



ESG report 2025

novar

Getting new
energy done.

ESG report 2025



Foreword by the CEO

Shaping the next phase of the energy system

The energy transition is shifting from large-scale generation to an integrated energy system in which flexibility, timing and market access are central. For Novar, this marks the next phase in its development: from developer and producer to orchestrator within the energy system. Novar's strategic direction is focused on accelerating the decarbonisation of Europe by not only producing renewable energy, but also by optimising, trading and integrating it into the energy system of tomorrow. This requires a broader perspective: from individual projects to the system as a whole.

From building assets to orchestrating energy

For Novar, this marks a natural evolution of its role. It all started in a relatively straightforward way: develop projects, build them and supply energy to the grid. Today, that model is under increasing pressure. The rapid growth of renewable energy leads to moments of overproduction, while demand continues to rise due to electrification. At the same time, grid capacity is becoming a limiting factor in many regions. These developments require a more dynamic approach. Novar is therefore evolving from a developer to an asset-driven organisation that is actively participating in the energy system. As Novar expands its role in the energy system, the focus is shifting to orchestrating energy flows, where data, algorithms and cybersecurity become just as critical as the infrastructure itself.

"Novar will continue to develop Green Energy Systems, while increasingly focusing on ensuring that these assets function effectively within the wider energy system."

Gerben Smit, CEO

Building an integrated energy system

Through participations such as Repowered, Novar is developing the capabilities to actively manage energy flows. This includes presence in energy markets, real-time optimisation of assets and the deployment of flexibility through storage and demand response. In this context, energy is no longer a static product, but a dynamic system that requires continuous optimisation.

At the same time, this evolution changes the nature of the organisation. Data becomes a critical asset and the ability to analyse, predict and act in real time becomes essential. This also increases the importance of cybersecurity as a core capability.

Scale, partnerships and responsibility

This transition requires scale and collaboration. Novar works closely with partners across the value chain, including technology providers, customers, financiers and local stakeholders. Together, these partnerships enable the development of integrated solutions that contribute to a more flexible and resilient energy system.

With this expanded role comes broader responsibility: growth is not only measured in installed capacity, but also in the impact on society and the environment. ESG considerations are therefore embedded in decision-making, project development and day-to-day operations.

Outlook

The coming years will be defined by this transition. Novar will continue to develop Green Energy Systems, while increasingly focusing on ensuring that these assets function effectively within the wider energy system.

By combining production, storage, flexibility and data-driven optimisation, the company is positioning itself to contribute to a more efficient, reliable and sustainable energy system.

Gerben Smit
CEO



Contents

International expansion	10	Novar’s ESG team	80
A European growth strategy			
Building Novar Sweden from the ground up			
Regulation and pragmatism in the French market			
Finding growth in Germany’s mature market			
Environmental	22	Building the foundation for strategy	86
From design principle to measurable impact		Financing & due diligence	
Biodiversity in solar parks: better understanding of ecosystems		Holland Solar: Connecting ESG, geopolitics and system impact	
CO2 reduction: steering for impact in a growing energy system			
Generation Green: execution aligned with impact			
Repowered: orchestrating the energy system			
Social	44	SDG commitments	96
Community ownership and social impact		Our ESG themes aligned with global goals	
Employee wellbeing: from intent to targeted action			
Governance	54	Strategic framework	100
ESG governance in procurement and supply chain		Environmental	
WATT Infra: infrastructure, safety and control		Social	
Complaints and whistleblower policy: from practice to compliance		Governance	
Cybersecurity and AI: building a resilient energy system			
Vodafone: cybersecurity across solar parks			
Repowered: Data, AI and system control at scale			



International expansion



A European growth strategy

The energy transition is inherently cross-border. For Novar, international expansion is therefore a logical next step in the company's development. Under the leadership of its international business development team, Novar has, in recent years, pursued a structured and phased expansion into new European markets.

At the core of this strategy lies a fundamental question: how do you build on a proven model in the Netherlands and translate that into sustainable growth across different countries?

Merijn Havinga, head of international operations, explains: "We did not expand because opportunities presented themselves. We started with a structured view on where we can actually build something that fits our way of working."

