurement will become simpler and more flexible, with greater consideration of security, security of supply and strategic dependencies.[55] As a regulation, it will apply equally across the EU.

Cooperation differs between sectors and locations

Cooperation in agriculture shows how companies' size and resources shape the available paths. Large agricultural companies often have established contacts with authorities and international financiers. Smaller farms have adapted through short local food chains and mutual help with resources and supplies. This support also reaches internally displaced people, local communities and the military.

At the same time, companies have needed to manage much with their own resources. Synevo and the export-oriented manufacturer, whose facilities were bombed, had to organise and finance restoration themselves. Scania's CEO summarises the experience:

> *"The important thing is that every company must be able to act on its own. In a situation like this, you have to rely on your own resources."*

Lessons for business preparedness

- #9 Clarify what the company and society need from each other.

Companies' experiences in Ukraine show how preparedness is shaped by the exchange between their own operations and the surrounding environment. Municipalities and regions have provided establishment support and services, authorities have made decisions, and electricity network companies have provided information about supply and outages. Companies, in turn, have sustained production and jobs and made shelters, transport and equipment available to society. At the same time, companies need

[53] Ordinance 2022:524.

[54] Myndigheten för civilt försvar, 2026b.

[55] Upphandlingsmyndigheten, 2026.

enough endurance of their own to act independently, and prepared relationships they can activate when their own capacity reaches its limit.

For Swedish companies and public actors, the task is to establish a shared understanding of expectations before disruption: which needs take priority, what each party can contribute and how long operations can continue when resources become scarce. For smaller companies, local contacts and industry networks can provide a way into that planning.

4. Ten Swedish companies' experiences of the war in Ukraine

4.1 Sigma Software – eight years of preparation saved the IT company

When the phones began ringing on 24 February 2022, Sigma Software knew how to respond. Coordination started at 5.30 a.m. Around 2,500 people, including approximately 1,000 employees, were evacuated; pets came too. Four days later, 73 per cent of employees were back at work.

Company facts

Company and ownership: IT and technology consultancy owned by Sigma Software Group. Its main owner is Danir Group.

Employees: Around 2,000 worldwide, with fewer than 1,000 remaining in Ukraine in summer 2026.

Takeaway: A plan cannot anticipate everything, but planning can create the ability to act when reality differs. Disperse critical resources, test alert chains and prepare alternative communications channels and non-digital backups.

Sigma Software is a Swedish-Ukrainian company with roots in Kharkiv, developing software and digital solutions for international customers.

The digital nature of its operations made it possible to locate servers and development environments outside Ukraine and perform work elsewhere. Deliveries nevertheless depended on employees' safety, functioning electricity and connectivity, and customer confidence.

Customers' questions initiated preparedness

Preparations began in 2014, after Russia's annexation of Crimea and the war in Donbas. "In summer 2014, our international customers began asking what would happen to their projects if the war reached Kharkiv. They asked whether we had a business continuity plan, a BCP. We replied: what is that? There was no war in Kharkiv. But the customers were absolutely right to be concerned. We realised that we did not have adequate answers. That was when work on our BCP began," says Artem Petrenko.

Artem Petrenko is Ukrainian and has worked at Sigma Software for around 18 years. He is President of Sigma Strategy, has been CEO of the Swedish operation since 2018, and is a board member of Sigma Software Group.

The alert chain was tested a week before the invasion

The alert chain had been tested before war broke out. In a 2021 test, only 58 per cent responded within 24 hours. On 17 February 2022, a week before the invasion, it was tested again. This time, 62 per cent responded. Twelve per cent said they did not want to be evacuated in the event of an invasion, and 27 per cent were unsure. The test exposed the knowledge-based company's vulnerability. Systems and data could be moved, but delivery required people to respond, make decisions, get their families to safety and concentrate on work.

On the evening of 23 February, management considered evacuating around 1,300 people, including family members, at a cost of approximately one million dollars. Staff safety had to be weighed against the risk of an unnecessary evacuation. There was no certainty that an invasion would occur.

Bus drivers refused to drive

The next morning, the preparedness plan was activated. Up to 60 employees volunteered to join the crisis organisation and worked around the clock during the first three weeks.

“We had agreements with bus companies and thought transport was secured. But when the invasion began, drivers did not want to enter areas where their own lives were in danger. The contracts no longer mattered. We had to find other solutions and pay considerably more,” says Artem Petrenko.

The company could act because important information was available without internet access, cash had been prepared and several communications channels were available. Digital infrastructure outside Kharkiv and laptops made the workplace movable. The COVID pandemic had prepared staff for remote work.

Customers became part of preparedness

Customer relationships also became part of preparedness. Some customers offered advance payments.

> *“Customers said: take care of the people first. Some offered to pay earlier so that we would have money for the evacuation. They accepted that deliveries might be delayed, but also wanted to know which projects were affected and when teams could return,” says Artem Petrenko.*

After two weeks, 95 per cent of staff were back at work, and after three weeks 97 per cent. The company lost no customers because of the war. Today, Sigma Software’s offices in Ukraine have diesel generators and Starlink. During winter 2025/26, when heating failed, they also had food for two weeks. Employees could work and live in the offices.

“Buying a generator is not enough. You need fuel, servicing, spare parts and someone who ensures that it really works when the power goes out,” says Artem Petrenko.

Human capital remains the company’s most exposed resource. In summer 2026, approximately as many employees were outside Ukraine as inside the country. Around 64 were serving in the armed forces. The company needs to manage the loss of skills while the war tests employees’ psychological endurance and family circumstances.



Kyiv, May 2026. Photograph: Madeleine Filander, Swedish civil defence and resilience agency.

In depth: when the company's preparedness plan is activated

Sigma Software began developing its Business Continuity Plan in 2014. Preparedness was built gradually: first evacuation equipment and generators, then the geographical dispersal of staff and digital infrastructure. Servers and development environments were moved from Kharkiv to other parts of Europe. A systematic approach to information security enabled the company to meet ISO 27001 requirements in 2018.

Ahead of the invasion, a Business Impact Analysis identified documents, people and communications as particularly critical. Cash was prepared, accommodation booked and buses contracted. Multiple communications channels and satellite communications were intended to reduce dependence on a single system.

Despite preparations and tests, much failed when the invasion came. For Artem Petrenko, this is no argument against planning: "You need to prepare to be able to respond," he says.

The experience is also summarised in one point from Sigma Software's own post-invasion review: "The Plan is nothing ... Planning is everything." The organisation will need to face dilemmas rather than problems with predetermined answers. People must be able to make decisions quickly even when a situation is not described in a manual.

Even backup solutions can fail. Paper copies of contact, account and contract information made information accessible without internet. A contracted transport service, however, was no help when the carrier was affected by the same crisis. An alternative to the backup solution was then needed.

In 2023, Sigma Software introduced a global continuity framework incorporating its experiences from Ukraine.

Sigma Software's preparedness plan

Global continuity work includes:

- geographical dispersal of staff, servers and development environments;

- generators, backup equipment and alternative workplaces;
- information security in accordance with ISO 27001;
- alert chains, scenario tests and management exercises;
- multiple communications channels and satellite connectivity;
- printed contact lists, account information, contracts, checklists and standard messages;
- cash for transport and other emergency expenditure;
- prepared transport, hotels and reception arrangements for employees and families;
- the ability to move projects and tasks between teams and countries.

4.2 Synevo – when the Odesa laboratory was damaged, Kyiv took over the samples

During the night of 28 March 2026, a Russian Shahed drone struck around 50 metres from Synevo's laboratory in Odesa. The blast wave damaged the building and medical equipment. No employees were injured, but the laboratory had to close. The nationwide network became the company's backup solution.

Company facts

Company and ownership: Synevo Ukraine is part of Medicover AB, listed on Nasdaq Stockholm. The largest shareholders are Christina and Robert af Jochnick and their families.

Presence in Ukraine: More than 360 sample-collection points, eight regional laboratories and around 2,500 employees.

Takeaway: When a laboratory becomes unavailable, samples must be redirected quickly. Backup power, water, transport, IT and staff therefore need to be planned as parts of the same system.

Ukraine's largest private laboratory network

Synevo is Ukraine's largest private laboratory operator and the only one with a nationwide network. Its largest laboratory is in Kyiv. Six of its eight laboratories were operating in summer 2026. The facilities in Kharkiv and Kherson had closed for security reasons.

Since the invasion, around 30–40 sample-collection points had been damaged and a further 20–30 lost in occupied areas. Restoring a sample-collection point costs around EUR 5,000–20,000. Many regional competitors have only one laboratory. Synevo's network, by contrast, allows samples to move between several facilities.

From rapid expansion to cutbacks

For Synevo Ukraine's Deputy CEO Mykola Skavronsky, the first days of the invasion were personal. It took him two days to persuade his wife to travel west with their children. He stayed in the house with the family's three cats.

> *"I sat at home with my gun, waiting for the Russians. I understood that I might kill two or three of them and then be killed myself. But at least I would take some of them with me," he says. "Why should I leave? It is my house, it is my country."*

Including employees on parental leave and in military service, Synevo had up to 3,000 people on its staff list in summer 2026, equivalent to 30 per cent additional staffing. Ukrainian operations generated around UAH 4.2 billion in revenue in 2025, equivalent to approximately USD 100 million.

Around 85 per cent of revenue is paid directly by patients, approximately 13 per cent comes from private clinics, and the remainder from the public healthcare system. Demand remains lower than before the invasion, while the costs of keeping operations running have risen. To protect profitability, Synevo stopped expanding its network, limited investment and froze almost all recruitment. Investment in electricity, water and preparedness has nevertheless continued.

“That immediately made us very profitable. It is good in the short term, but in the medium term decisions like these may create problems. At the same time, I understand headquarters’ requirement to limit investment in a high-risk war zone,” says Mykola Skavronsky.

Employees cleared the site and contractors made repairs

After the attack in Odesa, the emergency services first inspected the premises. During the first two days, employees cleared broken glass, wood, smashed furniture and other debris. Technicians checked the analytical equipment. Almost all equipment could be restored within a few days. Private contractors carried out the heavier building work.

Sample collection continued. Samples intended for Odesa were instead transported through the existing logistics network to the central laboratory in Kyiv. The Odesa laboratory reopened after one week. Synevo had to commission, organise and pay for repairs itself. Its status as critical healthcare infrastructure provided no practical assistance with the building.

“We never expect anyone else to solve our problems. We are used to solving them ourselves,” says Mykola Skavronsky.

Preparedness has developed gradually as new vulnerabilities emerged. Work has focused on three critical areas: electricity, water and heating; protection of IT systems and patient data; and appropriately skilled staff.

“We have a continuity plan. It is not written down in detail, but parts of it exist within different departments and functions,” says Mykola Skavronsky.

Patient information and analytical results are protected against both physical attacks and cyberattacks. Backups are stored in the cloud, and if a building is hit, information can be accessed elsewhere.

In depth: the Kyiv laboratory must withstand long outages

The central laboratory in Kyiv is Synevo’s largest hub. There are also around 80–90 sample-collection points in Kyiv and its suburbs. During winter 2025/26, the laboratory sometimes received grid electricity for only two to three hours per day. The generator installed before the invasion had no backup of its own. Synevo therefore installed a second and then a third generator. Alternating between the units allows the laboratory to continue through long outages. A tank holding around ten tonnes of diesel supports three to four days of operation, and backup power also keeps the building heated.

A laboratory needs water for both hygiene and analyses. Tanks holding around ten tonnes of water last approximately two days and have been replenished by tanker when municipal supply failed. Ahead of winter 2026/27, Synevo had its own well drilled at the facility beside Kyiv’s ring road. Groundwater is drawn from a depth of 50–60 metres and passes through several filtration stages before use.

A large, predominantly female workforce

Around 90–93 per cent of Synevo’s employees are women. This has limited the direct effect of mobilisation. Critical-infrastructure status allows half the men liable for mobilisation to be exempted. Public healthcare institutions, however, can exempt all of them. A specialist at a private laboratory can therefore be mobilised even though the same expertise would have been protected at a public hospital.

Emigration, internal displacement and mobilisation have also made recruitment more difficult. Synevo pays higher wages but still struggles to find people with the right experience. Management has remained in Ukraine, and operations are led locally. Patient information, analytical results and system access must be protected against both physical attacks and cyberattacks. Synevo stores backups in the cloud and at other locations. If a building is hit, information must remain accessible elsewhere.



Synevo blood-sample collection point in Kharkiv, March 2022. Photograph: Synevo.

4.3 Llentab – building premises that allow industry to continue

When Ukrainian factories expand or relocate away from the war, a new production site must become operational quickly. Llentab has continued supplying and constructing steel buildings. At the same time, the war has made installation workers the company's most exposed resource.

Company facts

Company and ownership: Llentab manufactures steel buildings, has roots in Bohuslän and has been owned by Profura AB since 2023. The group has more than 400 employees in seven European countries.

Presence in Ukraine: Sales operations since 2003 and a branch since 2006. Around 50 employees, with an office in Sofiivska Borshchahivka in the Kyiv region, a salesperson in Lviv and projects across much of the country.

Takeaway: Examine which tasks can be simplified or prepared in advance when specialist skills become scarce. Llentab reduced on-site work by supplying more prepared and preassembled components. This reduced dependence on staff.

Llentab designs and erects steel buildings for industry, warehousing, food production and logistics. Steel components are produced mainly in Sweden. The Ukrainian operation designs buildings, works with customers and assembles components. Its role within the group has grown during the war: half of a new group-wide design team is based in Ukraine, designing buildings for Sweden and Norway.

Wages and evacuation came first

When the full-scale invasion began, the management team consisted of four people. The company had some continuity planning, functioning IT backup and procedures for evacuation, suppliers and staffing. Several elements had not been communicated internally. Crisis management, scenario work and backup power were under development. No plan was designed for a prolonged full-scale war. Management halted installation work and held materials in the Lviv region.

Manager Konstantin Ivanov stayed to secure wage payments. Internet access was poor, and the future of the banking system was uncertain. He went to the bank in person and signed the documents for advance payment of wages and earned bonuses.

“Above all, we wanted to protect people. I had personal contact with every employee and tried to persuade them to leave Kyiv,” he says. Within a week, everyone had left the city. The parent company and sister companies in Poland and Czechia arranged travel and accommodation. There was no dedicated war reserve, but customers’ advance payments provided room to relocate staff and continue operations.

Work provided structure

The COVID pandemic had prepared staff for remote work. Design, sales and administration could continue, but installation required people on site. A project in Zakarpattia resumed in less than three weeks. In April 2022, the company returned to building sites near Kyiv and in the Poltava region. Most employees were back in Kyiv during the third quarter of 2022.

“The first medicine is normal work. Employees get to do normal things in an abnormal situation. It really helps. But now, after several years, I can see how exhaustion has accumulated and how some are on the verge of very severe stress,” says Konstantin Ivanov. Llentab offers additional life insurance and psychological support, but few use the support. In summer 2026, some employees’ homes were damaged in attacks on Kyiv. No one suffered physical injury, but families once again had to leave their homes.

Mobilisation changes the construction system

Around 30 per cent of the installation department has been lost to mobilisation. Ten employees were mobilised and one has been killed. Llentab can temporarily exempt half of certain remaining employees, but must reapply when rules change. This makes workforce planning less certain and increases administration.

“We have high unemployment, yet we still lack people who can work. Some men avoid formal employment because they are afraid of being mobilised. It is a major problem both for us and for our customers, because they run manufacturing businesses and need the same workforce,” says Konstantin Ivanov.



Kyiv, March 2022. Photograph: Pexels.

In depth: from decision to completed facility in six months

In the Ternopil region, 130 kilometres east of Lviv, an industrial park has emerged around companies relocating from war-affected areas. One of Ukraine's largest metal-packaging manufacturers chose land where the municipality wanted to attract industry and jobs. Llentab had previously constructed several buildings for the company in the Sumy region near the Russian border, with a combined area of around 8,000 square metres. Its latest project there was completed in 2021. The new building was designed in Ukraine, and work on site was connected to the group's European production and logistics.

"It was a record project. Only six months passed from the decision to build until the facility was fully completed. We erected 12,000 square metres, and the customer could move its equipment and resume production," says Konstantin Ivanov.

During construction, a food company from Kharkiv bought the adjacent land and hired Llentab. In less than a year, two manufacturers had moved to the area. "We helped set the creation of an industrial park in motion. The local authorities showed great openness and actively helped the companies resolve organisational matters," says Konstantin Ivanov.

Labour shortages have led the group to change design and installation methods. Components are delivered to exact dimensions with predrilled holes. Some work is preassembled in Poland to reduce working time on Ukrainian construction sites. An installation worker who returned from military service with physical injuries has received further training to lead and inspect subcontractors' work.

Electricity, heating and internet have had a relatively small direct impact on Llentab's operations. Transport and supply chains have been more difficult. For customers, energy supply has become an investment issue. Even before the invasion, buildings were designed as standard to support solar panels. Demand has increased during the war. Over the past two years, nearly half of customers have chosen solar panels, some also choosing energy storage for backup power.

Several postponed projects started at the same time

During 2022 and 2023, customer numbers, demand, turnover and delivery capacity declined. The market subsequently improved. Industrial construction is driven mainly by Ukrainian investors, business relocations and reconstruction. Many foreign investments remain on hold. Fewer suppliers have made purchasing outside Ukraine and cooperation within the group more important. Llentab Ukraine has remained profitable, but turnover is below earlier plans. In spring 2026, several postponed projects started simultaneously, and installation capacity once again became the main constraint.

4.4 Mining equipment manufacturer – continuity management outside Ukraine and clear communication

When Russia launched its full-scale invasion, the company was much better prepared than eight years earlier. Money could be paid out immediately and employees' families evacuated. For the country manager, the war has also demonstrated the importance of acting independently, communicating clearly and preparing who will take over if he can no longer lead operations.

Company facts

Company and ownership: Swedish listed industrial group supplying equipment, spare parts and services primarily to the mining industry.

Operations in Ukraine: Around one hundred employees at the time of the full-scale invasion in 2022, with a slight reduction since then. The operation is part of an international group organisation.

Takeaway: The company has established a continuity management team outside Ukraine that can keep operations running if key personnel are no longer able to do so. Its experience also shows that a crisis requires authority to act without waiting for the state, and faster, more direct communication than under normal conditions.

The country manager remembers queues at cash machines and petrol stations in spring 2014, when Russia's aggression changed everyday life in eastern Ukraine. He notes that few had imagined the situation would develop as it did.

> *"In 2014, we were not particularly well prepared. No one really expected anything like this to happen."*

Ahead of February 2022, there was a crisis committee, clear areas of responsibility, diesel, water and arrangements for evacuating employees and their families. Together with headquarters, the company had increased credit availability for wages and taxes if operations stopped. An additional payment was prepared before the invasion.

When the war began, the country manager was travelling in southern Ukraine. He managed to return and activated the financial preparations. The prepared funds could be paid directly to employees.

> *"On the 24th, I simply pressed the button and the money was sent straight to the employees."*

Employees and families were evacuated

Operations were temporarily suspended. During the first two weeks, the company evacuated around a hundred people, mainly women and children. Options in other European countries had been explored in advance. In western Ukraine, the company rented hotel rooms and arranged transport to the border, where colleagues from other parts of the group received them.

Needs changed quickly. A service technician who initially wanted his family to stay asked for help the next day as the front approached his hometown. Some employees and their families remained under Russian occupation for a period.

The country manager ensured that his own family reached safety but remained in Ukraine himself. He judged that otherwise he would have to devote too much energy to their safety and would find leading operations more difficult. After a few weeks, business began to resume.

Offices became a place of safety

The country manager sees an important difference between Sweden and Ukraine in a crisis.

"Trust in the state tends to be somewhat more limited."

This has disadvantages, but in his view it also means people are accustomed to trying to solve problems themselves. He believes Swedish companies may be more inclined to wait for instructions from a manager, the municipality or the state.