From analysis to action

The international strategy was built on a systematic assessment of the European market, taking into account factors such as market size, regulatory frameworks, price levels and cultural distance. This analysis resulted in a focused selection of countries where Novar is now active: Germany, France and Sweden. Each of these markets represents a different profile within the portfolio, allowing Novar to balance risk while gaining

experience across a range of market dynamics. "Each country teaches you something different," Merijn notes. "That diversity is not a complication, it is part of building a resilient portfolio."

A hybrid market approach

When entering new markets, Novar applies a hybrid strategy. On the one hand, the focus is on developing projects organically; building a pipeline through land positions and local networks. On the other hand, selective acquisitions are used in certain markets to accelerate scale and gain market knowledge. This approach reduces time to market while allowing Novar to quickly understand the local playing field.

Local teams as a foundation

A critical success factor in the international expansion is the development of strong local teams. In each country, organisations have been established with a high degree of autonomy and entrepreneurial responsibility. The initial phase - attracting the right people - proved to be the most challenging. Over time, stable teams have been built, at present consisting of seven to fifteen professionals per country, responsible for developing the local business. "The key is to find people who understand both the local context and the ambition we bring," Merijn explains.

The overall model balances central direction with local autonomy. Country teams are given the space to adapt their strategy to local conditions, while knowledge and experience from the Netherlands are actively shared.

Cultural intelligence as a differentiator

Expanding internationally requires more than market knowledge; it also demands an understanding of cultural differences. In some markets, such as Sweden, collaboration across distance is relatively straightforward. In others, such as France, a stronger local presence and relationship-building are essential. "You cannot copy-paste your way of working from one country to another," Merijn notes. "You have to adapt to how decisions are made locally." By explicitly integrating this cultural dimension into its approach, Novar strengthens the effectiveness of its international operations.



"Each country teaches you something different. That diversity is not a complication, it is part of building a resilient portfolio."

Merijn Havinga,
head of international operations

From first projects to scale

Following market entry, the focus shifts to building a project portfolio. Across all countries, initial steps have been taken, ranging from permitting processes to the acquisition of projects that can be realised in the near term. Progress varies by country, depending on regulatory conditions, competition and market maturity. By operating across multiple markets, Novar creates a balanced portfolio in which opportunities and risks are distributed.

Creating long-term value

International expansion is guided by a Value Creation Plan with a horizon towards 2030. For each country, clear objectives are defined and translated into concrete actions and investment decisions.

The focus is on progressing projects through the development cycle – from site acquisition to permitting and realisation – as a foundation for value creation. At the same time, the strategy remains adaptive. Decisions are continuously reassessed based on market developments and project progress.

Integrating platform and operations

The next step in our international growth is further growing our capability in full-stack optimization as well as portfolio and revenue management of our European portfolio. This requires a careful consideration of country-specific market access regulations, energy market structures and the operational capability needed to become what is also called a ‘NextGen IPP’.

Knowledge sharing as an accelerator

International expansion builds explicitly on the experience gained in the Netherlands. Through structured knowledge exchange – such as regular sessions between country teams – best practices are shared across areas including technology, stakeholder management and ecology.

This approach not only accelerates development, but also strengthens the coherence and quality of the organisation.

ESG in an international context

Operating across multiple countries also adds a new dimension to ESG. Regulatory frameworks differ, stakeholder expectations vary and local environmental and social contexts require tailored approaches. This makes ESG inherently context-dependent. At the same time, Novar’s ambition is to maintain a consistent level of quality and responsibility across all markets. Merijn Havinga: “Novar aims to apply a consistent ESG framework across all countries in which it operates. At the same time, the company takes a collaborative approach to developing its ESG policies across markets, recognising the value of local perspectives and experience.”

Towards an integrated European energy system

With its international expansion, Novar is evolving into a player that contributes to the energy transition not only locally, but at a European scale. By combining projects, platform capabilities and knowledge, the company is building an integrated model that can scale and respond to the increasing complexity of the future energy system. At the same time, this expansion contributes to a broader European ambition: strengthening energy independence and resilience in a rapidly changing geopolitical landscape.

The first results demonstrate the viability of this approach. The coming years will focus on further scaling, deepening and integration; towards a robust and future-proof European platform for sustainable energy.