When the electricity supply came under extensive attack, the company installed diesel generators and, at some sites, solar panels. Staff received battery packs for basic equipment at home. Winter 2025/26 brought recurring, prolonged outages, sometimes lasting an entire day.

Offices were prepared for employees whose conditions at home became difficult. They provide heating, hot water, phone charging and communications. The company arranged and paid for the solutions itself, without waiting for the property owner or any authority. The workplace thus became a stable point in an otherwise uncertain daily life.

The country manager describes the company as "an island of stability in Ukraine".

Leadership that works even if the manager becomes unavailable

After major attacks, the country manager reports on employees' safety and the state of operations. If necessary, he contacts group management directly.

If he faced a similar situation again, he would place even more emphasis on communication. During the first days, information needed to be communicated quickly even though the situation changed hour by hour. After several years of war, clear everyday feedback is also needed: what is known, what is uncertain and what is unacceptable.

"It is difficult to talk about these things," says the country manager. Yet discussions about responsibilities, substitutes or what happens if a manager is killed cannot be postponed. Clarity therefore applies both to daily operations and to the most serious scenarios, and he believes Swedish leaders need to learn this.

Staffing must also be sufficient after the war

The company has many male service technicians and has been affected by mobilisation. Employees have also gone missing or suffered serious injuries because of the war. The company continues paying mobilised employees' wages and has covered rent for families who left occupied areas.

To reduce vulnerability, it is trying to recruit younger service technicians and more women, and to automate administration. Cooperation with universities and vocational training programmes has been strengthened.

The country manager notes that the workforce has aged during the war. Current staffing needs must be met while the company builds its organisation for the post-war period.

In depth: continuity management outside Ukraine

The company's continuity planning covers what happens if the country manager or other key personnel are killed or can no longer work. To keep operations running, it has established a continuity management team outside Ukraine. Critical functions have designated substitutes within the regional organisation who can take over responsibility when needed.

This includes financial management, accounting and HR. These functions must be manageable from other parts of the group so that reporting, transactions and payments can continue even if parts of the organisation in Ukraine are disabled.

"We created a kind of plan B for every position. Whatever happens to me, another person can step in and start working as usual," says the country manager.

However, designating a substitute is not enough. The person also needs relevant information, system access, decision-making authority and legal powers of attorney to represent the company and perform the tasks. The country manager and headquarters have therefore prepared documents held outside Ukraine that allow responsibility to be transferred if necessary.

The continuity management team is based on the group's global crisis-management framework, but some procedures have been adapted to Ukrainian conditions. Documentation specifies roles, substitutes, information channels and actions at different points in time. It is updated during the war and used in ongoing crisis work.

The country manager describes the planning as a living document.

"Whatever happens, the person taking over from me can read it and know how to act and what is expected."

The successor must quickly understand how operations work, which decisions are needed and what responsibilities come with the role. The next person should not have to start from scratch when the crisis is already under way.

The continuity management team reduces dependence on individuals and enables critical functions to be maintained even during very serious disruption. Together with local decision-making authority and rapid communication, it improves the company's ability to continue operating when management, staff and basic societal functions face severe pressure.

4.5 Vandra Rugs – restarting rug weaving in western Ukraine

Vandra Rugs moved its handwoven rug production from occupied southern Ukraine and rebuilt the company in the west. Some equipment and its most important craft expertise came with it. The workforce, supply chain and logistics had to be recreated while retaining customers' trust.

Company facts

Company and ownership: Vandra Rugs produces handwoven rugs and is jointly owned by Cia Attling, Marie Wallenberg Olsson and Larissa Boden, who leads operations in Ukraine.

Presence in Ukraine: Manufacturing since 2007. Operations moved from Kakhovka to Kosiv in summer 2022, when the company had 30 employees. Today it has around 50 employees, mainly women.

Takeaway: A small company like Vandra could restart when it succeeded in moving a minimum functioning production system: key personnel, critical components and sample materials. It also received municipal help with premises and support from owners, customers and suppliers through advance payments and credit.

Vandra Rugs has roots in EMTE Textil, founded in the 1940s and a collaborator with Svenskt Tenn. In 2007, the co-owners located production in Liubymivka outside Kakhovka. Swedish weavers trained the first five Ukrainian women in Scandinavian weaving techniques. For Larissa Boden, the company was also about providing permanent, year-round employment for women who had previously often relied on seasonal agricultural work.

Premises and housing had to be available together

When Russian forces occupied Kakhovka in 2022, there was no completed continuity plan. Larissa Boden had explored a backup option in Lviv, but no alternative production site existed.

“Marie and Cia had raised the need for an evacuation plan, especially after everything that happened in Bucha, and I had explored a backup option in Lviv. But there was no alternative production site. We had to create the plan while we were fleeing,” says Larissa Boden.

In May, she investigated around 15 locations in western Ukraine. Several weavers had children and could relocate only if they had both work and a functioning everyday life. Lviv had premises but little housing. Another location offered accommodation, but the workshop required months of renovation.

They chose Kosiv in the Carpathians, more than 1,000 kilometres from Kakhovka. The small town had a strong craft tradition and an institute of applied and decorative arts. The mayor offered a municipal building recently renovated through an international cultural project. Larissa Boden arranged electricity, water, sewerage and toilets. The company recruited through the weaving programme, teachers, former students and women with experience in other crafts.

“We had to build a completely new team again and achieve the same quality, speed and creativity that had taken us 15 years to develop,” says Larissa Boden.

Business relationships financed restart

The company’s own reserves were limited. The Swedish parent company made advance payments, customers kept ordering, and the Spanish wool supplier provided 180-day credit and sent yarn directly to Kosiv. Materials could therefore be in place before normal cash flow returned. As a registered internally displaced person from the Kherson region, Larissa Boden has also been able to apply for support for internally displaced people and relocated companies. Grants have financed investment.

Energy and transport require new solutions

During the first winter, indoor temperatures sometimes fell to around eight degrees Celsius. Warm base layers were sent from Sweden. The municipality and company later found financing for around 15 air-heating units. A generator powers lighting and some functions, but not the entire heating system. The workshop has safety rules for air-raid warnings and has received Starlink through Swedish support.

Exports now travel overland, with carriers booked through digital logistics platforms. Before the invasion, DHL collected samples twice a week. Today they accompany rug shipments to Sweden roughly every two or three weeks and are distributed from there. The company still has no complete continuity plan or alternative production site.



Without heating in the rug workshop during the first cold winter in Kosiv, 2022/23, after fleeing Kakhovka. Photograph: Vandra Rugs.

An everyday life that people can sustain

Around 15 employees are internally displaced. Together, employees have nearly 60 children under 14, and some have spouses at the front. After four years of war, Larissa Boden and Marie Wallenberg Olsson describe deep fatigue and fluctuating motivation. When Marie visited Kosiv in summer 2026, the visit concerned both the company's future and showing that the Swedish co-owners remained close to the operation.

Meanwhile, sales had increased from around SEK 15 million to SEK 22 million in the latest financial year. The company plans additional looms, new products, digitalisation and increased sales in the United States. Staff turnover is high, however, especially in summer when seasonal jobs in other countries attract workers.

"We have had to promote the value of formal employment, stable working hours and 24 days of paid holiday," says Larissa Boden. Future expansion may therefore take place closer to a larger labour market, such as Kolomyia or Lviv. Leaving Ukraine, however, is not an option.

"We believe in the future. Otherwise, we would never keep fighting. We will be here until the end."

In depth: a dramatic escape brought the looms out of occupation

On 24 February 2022, completed rugs were ready to leave the Kakhovka workshop. The invasion began, the driver cancelled transport and Russian forces took the town within the first day. During March and April, the owners helped eight to ten weavers and many children leave the area. The women who wanted to remain in Ukraine were willing to move within the country if production moved too.

Under occupation, the weavers worked behind windows covered with wooden boards. Finished rugs were hidden in homes and carried out on evacuation buses to reach customers. The company rescued components for around six looms and yarn in the collection's colours to make samples and cover the first week of production. The load was mixed with fabric to attract less attention at checkpoints.

The approximately 180 kilometres to Zaporizhzhia, normally less than three hours, took around ten days. At Vasylivka, Russian forces allowed only a limited number of vehicles through. After several days'

waiting, the driver continued but became stuck in mud between the last Russian and first Ukrainian checkpoints. The company lost contact with him for nearly two days.

Larissa Boden contacted the Red Cross and other networks in Zaporizhzhia. A heavy vehicle pulled the truck free. On 11 June, the equipment reached Kosiv, where five experienced weavers and prepared premises were waiting. The transport saved the technical core of production; the weavers brought the knowledge that made restart possible.

4.6 Väderstad – machinery that keeps agriculture running as the workforce shrinks

Ahead of spring sowing in 2022, Väderstad delivered a 24-row Tempo planter to the Odesa region despite missile threats and closed roads. War has made farmers' access to machinery, servicing and spare parts more decisive as fewer people must farm large areas.

Company facts

Company and ownership: Väderstad is a family-owned manufacturer of agricultural machinery and spare parts, headquartered in Östergötland. Group turnover is approximately SEK 6 billion.

Presence in Ukraine: Since 2006 in the Cherkasy region, south of Kyiv. Around 50 employees.

Takeaway: Food preparedness is also repair preparedness. As drivers and mechanics become fewer, the need grows for productive machinery, rapid servicing and several backup routes for energy, spare parts and transport.

From its base in Zhashkiv, the Ukrainian subsidiary sells and services machinery for tillage, drilling and precision planting. Employees also work with spare parts, logistics, demonstrations and technical support for farmers across much of the country.

Preparations provided a head start

Management took US intelligence reports of an impending attack seriously. In December 2021, the company had obtained generators, fuel, first-aid equipment, medicines and basic supplies. A continuity plan, crisis management, evacuation procedures, IT backup, alternative suppliers and workforce planning were in place and known internally. However, the company had not rehearsed different scenarios or determined a minimum operating level and which functions would take priority.

"Functionally, we were fully prepared. That gave us a head start and a sense of security. Psychologically, we were not prepared. You cannot prepare for a missile exploding near your home," says Vitaliy Filatov, CEO of Väderstad in Ukraine.

When the invasion began, the company offered to evacuate employees and families to safer parts of Ukraine, Poland and Sweden. Most remained, and families with children who left later returned. Operations were functioning again around 11 March. Local managers received greater authority and had more frequent contact with headquarters.

Generators were supplemented with batteries and solar panels

Electricity supply became the greatest operational vulnerability. Diesel generators kept important functions running but were expensive and could not operate around the clock. The company added batteries and solar panels. During the difficult winter of 2025/26, batteries provided more hours of functioning offices, warehouses and communications without continuous generator use. The combination reduces costs, fuel needs and vulnerability if one solution fails. The mobile network has usually worked even during power outages; Starlink is the final backup.

Endurance in everyday life

In summer 2026, five employees were serving in the armed forces and two had returned for health reasons. Their employment is retained, and those serving receive around EUR 400 per month in voluntary support. The most difficult staff issue is nevertheless the prolonged psychological strain of air-raid warnings, interrupted sleep and repeated visits to shelters. Filatov describes how he approaches uncertainty:

> *"You can easily wear yourself down if you keep waiting for the situation to improve within a particular time. You cannot pin your hopes on victory coming in a month or a year. You simply have to do your job. That is the universal recipe. If we need to adjust something to improve the work, we do so."*

Fewer people increased the need for productive machinery

According to Filatov, some farms have lost around a quarter of their workforce but must cultivate the same area. Fewer drivers, mechanics and supervisors increase the need for capacity and reliability. At the same time, the war has reduced the customer base and many farms' ability to pay.

"We thought farmers would buy cheaper and used machines when the war put pressure on their finances. That proved wrong. When skilled employees become fewer, farms need more productive and reliable machinery," says Vitaliy Filatov.

Several farms have been able to use the government's 5–7–9 lending programme, guarantees, credit insurance and insurance adapted to war risk. Väderstad's revenue in Ukraine fell from UAH 1.31 billion in 2021 to UAH 550 million in 2022, a decline of 58 per cent. In 2025 it reached UAH 1.45 billion, exceeding the pre-invasion level in Ukrainian currency.

Taking a position and providing practical support

After the invasion, Väderstad stopped selling new machinery to Russia, previously one of its most important export markets with sales of around half a billion Swedish kronor. Some spare parts for machines already sold have continued to be supplied. "As a company, it is important to have values and a clear ethical compass.

We fully support Ukraine's struggle for freedom," says Christina Stark, former CEO and one of the owners.

Support has also included refurbished generators from Swedish farms and other businesses, and stoves. A Väderstad engineer developed stove drawings that were shared with others. In total, around 35,000 stoves have been manufactured and delivered to Ukraine using the drawings. Vitaliy Filatov emphasises that productivity, price and service determine business decisions, but the company's conduct during the war also matters for long-term customer relationships and employees.

"Our Ukrainian customers are aware of Väderstad's position. Although productivity, price and service still determine the deal, the company's conduct during the war is part of a long-term customer relationship and, of course, absolutely central to our employees," says Vitaliy Filatov.

In depth: spare parts are part of food preparedness

Väderstad has increased spare-parts inventories, rerouted transport and adapted contracts and payment procedures. Transport enters through western Ukraine and is adjusted to local risks. There is a warehouse in Zhashkiv. During spring fieldwork, a farm may have only a few days with suitable soil moisture. If the seed drill stops, the correct part, transport and technician must be available together.

Larger machines are transported mainly by truck. Parallel channels are used for spare parts: the company's own transport, external hauliers, dealers, and Ukrainian postal and logistics companies. The commercial postal network also reaches smaller towns. A package containing around 50 kilograms of spare parts can be sent approximately 400 kilometres and reach a farm within 24–48 hours.

This offers lessons for Sweden directly linked to agriculture. Christina Stark highlights the central role of machinery in the farming system.

"At Väderstad, we are prepared. The major challenge for us and for Sweden is to establish an understanding that work on Swedish food preparedness needs to cover the entire system around the farm. A farm's repair capacity needs to be assessed on the same level as access to seed, fuel and other inputs," says Christina Stark.

> *"Without functioning machinery, spare parts and trained mechanics, it will not matter if we increase our self-sufficiency. A spare part missing during spring fieldwork can matter more than the same part a few weeks later."*

4.7 Stritex – the clothing factory became a source of stability when the men went to war

Most employees at Stritex's clothing factory in western Ukraine are women. When men were mobilised, most of the workforce could therefore continue production. The factory, work and wages helped sustain families' finances and daily lives.

Company facts

Company and ownership: Stritex is Fristads' production company in Ukraine and makes workwear for Fristads.

Presence in Ukraine: The factory in Stryi was acquired in 2001. Before the invasion it had around 260 employees; today it has around 200.

Takeaway: Plan both for production needs and for employees' ability to work. Stritex shows how wages, clear local authority and backup power can keep operations running and give families greater stability in daily life.

CEO Galina Kreminets describes the workplace in simple terms: "It is like a little home." The factory is in Stryi in the Lviv region, approximately 70 kilometres from Lviv and just over 100 kilometres from the Polish border. Materials are trucked from Europe to Stryi, where workwear is sewn and then transported back. Production therefore depends on both cross-border transport and work in the factory continuing to function.

Galina Kreminets has worked at the company since 2005, initially in finance, including group reporting. She became CEO at the end of 2020. Just over a year later, Russia invaded Ukraine.

A delivery provided structure

24 February 2022 came as a shock. Despite the warnings, management had been unable to imagine a full-scale war. "We did not know what to do," says Galina Kreminets. Amid the paralysis, there was a concrete task. Finished garments needed to be delivered to Fristads. Employees went to the factory and arranged transport to Sweden.

The delivery gave work structure. During the first days, Kreminets was in close contact with Fristads about whether the factory could remain open without exposing staff to unacceptable risks. The Swedish owner allowed local management to assess the situation. Kreminets and her colleagues wanted to

continue and were given the authority and support to do so. At first, the factory worked day by day, and then through an increasingly prolonged war.

Kreminets is a mother of four and could have left Ukraine and performed her previous finance role remotely. But the entire management team chose to stay and keep the factory running. Cooperation, Fristads' support and the confidence of the owner's top management enabled the company to get through the difficult period.

"Major management changes would have created problems for operations," she says. Stryi is far from the front, but missiles and drones also reach western Ukraine, and explosions have repeatedly reminded people of the war.

Work held everyday life together

The predominantly female workforce made Stritex less directly exposed to mobilisation than companies with many men in technical occupations. A small number of men have been mobilised. For women, the war has instead often affected them through their families. Many support children and households while a husband or son serves in the armed forces.

Work has provided wages, colleagues and a few hours away from the news. Children have been able to continue attending school, and families have had an everyday routine to hold on to. A production stoppage would therefore have caused both financial problems and renewed anxiety. "When the company is stable and wages are paid, it creates stability for people," says Kreminets.

Backup power for critical machinery

Electricity was the greatest technical vulnerability. Around 200 people cannot wait for hours for power to return. Many live in villages around Stryi and travel in on a hired bus. When information about the next day's outages arrived only the evening before, both transport and production became difficult to plan.

In summer 2024, Fristads purchased a large diesel generator. Stritex added batteries and UPS solutions for computers, the server and production equipment. Its experience is that backup power must be planned down to individual machines. The factory's large cutting machine could stop in the middle of an operation. The computer had battery backup but the machine did not, and abrupt stops risked damaging the equipment. Without the generator, Kreminets believes production would eventually have ceased.

Before the generator was installed, local authorities tried to help the factory with contacts concerning electricity supply. The company needed to know when planned outages would occur and whether they could be scheduled outside production hours. The solution therefore required both investment by the company and functioning local contacts.

Fristads continued investing

Support from Sweden has also included an additional wartime payment in 2022, new sewing machines, renovations and higher wages. When a mobilised employee was killed, his family received support equivalent to one year's average salary. A planned project to install solar panels on the factory roof has been approved. For Kreminets, these investments demonstrate that the owner sees a future for operations in Ukraine.

Stritex pays wages and taxes and has been designated a company of critical importance to the local economy. Six men in key functions have therefore been exempted from mobilisation.

In depth: when the shelter became part of the factory

When Fristads invested in Stryi in 2001, an older, unfinished factory building was renovated. The basement included a space intended as a shelter. Before the full-scale invasion, parts were used as changing rooms. After February 2022, Stritex refurbished the ventilation, walls, showers and toilets.

When an air-raid warning sounds, employees leave their sewing machines and go down to the basement. Production stops until the danger has passed. The shelter belongs to the city but is used by Stritex. During night-time alerts, the factory's security staff also open the doors to nearby residents.

How often people seek shelter depends on the threat. After several years of war, residents monitor reports of the location of missiles and drones. When they appear to be heading towards western Ukraine, more people come to the factory.

It is not enough for a shelter to exist on a drawing. It must be equipped, accessible and usable when people need protection.

4.8 Begoma – the freight forwarder that dared to enter when the war began

Family-owned logistics company Begoma is among the few Swedish companies that entered Ukraine after the outbreak of war. Only days after 24 February 2022, the family decided to establish a Ukrainian subsidiary. As old trade routes were broken, Ukraine needed new routes to Europe. This was where societal benefit and business benefit met.

Company facts

Company and ownership: Begoma is a family-owned freight-forwarding company run by the Malmberg family.

Presence in Ukraine: Since the invasion in 2022. Today, five employees work in Ukraine.

Takeaway: Build relationships with more carriers and test alternative routes before the normal route closes. Begoma shows how a company can create options through its network. Check which alternatives can actually be used if several flows are disrupted simultaneously.

"We gathered around the coffee machine and asked ourselves: what can we do? We began by offering humanitarian transport free of charge and then decided to open our own company in Ukraine," says Henrik Malmberg, Begoma's CEO. Henrik Malmberg is part of the family management team. Short decision-making chains allowed the family to act immediately.