Building Novar Sweden from the ground up

As Novar expands internationally, each market brings its own dynamics, priorities and interpretation of sustainability. In Sweden, the focus in 2025 is on building a solid foundation while gradually embedding ESG into daily practice. This reflects a broader strategic reality: international growth is not about copying a model, but about translating it into local contexts.



"A good solution for the environment can also be a good solution for the business. It's not always a contradiction."

Robin Fallai,
country manager

For country manager Robin Fallai, who joined in 2024, the first phase was defined by speed and execution. "When I started, it was really about understanding the Novar concept and getting things up and running quickly," he explains.

The early phase in Sweden focused on building a project pipeline through securing land positions, initiating lease agreements and progressing projects through permitting.

This resulted in a growing portfolio of projects within a short timeframe. "It was very much a 'baptism by fire,'" Robin notes. The rapid build-up illustrates how Novar scales internationally: through locally driven platforms that develop in parallel.

ESG in context

"ESG is still mainly seen as something for larger companies," Robin observes. As a result, ESG is rarely a primary driver in stakeholder discussions. Instead, it is embedded through: permitting requirements, practical project decisions and local engagement

This underlines a critical point for Novar: ESG is context-dependent and develops at different speeds across markets. Rather than applying a formal ESG framework from the outset, Novar Sweden integrates sustainability through practical choices.

A clear example is the office location in central Gothenburg: "We decided early on that we should never be more than 500 meters from a central station," Robin explains. This supports sustainable commuting while remaining operationally efficient.

People and culture as foundation

With a small and growing team, culture plays a central role. "To create a strong team, you need to meet each other," Robin says. This is reflected

in regular in-office presence, team events, alignment moments and a strong focus on interpersonal dynamics

Recruitment follows the same logic: Robin: "I would rather have a kind person who performs slightly less than someone highly skilled that no one wants to work with."

Biodiversity in practice

Biodiversity is primarily addressed through the permitting process and local context. A concrete example is a project where an existing farm structure was preserved to protect a population of bats. "We worked together with the local community and decided to keep part of the structure intact so the bats could remain," Robin explains. This illustrates how ecological considerations are integrated into project design in a pragmatic, site-specific way.

Local engagement as a success factor

Engagement with local communities is both required and strategic. "It is much easier to develop a project together with the local community than to impose it," Robin notes. This approach improves project quality and supports long-term acceptance. This is a practice that is central to Novar's business strategy.

Outlook

The development of Novar Sweden shows how ESG evolves alongside the organisation itself; shaped by local context, regulation and market maturity. As the organisation grows, the focus will shift towards: deeper ESG integration, scaling the organisation while maintaining culture and strengthening stakeholder engagement

The key challenge will remain the same: connecting central ambition with local execution. Or as Robin puts it: "A good solution for the environment can also be a good solution for the business. It is not always a contradiction."

Regulation and pragmatism in the French market

The role of ESG is shaped not only by company ambition, but also by local regulation. In France, sustainability is already deeply embedded in legal frameworks, creating a different starting point compared with other markets. For country manager Francisco Varela, the challenge is therefore not whether ESG is relevant, but how it is applied in practice within a growing organisation.



"It's not just about producing energy. You need to show that you are supporting the farming activity as well."

Francisco Varela,
country manager

In 2025, Novar France was still in its early development phase. As in other new markets, the initial focus was on building the organisation. So it came down to assembling a team, initiating projects and establishing a local presence.

"I don't think ESG was at the top of the list," Francisco notes. "The priority was to build a team and start projects." This reflects a broader pattern in Novar's international expansion: ESG is not always introduced as a formal priority from day one, but develops alongside the organisation.

What distinguishes France is the level of regulation. Many ESG-related aspects are already embedded in law, including:

- mandatory consultation of local communities
- public disclosure of metrics such as gender pay equality
- and structured environmental requirements in project development

In practice, this means that certain ESG elements are not optional, but part of the standard development process. "You cannot avoid it,"

Francisco explains. "Some of these steps are simply required by law." This creates a situation where ESG is less a differentiator and more a baseline for operating in the market.