Before the invasion, Begoma already handled transport to and from Ukraine, including assignments linked to automotive subcontractors. Initial efforts involved transporting urgently needed items, including generators and medical equipment. But the family quickly recognised that the need extended beyond humanitarian transport. Ukraine also needed to continue trading, producing and exporting. Begoma began recruiting in autumn 2022, and operations started around the turn of the year.

A transport system redrawn during war

Establishing the company itself went smoothly. Company registration, bank accounts and contacts with authorities worked, helped by Ukraine's extensive digitalisation. The major task is operating in a transport system that is being redrawn while the war continues.

> *"For example, blockades at the Polish border have periodically created queues, disruptions and sharply increased prices. We have dealt with this by combining different carriers and routes," says Henrik Malmberg.*

As a freight forwarder, the company organises transport through subcontractors from Ukraine, Poland and Czechia, among other countries. Flexibility rests in relationships and the ability to change supplier, route and country as conditions change.

Functioning logistics keeps production running

“Everything is transported, without exception. Every single thing you look at around you has been transported,” says Henrik Malmberg.

A Ukrainian factory may have staff, machines and orders. Production also requires raw materials and components to arrive. Finished goods need to reach customers so that the company earns revenue and can pay wages and taxes. Imports supply businesses with inputs and spare parts and provide households and public operations with food, clothing, medicines, fuel and other products.

Henrik Malmberg points out how clearly the war has shown that no industry and no country is self-sufficient. When Ukraine’s former trade with Russia disappeared, Ukrainian companies needed to find new customers in Europe and buy more from the EU. Begoma’s own flows show the change. In summer 2026, around 85 per cent of transport went into Ukraine and 15 per cent out, according to the company. Deliveries related to construction, technology and equipment have grown, and humanitarian transport continues.

When war comes close

At the end of summer 2026, reports emerged of Russian attacks on logistics facilities. Ukrainian country manager Boris Khruslov, who was travelling to Kharkiv to deliver an ambulance, sent reports.

“Boris sent videos from facilities attacked during the night. The images were terrible,” says Henrik Malmberg.

When a logistics hub or warehouse is destroyed, the effects spread to businesses waiting for materials and customers waiting for their products. Begoma then encounters increased and changing demand for transport, alternative routes and new logistics solutions.

Five employees in the midst of war

Employees work at the Kyiv office and remotely when conditions require. The war shapes the employer’s role. After a night of missile and drone attacks, conversations between Sweden and Ukraine also concern employees’ and families’ wellbeing. Air-raid warnings and public-transport disruptions can alter the working day at short notice. One employee has been mobilised.

The employees join weekly meetings with Begoma’s approximately 60 staff. These meetings create a shared situational picture and make the Kyiv team part of everyday life across the company.

“Our father travels frequently between our offices and has visited Ukraine several times. You can see how much it means to the employees,” says Henrik Malmberg. Begoma also maintains contact with the Swedish embassy and Business Sweden in Kyiv. The country manager regularly participates in activities, where the family meets other Swedish companies operating in the country.

Electricity, communications and information must function

The war has intensified Begoma’s work on IT and information security. Employees need secure access to data wherever they are, while sensitive information about goods, timings and routes must be protected. This is particularly important for transport linked to the defence industry. The company therefore works with secure data storage and backups and keeps sensitive documents secure.

The Kyiv office has its own battery backup, which can power computers for a few hours, and Starlink for internet access. When electricity is available, batteries are charged for the next outage.

In depth: when the old routes disappear

The war in Ukraine shows how quickly a transport system can change. Container shipping disappeared, border crossings were blocked and trade routes through Russia became unusable. Goods shifted to new modes of transport, borders and carriers. Begoma works with Ukrainian, Polish, Czech and other European carriers. The network provides more alternatives when capacity is lost in one place.

The war also shows that modes of transport cannot always replace one another. When grain shipping was disrupted, some flows shifted to road and rail. But grain volumes are so large that overland transport becomes both expensive and insufficient in capacity.

Henrik Malmberg describes how transport flows and business reinforce each other. Where large logistics flows emerge, infrastructure and transshipment facilities are built, which in turn make it easier for businesses to establish operations. Transport routes therefore need to develop alongside trade.

4.9 Scania – trucks strengthen Ukraine's resilience

When Russia invaded Ukraine, Scania's main facility in Bucha found itself in the middle of the combat zone. Yet the company stayed. Its task became broader than its own operations: if customers' trucks could be kept running, food, fuel and other essential goods could continue to be transported.

Company facts

Company and ownership: Scania manufactures heavy trucks, buses and engines and is part of Germany's Traton Group.

Presence in Ukraine: Since 1993. Around 200 employees and a network of approximately eleven facilities.

Takeaway: Start from the minimum function customers need, rather than assuming your own facility can continue as usual. For Scania's customers, repairs, spare parts and financing were as decisive as new trucks. Plan which parts of the offering must function when premises, logistics, electricity or key skills, such as drivers, become unavailable.

When Scania's CEO in Ukraine, Håkan Jyde, returned in spring 2022 after Russian forces had been driven out of the Kyiv area, he returned to a country where much of normal life had ceased. Long queues formed at petrol stations, and he carried extra fuel cans in his car to ensure he could get around.

Håkan Jyde had led Scania's Ukrainian operations since 2017. The company had already lost its first facility in Donetsk after 2014. When the full-scale invasion came, it had a general continuity plan, backup power at larger facilities and a geographically dispersed organisation. A data server was also moved from Bucha to Lviv before the invasion.

However, headquarters, the largest workshop and the central spare-parts warehouse were concentrated in the Bucha area, directly in the path of the Russian advance towards Kyiv. The facility was occupied, shelled and damaged. Spare-parts deliveries were redirected to Lviv near the Polish border, and around 125 family members received help leaving Ukraine. After the Russian retreat, operations reopened gradually, and the central warehouse was later moved back to Kyiv.

The war made previously rather theoretical continuity planning concrete. The communications plan, with parallel channels and daily check-ins, worked from the outset. At the same time, Scania had to solve problems the plan had not anticipated. In Kramatorsk, staff and equipment were moved as the security situation deteriorated. When the rented workshop was later hit, operations had already left the site.

"Dare to think about the unthinkable. What do we do without electricity? What do we do if staff become unavailable? What do we do if our facility cannot be used? What do we do if logistics stop?" says Håkan Jyde.

The plan needs to specify roles, priorities and communications channels, but local managers also need authority to act when information is incomplete and events do not follow the scenario.

A company must be able to act on its own

During the invasion's initial phase, state resources focused on defending Kyiv. According to Håkan Jyde, Ukrainian energy companies and authorities repair damage quickly, but businesses must still manage until then. "The important thing is that every company must be able to act on its own. In a situation like this, you have to rely on your own resources."

During the war, all Scania facilities have received diesel generators. They cannot power all heavy workshop equipment but maintain heating, lighting and critical functions. Shelters have been built, and smaller facilities have movable concrete shelters. When air freight ceased, Scania also increased its spare-parts inventory. Parts are held at several facilities and can be moved through the network.

Trucks took on a new role in the wartime economy

When air traffic stopped and Black Sea ports closed or became restricted, railways could not quickly take over every flow. Trucks became the flexible link. Grain needed to be transported overland, attacks on fuel infrastructure increased demand for tankers, and demand grew from food retailers and refrigerated transport.

In 2024, Scania delivered 769 new trucks in Ukraine, its highest sales since establishing operations in 1993. This compares with around 300–400 in a good year before the war. Scania also accounted for almost 33 per cent of registrations of European heavy trucks. Sales fell in 2025 after several large customers had already bought the vehicles they needed. Orders have increased again in 2026, particularly for food and refrigerated transport vehicles.

Scania is one of the more expensive truck brands in Ukraine, but customers consider more than the purchase price.

"When diesel is expensive or difficult to obtain, fuel consumption becomes even more important. Customers also need to trust that the truck can be repaired and returned to the road quickly. We see Scania's high resale value and low fuel consumption making a difference," says Håkan Jyde.

Women and veterans strengthen the skills supply

Mobilisation and emigration have created major shortages of both drivers and mechanics. Scania is trying to broaden the skills base through training for women drivers under Re-Skilling Ukraine, an initiative run by the Swedish non-profit organisation Beredskapslyftet. Driver training includes modern driving techniques, load securing, first aid and fuel-efficient driving. During 2026, the programme passed 1,000 women trained. Among participants followed up, around 32 per cent had found work.

Scania and Beredskapslyftet also train women as truck mechanics with the National Transport University in Kyiv. When Scania hired its first woman mechanic, a practical obstacle emerged: the workshop had changing rooms only for men. A new one had to be built.

Scania continues paying employees serving in the military. It has also hired veterans and maintains contact with the TYTANOVI Rehabilitation Center. Veterans may return with physical or psychological injuries, while their labour is needed. As Jyde puts it:

"We are going to need everyone available."

Being present as a leader

Jyde has continued leading operations on site. For him, presence concerns both the ability to make decisions and what management signals to employees living with air-raid warnings, attacks, mobilisation and relatives at the front.

He questions a model in which foreign managers lead through Teams from another country and visit only occasionally, while local employees are expected to remain every day. Scania has also offered psychological and financial support and training. At the same time, work itself can provide structure in daily life when much else is uncertain.

Networks for operations and reconstruction

Long-standing relationships with private dealers and a dispersed workshop network made it possible to maintain customer contact when individual facilities became unavailable. As early as June 2022, Scania opened a second workshop near Brovary in the Kyiv area, despite partially closed bridges and fuel shortages. The workshop quickly filled. The investment brought the company closer to customers and reduced dependence on a single facility.

“For us, it is about keeping hospitals, workshops, petrol stations and food distribution running,” says Håkan Jyde.

As President of the European Business Association, EBA, for 2026–2027, Jyde links businesses and decision-makers as Ukraine continues moving closer to the EU. EBA discusses the rule of law, functioning courts and property rights, among other issues, all prerequisites for private investment in reconstruction.



A burned-out Scania truck in Kalynivka in the Bucha district, 2022. Photograph: Scania.

In depth: different financing solutions for different needs

With group support, a local finance company and its own balance sheet, Scania has been able to finance expansion during the war.