Going beyond compliance

Within this regulated context, Novar France makes deliberate choices that go beyond minimum requirements. A key example is the early involvement of municipalities in project development. Before formally launching a project, the team engages with the mayor and local council, presents the project concept and seeks initial feedback or alignment.

"We decided that we would always seek the advice of the municipality before launching development," Francisco explains. This is not required by law, but serves multiple purposes, such as improving stakeholder alignment while reducing development risk and building long-term relationships." It also reflects a more proactive approach to affected communities.

Navigating local complexity

Working with municipalities in France requires a high degree of adaptability. With more than 30,000 municipalities, each with its own context, responses vary widely. Some are supportive and see economic benefits while others are cautious or already saturated with projects. And as always, political dynamics can influence decision-making

This diversity reinforces the importance of a local, case-by-case approach. "There is no single pattern," Francisco notes. "It really depends on the municipality."

People and culture in a growing team

As in other markets, employee well-being and team culture are central to building a sustainable organisation. In France, this is reflected in careful recruitment, focusing on both hard and soft skills. The focus is on team fit and cultural alignment. Moreover, Novar offers flexible working arrangements to accommodate individual needs.

The organisation operates across two locations, requiring deliberate efforts to maintain cohesion through regular team meetings, shared events

and ongoing communication. This approach has resulted in strong engagement with the French team reporting high satisfaction levels in internal surveys.

Sustainability in practice

While ESG is partly driven by regulation, it also emerges in practical decisions. A clear example is mobility. Due to the geographic spread of projects and the rural context, the transition to electric vehicles proved challenging. Rather than forcing an immediate shift, Novar France opted for a phased approach:

1. short-term leasing contracts to maintain flexibility
2. gradual introduction of electric vehicles as infrastructure improves
3. and alignment with local conditions and stakeholder expectations

This illustrates a pragmatic approach to sustainability, balancing ambition with feasibility.

Sustainability by design

A distinctive feature of the French market is the role of agrivoltaics. Most projects are developed as agri-PV systems, where energy generation is combined with agricultural use. This requires demonstrating a clear synergy between energy production, agricultural productivity and long-term land use. As a result, sustainability is embedded in the project design itself. "It's not just about producing energy," Francisco explains. "You need to show that you are supporting the farming activity as well."

Outlook

As Novar France continues to grow, ESG is expected to become more explicit in both internal processes and external positioning. Key priorities include further integration of sustainability into daily operations, continued development of stakeholder engagement practices and scaling the organisation while maintaining its culture. In this context, the challenge is not to introduce ESG, but to make it more visible and intentional. As Francisco reflects: "It's already there. The question is how consciously we apply it."

Finding growth in Germany's mature market

Where some markets are still developing as far as ESG is concerned, others – like Germany – are more mature, more regulated and more complex. This creates a different starting point for Novar's international strategy: not building from scratch, but positioning within an already established ecosystem. For country manager Kerim Eraksan, this means combining speed of execution with careful stakeholder alignment.

Novar Germany operates in a highly developed and competitive energy market, where regulatory frameworks are well established, stakeholder expectations are high and competition is intense. At the same time, the organisation itself is still in a build-up phase. "We are still setting up the company," Kerim explains. "That means ESG is not always something we approach consciously, but it is present in many of the choices we make."

This reflects a broader pattern within Novar's international expansion: ESG is not always introduced as a formal framework, but often emerges through practice.

ESG as part of daily operations

Within the German organisation, ESG is embedded primarily through day-to-day decisions. Examples include: electrified mobility and support for public transport, working in

modern, energy-efficient office buildings and encouraging sustainable commuting.

At the same time, social aspects play a central role. As a growing organisation, much attention is given to work-life balance, flexible working arrangements and regular check-ins with employees. "We talk a lot to make sure people are doing well and are not overloaded with work," Kerim notes. This is particularly important in a startup-like phase, where employees often take on responsibilities beyond their formal roles.

People as the foundation for growth

A defining feature of the German team is its composition. Many employees are in a similar life stage, with young families, which creates a strong sense of mutual understanding. "It creates empathy," Kerim explains. "People understand each other's situation." This shared context supports a culture of openness and

flexibility, where maintaining balance is seen as essential to long-term performance.

At the same time, building a complete and well-functioning team remains a priority. Looking ahead, Kerim identifies a clear objective: "If we have a strong, happy and well-balanced team, the organisation will be successful."