1. Local capital: Ukraine’s currency restrictions prevented Scania’s profits from leaving the country. Capital was instead reinvested in Scania Credit Ukraine and used to finance customers’ vehicles.

Known customers, payment discipline and vehicles as collateral enabled expansion of the loan portfolio. “We have customers here whom we have worked with for almost 30 years. Of course we cannot abandon them. We have to keep their vehicle fleets running,” says Håkan Jyde.

2. EKN insurance: On one occasion, Scania bought insurance from the Swedish Export Credit Agency, EKN, against the political risk of money becoming trapped in Ukraine. Jyde describes the insurance as expensive and says Scania does not actively use it today. It was therefore a complement rather than the basis for continued financing.
3. Nefco financing: With financing from Nefco, the city of Irpin near Kyiv could purchase Scania vehicles for demolition and reconstruction. Here, an external financier enabled a specific transaction with a clear societal purpose.

4.10 Export-oriented manufacturing company – keeping a bombed factory alive

A Russian missile attack destroyed large parts of the production facility. Yet not a single customer delivery was missed. Four and a half years after the full-scale invasion, the manufacturer keeps its factory in western Ukraine operating, albeit at much lower volumes. At the same time, it is seeking new customers, managing electricity shortages and building a bridge between the factory’s city and a city in another EU country where the group has a subsidiary.

Company facts

Company and ownership: Export-oriented factory in western Ukraine owned by a Swedish company.

Employees: More than 1,000 before the full-scale invasion.

Key lesson: Energy preparedness requires prioritising machinery, working hours and backup power, and close dialogue with the electricity network operator to enable safe production shutdowns. The company’s international network can also become a resource for municipal preparedness.

Preparations made a difference

Before the invasion, the factory had more than 1,000 employees and manufactured components for industry. Fully 98 per cent of production was exported to around 50 countries. Production stopped when Russia launched its full-scale invasion, but the factory restarted after approximately two and a half weeks.

The factory’s CEO describes how the management team gathered on the first morning after the invasion in February 2022 without knowing what would happen. Fear and frustration were natural reactions. Clear responsibilities and delegated authority helped employees move beyond their initial paralysis and begin acting.

The manufacturer had no specific plan for a full-scale war. It did, however, have shelters, rehearsed evacuation procedures, clear roles, a local crisis team and continuity plans for suppliers, production facilities and logistics. Group management also authorised local management to make the necessary decisions. The parent company’s headquarters in Sweden was not in Ukraine and therefore could not determine which actions were appropriate on the ground.

The war then eliminated large parts of the market. The factory has sharply reduced production volumes following the attack. Nevertheless, it remains in place and retains the skills needed to grow again.

“Sometimes we are exhausted, very exhausted, and sometimes highly motivated. It goes up and down. But we are still here and the company is operating,” says the manufacturer’s local CEO. At the time of

the interview in summer 2026, new Russian missile and drone attacks were taking place against Kyiv and other parts of Ukraine.

The missile attack tested the continuity plan

In summer 2023, a Russian missile hit the factory. The factory building and advanced production equipment were completely destroyed. Production stopped but partially resumed in January 2024. After the 2022 invasion, subsidiaries in other countries had produced trial batches, carried out tests and secured approval for alternative products. When the factory was hit, those facilities could take over production. This was possible because the alternatives already met customers' quality and traceability requirements.

"We continued serving all our customers. The continuity plan no longer existed only on paper; it worked in reality," says the manufacturer's CEO.

The global network protected customers, but the factory lost production capacity, jobs and customers. Many employees left after being offered severance packages. Full reconstruction of the precision equipment has been postponed. It would require tens of millions of euros. Because the risk of new attacks remains, investments are on hold for the time being.

The factory is seeking new customers

Before the missile attack, the factory focused mainly on the automotive industry. When production moved to other subsidiaries outside Ukraine, the manufacturer began seeking industrial customers in construction and agriculture, among other sectors. After the attack, some automotive customers chose to leave Ukrainian production even though the factory could again meet quality requirements.

The manufacturer is now attempting a gradual return to the automotive market. Volumes have begun to grow slowly and steadily. Nevertheless, operations remain far below the level before the attack. The company therefore continues producing at limited capacity and retains its organisation and expertise while awaiting the opportunity to make larger investments.

Electricity shortages require flexible production

Russia's attacks on Ukraine's energy system have forced the manufacturer to move production from day to night and shut down energy-intensive equipment when the regional grid operator required lower electricity use. Backup generators cannot cover the factory's entire electricity demand. The company therefore prioritises equipment, adjusts working hours and prepares safe shutdowns.

The parent company arranged access to a satellite phone and Starlink internet. The satellite phone has been used when mobile networks were down. Sensitive documents have been moved to a safer location, and information previously stored on servers has been transferred to cloud services. During air-raid warnings, all employees evacuate to the shelter.

Endurance determines whether production can continue

The war has also changed views of leadership. A manager needs to make clear decisions while showing empathy and understanding how the war affects employees. "It must be completely acceptable to be afraid or frustrated. These are natural human reactions," says the CEO. Repeated air-raid warnings, concern for relatives, mobilisation and prolonged exhaustion affect staffing, decision-making and safe production. The manufacturer therefore offers anonymous psychological support. Employees received psychological first-aid training in 2024, which the CEO believes should have been part of preparations before the war. Support also includes discussions about explaining war to children and how colleagues can support people returning from military service.

The manufacturer has been designated a company of critical importance to Ukraine's economy. This allows 50 per cent of its male employees eligible for call-up to be exempted from mobilisation.

Returning veterans have different needs. Some need time away from working life. Others need new tasks or an adapted workplace. The company's support contributes both to individual security and to retaining skills as operations are rebuilt.

In depth: preparedness increased contacts with authorities and the municipality

Before the factory was bombed, the manufacturer was an important taxpayer in its city. Locally, it has contributed humanitarian support to hospitals, preschools, emergency services and organisations for people with disabilities. An initiative by a colleague in another European country and the manufacturer's CEO led to a partnership between the factory's city and a city in an EU country. The manufacturer still acts as a logistics link between the cities. When equipment and humanitarian aid are transported from the European partner city, the company handles administration, arranges transport and covers logistics costs.

Contacts with the regional administration are important for security, dialogue with businesses and mobilisation. Energy supply in particular requires ongoing coordination. During planned electricity restrictions, the regional grid operator informs companies when electricity use must fall and by how much. Hospitals, water supply, heating, schools and preschools take priority over industry.

National decisions also set the operating framework. Mobilisation legislation, currency restrictions, customs rules, border crossings and documentation requirements relating to force majeure affect staffing, payments and deliveries. With its strong export focus, the manufacturer has been significantly affected by changing procedures for imports, exports and border crossings. These include restrictions on foreign-currency payments introduced by Ukraine's central bank.

Despite losses, uncertainty and recurring attacks, the manufacturer continues parts of its operations. Asked how long this endurance can last, the CEO replies:

> *"As long as necessary. That is the price we pay for being independent."*

5. Analysis – what strengthens companies' resilience?

The survey, open-ended responses and ten case studies show what it is like to run a business in a country defending itself against a war of aggression. The full-scale invasion has lasted almost five years. Companies protect people, continue delivering and repair damage while preparing for the next interruption.

The report starts from the advice in the Swedish civil defence and resilience agency's brochure Preparedness for businesses – In case of crisis or war. Companies' experiences make it possible to illuminate what this advice means under prolonged wartime conditions: where the emphasis falls when it is applied over a long period, and what needs to be added. The survey reveals patterns. The case studies explain how companies acted and why alternatives worked. Together, they deepen the research perspective on resilience as anticipation, coping and adaptation (Section 2.3). During a prolonged war, the three overlap, and learning connects them.

The lessons are interconnected

The ten lessons in Figure 1, reproduced here as Figure 21, form a sequence. Deciding what must function and for how long (Lesson 2) is the basis for mapping dependencies (3). Staffing and skills (4), authority and substitutes (5), and financing (8) determine whether backup solutions (6), alternative deliveries and restart (7) work. Opportunities also depend on what the company and society need from each other (9) and how the business develops as customer needs change (10). Those who continually test their preparations (1) can use their experiences before the next interruption.

Figure 21. The report's ten lessons. The same figure as Figure 1, reproduced here to support the analysis.

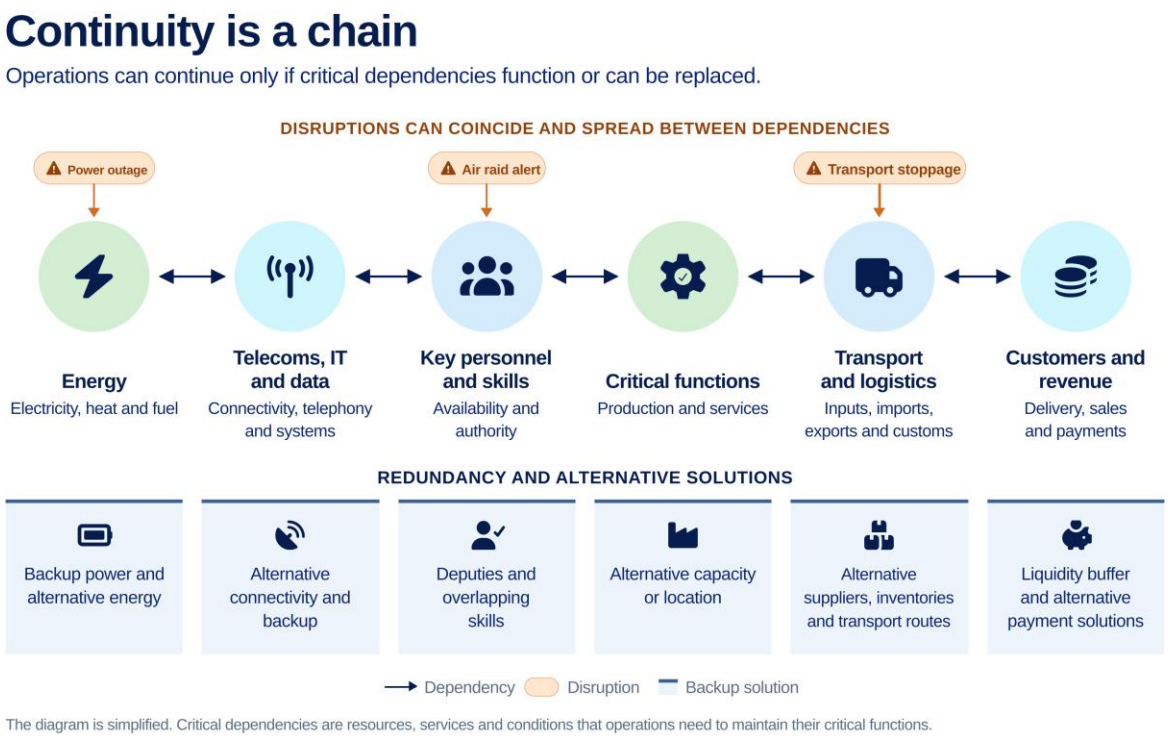


Continuity is a chain of dependencies and options for action

The ten lessons in Figure 21 summarise what companies need to work on. To understand how measures interact, the analysis also needs to trace dependencies in day-to-day operations. Figure 2 in the opening summary showed how a disruption affects a dependency, connects to other activities and spreads through the organisation. Figure 22 shows the same elements as a chain, but also includes the backup

solution that can replace each affected link. Most companies in the study identify several critical dependencies simultaneously, with energy the most common.

Figure 22. Continuity is a chain. The diagram uses the same elements as Figure 2 and shows a backup solution under each link that can take over when the link fails. Backup solutions also have dependencies of their own.



The chain is a simplification, but it captures what companies repeatedly describe. A power outage simultaneously affects IT, water, heating and employees' ability to work. A transport stoppage causes material shortages, delayed deliveries and weaker cash flow. Several companies create redundancy through backup power but must still stop work when staff take shelter. A functioning resource is insufficient if the next link has failed. These experiences therefore show the value of planning not only individual reserves but the entire delivery: what must arrive, and what is required at each stage to make that happen?

Backup solutions also have links of their own. A generator needs fuel and servicing, a substitute needs access rights and authority, and an alternative supplier needs a different transport route from the normal one. At Stritex, the computer had battery backup but the cutting machine did not, and it could be damaged by an abrupt stop. The backup therefore needs to be examined using the same questions as the resource it replaces. A smaller company can begin by tracing one important delivery through the chain and asking at every link what can replace it, how long the backup will last and what the backup itself needs.

Material preparations need to be complemented by priorities and exercises

Before the invasion, or on establishment for companies that arrived later, IT and data backup was the most established preparation. Exercises, crisis simulations and scenario planning were least developed. Planning a minimum operating level for critical functions existed in half the companies but was known and used in fewer than a quarter. The results show a difference between preparations existing and being embedded in the organisation. Väderstad had a continuity plan known internally and generators, fuel and medical supplies in place in December 2021, but had not rehearsed scenarios or determined a minimum operating level and which functions would take priority.

Companies consider their preparedness stronger after several years of war. The case studies also describe how plans needed to be reassessed as disruptions became more extensive and prolonged. The material cannot establish how much different measures contributed to the higher self-assessments. Experiences indicate that equipment investments need to be complemented by clear priorities, embedded plans and exercises. Resources being in place is not the same as the organisation having tested how to use them when several conditions change simultaneously.

The size of the local operation does not tell the whole story

Larger operations rate their preparedness higher and also identify energy and transport as critical factors more frequently. The groups are small, and the material does not show what explains the differences. The cases do, however, show the importance of mobilising resources outside a company's own facility. The three operations damaged by attacks – Synevo in Odesa, the export-oriented manufacturer and Scania in Bucha – maintained customer deliveries through capacity elsewhere: another laboratory, sister factories in Europe and a warehouse in Lviv. The smallest company in the study, Vandra Rugs, restarted with owners' advance payments, continued customer orders and credit from its wool supplier. Group support, geographical dispersal and customer and supplier relationships can expand options even for a small local operation.

Continuity for the customer, the group and the local community are nevertheless different outcomes, and a backup solution may protect one level without protecting the others. The exporter's sister factories secured customer deliveries, while the damaged facility lost capacity and the local community lost jobs.

A group can provide access to resources in other units, but usable reserve capacity needs to be prepared. For an independent company, agreements and relationships with suppliers, customers and sometimes competitors can provide resources outside its own operations. Relationships do not guarantee reserve capacity, however, because several companies may be relying on the same repair technician or carrier. For cooperation to provide usable reserve capacity, it must be known which resources exist, how far they will stretch and who decides when needs exceed capacity. This makes the resource-based perspective in Section 2.3 concrete: what matters is not which resources and relationships a company possesses, but which can actually be mobilised during disruption.

Time is a dimension of its own

The brochure's starting point for essential activities is to manage two weeks primarily with the organisation's own resources. That is a reasonable initial threshold, and companies' experiences show what happens beyond it. Generators were a first layer. When outages became prolonged, Väderstad added batteries and solar panels, while Synevo added a third generator and its own well. At the central Kyiv laboratory, fuel lasts longer than water. Reserves have different endurance, and the shortest determines how long operations can continue.

Continuity can also mean a different location or lower capacity. When the Odesa laboratory was damaged, samples were transported to Kyiv until Odesa reopened. A few days, a few weeks and several years require different things: inventories, replenishment and transformation of the operation itself, respectively. A preparedness plan needs all three time horizons. This distinction helps companies prioritise measures that might otherwise appear equally urgent.

Workforce preparedness extends beyond staffing

Around two thirds of companies or more report a high or very high impact from security risks, difficulties recruiting or replacing staff, and mobilisation. At the same time, workforce planning with substitutes was underdeveloped before the invasion. Today, stronger staff support and workforce planning are the

adaptations made permanent by the most companies. Where planning had been thin, companies had to build much from scratch.

Experiences show that staffing is too narrow a concept. What mattered was the ability to work: housing, children, electricity at home and relatives at the front. Vandra Rugs could not move its weaving operation without moving the families. At Stritex, work has provided income and daily structure, but the predominantly female workforce did not shield families from anxiety and prolonged strain. Shortages of mechanics and technicians also affect several stages, from companies' maintenance to customers' operations. A plan that does not address where employees' children will be during disruption is missing one of the links that proved decisive in Ukraine.

Authority must be accompanied by practical means to act

Most companies report faster decisions during the war, and many gave local managers greater authority. The cases show the importance of people on site having both decision-making authority and access to the resources needed to implement decisions. Fristads allowed Stritex management to decide whether to keep the factory open. Llentab's manager went to the bank himself. The mining equipment manufacturer's country manager paid out the prepared funds on the first day.

This says something about the purpose of a crisis organisation. It does not replace local authority; it should enable it by clarifying in advance who may decide, on what matters and using which funds. SEB and the mining equipment manufacturer base their planning on the substitute needing access rights, powers of attorney and system access to make payments. Financing also rests on prepared relationships. Vandra Rugs received advance payments from its parent company and extended credit from its wool supplier, so yarn was in place before revenue returned. For a Swedish company, "who decides if I cannot be reached?" is therefore as important as "who is on the crisis team?"

A company's resilience is not the same as its market's resilience

Scania, Väderstad and Llentab found new business opportunities because the war created demand for trucks, machinery and industrial buildings. The export-oriented manufacturer contracted because European automotive customers left despite the factory again meeting requirements. All four had prepared. Approximately as many companies have seen customer numbers and turnover increase as decrease. Preparedness protects the ability to deliver, not demand. This is why Lesson 10 belongs within preparedness: a business needs both to adapt to changing market conditions and to have the decision-making capability to find new opportunities.

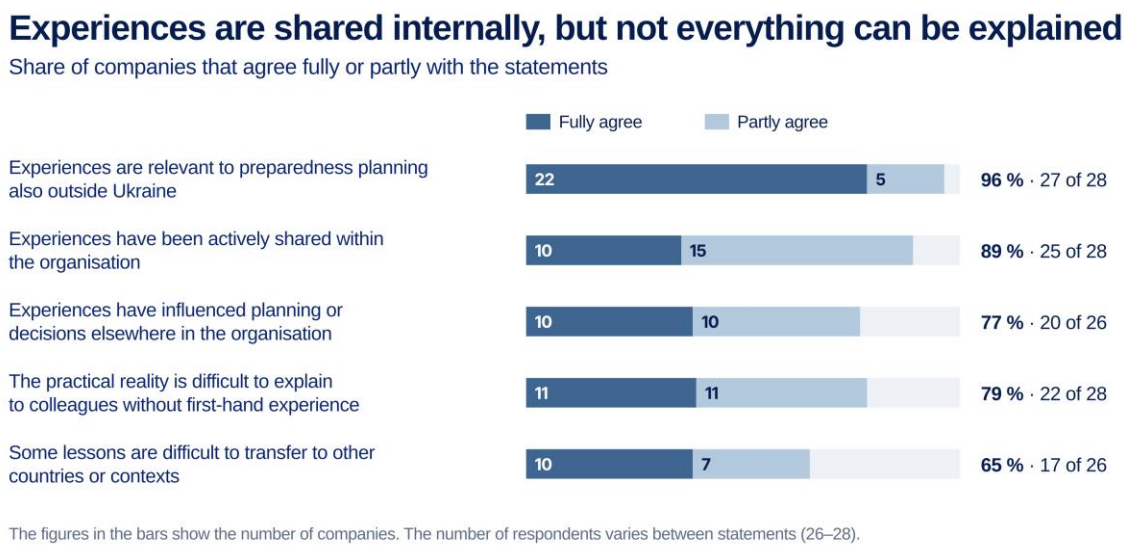
The same reciprocity applies to the society around a company. In Kosiv, the municipality gave Vandra Rugs premises and permits, and the company provided jobs. Stritex's shelter opens to neighbours. During the invasion's first weeks, state resources concentrated on defence, and companies had to arrange electricity, water and evacuation themselves. Business and societal preparedness are therefore one system, rather than two.