ESG driven by regulation and stakeholders
In contrast to less mature markets, ESG in Germany is strongly shaped by regulation and stakeholder expectations. Environmental requirements are deeply embedded in project development, including mandatory biodiversity and environmental studies, strict permitting processes and long-term national climate targets.

In addition, municipalities play a key role. They expect:

- financial contributions to local communities
- involvement in project development
- tangible benefits for residents

"What they all have in common is that they want to improve conditions for their local population," Kerim explains. This makes stakeholder engagement a central element of project success.

From compliance to differentiation

At this stage, ESG in Germany is largely a licence to operate rather than a differentiator. Kerim notes when asked whether ESG sets Novar apart from competitors: "I would say not yet." However, the ambition is to move beyond compliance. One example is the proactive involvement of a broad range of stakeholders through regional platforms, such as a multi-stakeholder network in Baden-Württemberg.

By bringing together municipalities, grid operators and other local stakeholders, Novar creates a more collaborative approach to project development. "It's about creating a win-win for all stakeholders involved," Kerim explains. This approach strengthens relationships, builds trust and contributes to long-term positioning in the market.

Local engagement as a long-term strategy

Even in cases where formal involvement of municipalities is not required, Novar chooses to actively engage them. This reflects a long-term perspective: solar parks are assets with a lifetime of 25–30 years, requiring ongoing collaboration with local stakeholders. "It's always better to keep the municipality close," Kerim notes. This supports both project development and future opportunities.

ESG in context

The German case highlights an important insight for Novar's international strategy.

While ESG is highly relevant, its role differs in some markets, it is emerging and implicit, in others, it is formalised and enforced. Germany clearly belongs to the latter category. At the same time, differences exist within the country itself, with varying levels of acceptance and political support depending on the region. This reinforces the need for a flexible, context-driven approach.

As Novar Germany continues to grow, the focus will shift from building the organisation to strengthening its position in the market.

Key priorities include completing and developing the team, increasing stakeholder engagement and gradually moving from compliance to differentiation in ESG. In this next phase, ESG will play a more explicit role in positioning and decision-making.

As Kerim puts it: "Everyone in this industry wants to do the right thing. The challenge is to make it part of daily decisions."



"ESG in Germany is largely a licence to operate, rather than a differentiator. The ambition is to move beyond compliance".

Kerim Eraksan,
country manager



Environmental



From design principle to measurable impact

For Novar, ecology and biodiversity are no longer boundary conditions, but an integral part of operations. In 2025, the responsibility for these themes was assigned to to Klaer; the asset management and maintenance organisation of Novar. This marks a fundamental shift: biodiversity is no longer considered only in the design phase of projects, but is actively managed, monitored and substantiated throughout the entire lifecycle of an asset.

As Business Unit Manager Jan Klijnstra puts it: “You can no longer separate renewable energy from ecology and biodiversity. It is part of daily operations.”

From design to operational discipline

Where biodiversity was previously embedded mainly in permitting processes and design choices, the focus is now shifting towards long-term management and monitoring. “It is no longer just about what you design at the front end, but what you actually do afterwards,” Jan explains.

This shift aligns with broader academic insights, including research by the University of Groningen, which shows that the ecological value of solar parks develops primarily during the operational phase. Management choices such as mowing regimes, soil use and site layout prove to be decisive for biodiversity outcomes over time.

By embedding biodiversity within Klaer’s responsibilities, this phase is no longer implicit, but actively managed.

From assumptions to structured monitoring

A second key development in 2025 is the transition from qualitative assumptions to systematic measurement. Where biodiversity was previously described in general terms, Klaer is now developing a methodological approach to track changes over time. Monitoring is organised across key categories such as flora, birds and insects, using established ecological standards and supported by specialised knowledge partners.

“Monitoring sounds simple, but it isn’t,” Jan notes. “You first need to decide what to measure, how often and with which method.” Klaer’s approach combines field observations with technological tools, including wildlife cameras, audio recordings for species detection and AI-supported recognition. Together, these methods make it possible not only to observe biodiversity, but to understand and compare developments across locations. The involvement of biology students in fieldwork further strengthens this approach, connecting operational practice with academic research.

Positive trends, with a nuance

Initial insights confirm a trend also identified in earlier research: solar parks can support an increase in biodiversity compared to intensive agricultural land use. “At its core, you move from a monoculture to a richer habitat,” Jan explains.

At the same time, both research and practice show that this development is nuanced. Biodiversity increases, but species composition changes. Some species disappear, while others emerge, and ecological balance differs from site to site. This underlines that biodiversity is not a fixed outcome, but a dynamic process shaped by local conditions and management decisions.

Learning through practice

Experience in 2025 shows that not all interventions lead to the expected results. Experiments with ecological mowing and leaving compressed bales of vegetation on site, for example, proved less effective in stimulating biodiversity than anticipated.



Jan: “It is not always straightforward. That is why we actively measure the effects of our interventions; it is an integral part of the learning process.”

Based on these insights, management practices are continuously adjusted. For instance, mowing regimes are adapted to allow insects to escape before biomass is removed, supporting both soil quality and species diversity.

This iterative approach - measuring, evaluating and adjusting - is central to the further professionalisation of biodiversity management.

The value of natural management

An important insight from practice relates to vegetation management on solar parks. Novar avoids the use of chemical pesticides and applies extensive management practices such as mowing and grazing. This, however, does not yet translate into economic value. “We don’t use chemical inputs and allow grass to grow and dry naturally,” Jan explains. “Still, for now it is uncertain whether this approach will lead to higher-quality biomass. At present, Novar still bears the cost of removing and processing the material.”

This highlights a broader challenge: ecological value does not always align with current economic systems.

Balancing ecology and asset performance

A key principle in Klaer’s approach is that ecological measures must be feasible within the operational reality of solar parks. Jan: “The theory has to work in practice.”

This means that biodiversity measures are continuously balanced against maintenance requirements, safety considerations and financial viability. It is precisely this integration that allows ecology to become part of asset performance, rather than an add-on.

Scaling and standardisation

With a portfolio of approximately 1.3 GW under management, Klaer has the scale to test, validate and roll out biodiversity measures across multiple sites. Successful interventions - such as adding

structural elements to support habitats - can be replicated, while monitoring and reporting are increasingly standardised. This creates a foundation for future KPIs and ESG reporting.

Towards a data-driven approach

The combination of practical experience, systematic monitoring and alignment with scientific research marks a new phase in Novar’s biodiversity strategy.

Looking ahead, the ambition is to further quantify biodiversity outcomes, strengthen the link between management practices and ecological effects and integrate biodiversity more explicitly into decision-making and asset strategy.

This also reflects broader developments in ESG reporting, including CSRD, where organisations are increasingly expected to substantiate their environmental impact with measurable indicators. By standardising monitoring and developing consistent methodologies, Novar is building the foundation for reporting on biodiversity through clear metrics and - over time - comparable KPIs.

In this way, biodiversity is evolving from a qualitative topic into a data-driven component of asset management; one that can be actively managed, measured and transparently reported. As Jan concludes: “It’s about continuing to measure, to learn and to improve. That is the only way to create real impact.”



“It is not always straightforward. That is why we actively measure the effects of our interventions; it is an integral part of the learning process,”

Jan Klijnstra,
business unit manager Klaer



Biodiversity in solar parks: better understanding of ecosystems

In 2025, Novar further deepened its approach to biodiversity by strengthening the link between scientific research and practical application. Building on earlier studies into ecological impact, the focus is shifting from measuring biodiversity outcomes to understanding the ecological mechanisms that drive them. This development is supported by ongoing research in collaboration with the University of Groningen (UG), including the PhD research of Sylvia de Vries.

Recent research into solar parks in agricultural landscapes shows a nuanced pattern. Compared to intensively used farmland, solar parks can support higher biodiversity levels. However, this effect is not uniform across sites and greatly affected by vegetation management.

A nuanced picture of biodiversity

As Sylvia explains, “the overall ecological value of a solar park is not primarily determined by the area under the panels, but much more by the edges and compensation areas.”