6. Lessons for Sweden

Sweden is not Ukraine. But several challenges faced by Swedish companies there are relevant here too. For some companies, staying, retaining employees and fulfilling responsibilities to customers also became a way of contributing to Ukraine's economic endurance and democratic independence. Preparedness and continuity plans are therefore a broader matter than a checklist.

Swedish companies in Ukraine have contacts with Sweden and understand conditions in both countries. This makes their experiences valuable for learning. Of 28 companies, 25 agree fully or partly that experiences have been actively shared within the organisation. Fewer, 20 of 26, say that they have influenced planning or decisions elsewhere in the organisation, and only ten agree fully. Experiences are therefore shared more easily than implemented. Sigma Software illustrates the latter: it has incorporated them into group continuity planning.

Figure 23. Share of companies agreeing fully or partly with five statements about the transferability of experiences. Respondent numbers vary (26–28).



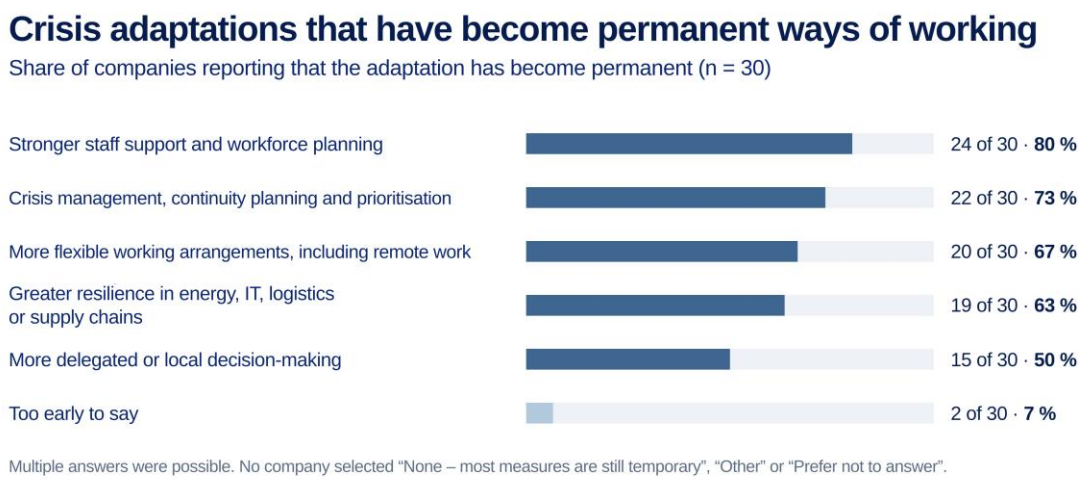
Part of the explanation is that experiences are difficult to convey. Of 28 companies, 22 agree fully or partly that practical realities in Ukraine are difficult to explain to colleagues without first-hand experience. One company describes how conditions can change within hours. Decisions that look inefficient from headquarters may then be necessary for safety and continued operation. Stritex describes how higher wages and special conditions for key personnel need to be understood as investments in continuity. One respondent uses the expression "walk in our shoes" to describe the local experience of exhaustion. Knowledge transfer therefore needs to encompass more than what can be written in a plan.

Leadership presence recurs in the interviews. Several managers remained in Ukraine; others returned after leaving. Begoma, Stritex and Vandra Rugs also describe the value of visits from headquarters. Presence is difficult to transfer as a method, but it shows what employees need from management under prolonged strain: for it to be there.

Much preparedness work can nevertheless be transferred. This applies to working methods that have become enduring regardless of where a company operates or its sector. Staff support and workforce planning have become permanent practices in 24 of 30 companies, or 80 per cent. Crisis management, continuity planning and prioritisation are cited by 22 companies, more flexible working arrangements by

20, and stronger resilience in energy, IT, logistics or supply chains by 19. Half, 15 of 30, have made more local or delegated decision-making an enduring practice. Two companies say it is too early to tell.

Figure 24. Share of companies reporting that crisis adaptations have become permanent practices. Multiple responses were possible (n = 30).



What can be transferred to Sweden

Although operations in Ukraine are difficult to explain to someone who has not been there, some insights are valuable: learning becomes lasting when experiences are translated into routines and exercises and someone is responsible for following them up. Above all, it is the principles behind solutions that can be transferred: how companies manage time, dependencies, authority, employees' lives outside work and capacity outside their own facilities. Examples include writing staff support into company policies, making workforce plans and decision-making authority part of normal working practices, or designing agreements that clarify access to reserve capacity and how it will be prioritised during disruption.

The mining equipment manufacturer's country manager describes lower trust in the state in Ukraine than in Sweden and argues that this also creates a habit of trying to solve problems independently. He believes Swedish companies may be more inclined to wait for instructions from a manager, the municipality or the state. This raises a question for Swedish preparedness planning: what must a company be able to decide and implement before receiving information or support from others? That is the test the brochure's advice is intended to support.

Concluding reflection

This report has been written while the war continues. When the study began in spring 2026, companies had come through the cold winter of 2025/26. Six months later, many had experienced a summer and autumn of increasingly intense Russian attacks on civilian targets, including privately owned companies previously spared. One survey company's central warehouse was bombed in 2022 and again in September 2026. Ahead of winter 2026/27, shelters are being expanded, food stocks increased and backup energy solutions reviewed, both in offices and in employees' homes.

The report has, of course, not answered every question. For example, all companies in the study currently operate in Ukraine. Some have temporarily paused, several have relocated within the country, and some have moved parts of their operations outside Ukraine. Swedish companies that left the country are not included. It cannot be ruled out that some who left made the right decision. The lessons should therefore be read as experiences of maintaining, adapting and restarting operations, rather than proof that staying was the right choice.

What makes the study distinctive is nevertheless its starting point: the multi-year perspective. Sweden lacks experience of living with war for several years. The study's value lies in understanding the connections behind companies' solutions, how preparations are tested and what needs to be addressed jointly. Perhaps most importantly, all work with businesses in civil defence rests on individual people's willingness, decisions and ability to remain and continue producing, selling and paying wages. Every business leader in the study demonstrates that willingness and determination.

The authors conclude with four messages concerning what different actors can work on next:

- Small and medium-sized enterprises can make concrete what needs to be resolved jointly. Starting from their own continuity planning, companies can discuss needs such as alternative premises, technicians or alternative transport with customers, suppliers and business networks. Joint reviews can reveal whether alternatives hold up when several actors are affected simultaneously.
- Municipalities and business organisations can bring companies, property owners and infrastructure owners together around shared needs, such as energy. Discussions can clarify what each party can contribute and which agreements on capacity, operational responsibility and prioritisation are needed.
- County administrative boards and relevant agencies can test dependencies between operations and sectors together with business. Joint exercises can reveal competition for staff, transport and repair capacity. Coordinated contact channels and information requests make it easier for smaller companies to participate.
- Companies, customers, financiers and public purchasers can examine how costs and risks are allocated when one company's reserve capacity protects deliveries needed by several parties. This raises questions about contracts, financing and risk sharing.

Experiences from Ukraine make preparedness concrete. Appendix 1 contains questions for companies wishing to use the study in exercises. Preparations gain value when people can use them, responsibilities are clear and resources remain available under pressure. We hope this report contributes to that work.



Kyiv, June 2026. Photograph: Pexels.

Appendix 1. Questions and answers on preparedness in your own business

The report can provide a starting point for a company's preparations to manage a serious crisis or war. One approach is to choose an important delivery and discuss with employees what happens if several conditions fail simultaneously. Decide on an initial action, who is responsible and when it will be followed up. Then make the necessary contacts with customers, suppliers or the municipality. The themes below follow the summary's ten main lessons and support that discussion.

Theme	Question for the company	Possible first step
1. Test preparations and make the lessons lasting	Do the preparations work when put to the test?	Test an important procedure with the employees concerned and correct any shortcomings.
2. Determine what must function – and for how long	Which delivery must continue, and for how long?	Choose a minimum functioning level and assess how long it can be sustained.
3. Map dependencies and how disruptions spread	What happens if several resources become unavailable?	Follow a delivery and test a simultaneous loss of electricity and personnel.
4. Ensure staffing, safety and critical skills	Who can replace a key person?	Share critical knowledge and discuss what staff need in order to work.
5. Give local managers authority and prepare deputies	Who may make decisions when the manager is absent?	Appoint deputies and arrange the necessary powers of attorney and system access.
6. Build lasting backup solutions and monitor their dependencies	How long will the backup last, and what does it require?	Check capacity, replenishment, maintenance and costs.
7. Secure alternative deliveries and prepare to restart	Which alternative can be used if the normal flow is interrupted?	Contact a potential backup supplier or repair provider and check their capacity.
8. Finance continued operations and restart	How long will the money last if revenue is delayed?	Draw up a simple liquidity plan and discuss credit and payment terms.
9. Clarify what the company and society need from each other	What can the company resolve on its own and together with others?	Contact the municipality or a business network about a shared dependency.
10. Develop the business as customers' needs change	Which changed customer needs can the company meet?	Discuss with a customer how deliveries can function during disruptions.

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Swedish companies' experiences of the war in Ukraine

The report examines both how Swedish companies in Ukraine were prepared for Russia's war of aggression and how their preparedness has functioned and changed during almost five years of war. The study focuses particularly on lessons relevant to small and medium-sized enterprises but also includes larger companies. The experiences can also be used by municipalities, county administrative boards, sector-responsible agencies and industry organisations in their joint preparedness work.

The report was written by Forever Sustainable on behalf of the Swedish civil defence and resilience agency.

The analysis, assessments and conclusions are the authors' own.

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FOREVER SUSTAINABLE

With sustainable business transformation as our foundation, we support organisations seeking to strengthen their role in total defence and civil preparedness.

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We help organisations strengthen energy infrastructure and sustainable energy systems.

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We connect preparedness with value chain risks, the green transition and social sustainability.

Resilience, preparedness and continuity
Tailored workshops for management teams on critical functions, dependencies and options for action, based on the Ukraine study.

Business relations with Ukraine
We support partner dialogue and collaboration for recovery, reconstruction and resilient operations.

Forever Sustainable's resilience and preparedness team








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