This finding aligns with earlier studies, which demonstrate that:

- biodiversity increases compared to monoculture agriculture
- species composition shifts rather than simply improves
- ecological value is concentrated in specific zones within and around the park

In practice, solar parks are a single ecosystem, but function across several gradients

(for example; shade, soil moisture, vegetation composition), creating a heterogeneous habitat supporting a heterogeneous species community.

From a buzzard to a research programme

The origin story of this research lies in one specific and unexpected observation. During the development of Groot Roodehaan, a solar park near Groningen, a Common buzzard *Buteo buteo* was found nesting in a tree at the edge of the site. This raised a simple but fundamental question: how does a solar park affect such a species that depends on this landscape?

“That question quickly grew,” Sylvia recalls. “From: what does this mean for a single species, to: what does a solar park mean for biodiversity in agricultural areas as a whole?” This shift led to the development of a five-year PhD programme, analysing biodiversity across eight large-scale solar parks in the northern part of The Netherlands.

Solar parks as new habitats

The research shows that solar parks create new habitat conditions within agricultural landscapes. In particular, they attract species that may have difficulty finding suitable breeding habitat in intensively farmed areas. “These are species that prefer high and dense vegetation, shrubs and more diverse structure,” Sylvia explains. “That type of habitat is largely absent in modern agricultural land.”

At the same time, species that depend on open, unobstructed landscapes tend to decline within solar parks. This highlights a fundamental trade-off: solar parks do not simply increase biodiversity, they reshape it.

Understanding behaviour: the case of wagtails

A key focus of Sylvia’s research is the behaviour of birds within solar parks, particularly wagtails. These species provide valuable insights into how habitats are actually used.

Two distinct patterns emerge:

- Yellow wagtails, typical of open agricultural landscapes, continue to breed in solar parks, although in lower densities, while conditions differ from their natural habitat
- White wagtails, which prefer structures and shelter, are found in high densities within solar parks, where they nest under panels and in technical installations



To better understand how these birds use solar parks, researchers equipped white wagtails with GPS trackers.

This revealed that birds forage extensively within the solar park itself and therefore sufficient insect populations must be present to support breeding success. Both the panel areas and surrounding vegetation contribute to food availability. “They don’t just use the edges,” Sylvia notes. “They actually forage between or on top of the panels as well.”

This behavioural perspective provides deeper insight than species counts alone, showing how solar parks function as living ecosystems.

The importance of management

One of the clearest conclusions from both research and practice is the importance of vegetation management. While the initial design plays a role, ecological outcomes are largely determined by how a site is maintained over time. “The difference is not so much in small variations in the distance between panel rows,” Sylvia explains, “but in the quality of the vegetation.” Key factors include mowing regimes, grazing intensity and vegetation diversity.

An example of that is intensive grazing, which can reduce vegetation to a level where insect populations decline. At the other end, selective mowing – only where shading affects energy yield – still allows biodiversity to develop in other areas. This confirms that biodiversity is not a static outcome of design, but a dynamic result of ongoing management.

From general principles to site-specific knowledge

Traditionally, ecological guidelines for solar parks have been based on general principles derived from broader landscape ecology. The current research marks a shift towards evidence-based, site-specific insights.

“With this research, we can move beyond general assumptions,” Sylvia explains. “We can actually base recommendations on data from solar parks themselves.” The aim is to translate these findings into practical guidance for

developers and operators, making biodiversity a more predictable and manageable aspect of solar park development.

A living system

The findings from 2025 reinforce a broader perspective: solar parks should not be viewed as static installations, but as evolving eco systems. They create new habitats within agricultural landscapes that support different species assemblages and develop over time, depending on management and local conditions. This understanding is essential for integrating biodiversity into the long-term operation of renewable energy assets.



“It’s not just about whether biodiversity increases or decreases. It’s about understanding what is happening and why.”

Sylvia de Vries,
researcher

Outlook

With the research programme entering its final phase, the focus is shifting towards consolidation and application. The results will be translated into practical guidelines, contributing to broader knowledge sharing across the sector.

For Novar, this represents an important step in embedding biodiversity into both strategy and operations. By combining scientific research with hands-on experience, the company is moving towards a more informed and adaptive approach; one that recognises solar parks not only as energy assets, but as part of a wider ecological system.



CO2 reduction:

Steering for impact in a growing energy-system

For Novar, CO₂ reduction lies at the core of its mission to accelerate the energy transition. At the same time, the strong growth of the organisation and its portfolio introduces an inherent tension. More projects, more assets and increasing international activities inevitably lead to a rise in operational emissions. The challenge therefore extends beyond absolute reduction. It increasingly lies in steering for efficiency, transparency and targeted mitigation within a growing system. At the same time, it is important to recognise the broader impact: the renewable energy generated by Novar's assets avoids significantly more CO₂ than the organisation emits in its own operations.

In 2025, scope 1 and 2 emissions were mapped again. The key conclusion is clear: absolute emissions are increasing. "As we grow, emissions grow with us. That is simply the reality of scaling up," says business controller Erwin de Ruiter.

This marks an important shift in how CO₂ reduction is approached. Where reduction was previously assessed primarily in absolute terms, the focus is increasingly moving towards relative performance and system impact.

"We are looking much more at efficiency indicators," Erwin adds. "Emissions per megawatt or per employee tell you more about how effectively you are operating."

Operational reality: own consumption and system services

A significant part of operational emissions is linked to the energy consumption of the assets themselves. While solar parks generate renewable energy, they also consume electricity, for example for monitoring, security and grid support. A specific example is the provision of reactive power, a system service that is essential for maintaining grid stability and was traditionally supplied by conventional power plants.

"It's a bit like the foam on a glass of beer," explains Olaf Neuteboom, director renewable assets. "You don't use reactive power directly, but without it, the system doesn't function properly."

To provide this service, electricity must be drawn from the grid during periods when the park is not producing energy, such as at night. This results in additional recorded emissions. "At first glance, it looks like extra emissions," Olaf adds. "But in reality, you are enabling the grid to function. Without that, the system cannot support large volumes of renewable energy."

This highlights the complexity of carbon accounting in a transitioning energy system: not all electricity consumption is the result of inefficiency; some is inherent to supporting the system as a whole.



"It's a bit like the foam on a glass of beer; you don't use reactive power directly, but without it, the system doesn't function properly."

Olaf Neuteboom,
director renewable assets

Limited levers for direct reduction

In the current phase, the options for further reducing direct emissions (scope 1 and 2) are relatively limited. The main levers available are reducing energy consumption where possible, increasing the share of renewable energy in procurement and compensating for remaining emissions.

"At a certain point, you reach the limits of what you can optimise within your own operations," Erwin notes. At the same time, current accounting methodologies, based on standard emission factors, do not always fully reflect the use of green electricity. As a result, actual improvements are not always directly visible in reported figures, a challenge that is recognised across the sector.

First steps towards scope 3

While scope 1 and 2 emissions are increasingly well understood, the largest challenge lies in scope 3: emissions across the value chain. In 2025, a first foundation was established, including through the double materiality assessment. However, current insights are still too limited to manage effectively.

“We have the first outline,” says Erwin, “but it is still too high-level to link to concrete KPIs.” A key next step is the systematic mapping of the supply chain, including the impact of suppliers and construction activities. As part of this effort, Novar has started to request environmental performance indicators from EPC partners. This data is expected to become available in the coming years and will form a basis for more targeted reduction strategies.

New challenges through technological development

The expansion into new technologies, such as battery storage, introduces additional CO₂-related challenges. Batteries involve energy losses during conversion, leading to additional consumption.

“Every new technology brings its own efficiency questions. With batteries, however, the bigger impact lies in how intelligently you use them. Rather than focusing on conversion losses only, you should look at how much carbon can be avoided by shifting excess renewable energy to moments when renewable supply is scarce.”

New technical aspects also come into play, such as the use of specific gases in electrical installations. European regulation is increasingly focused on phasing out highly potent greenhouse gases, such as SF₆, which will contribute to further emission reductions over time.

Mobility and internationalisation

The continued international expansion of Novar also affects its carbon footprint, particularly through increased travel. Within the Netherlands, the organisation strongly promotes sustainable mobility. International collaboration, however, introduces new trade-offs; for example between train and air travel.

“That is where you start making different kinds of decisions,” Erwin reflects. “It is no longer just about efficiency, but also about practicality and impact.”

Compensation and additional measures

In addition to reduction, Novar also considers compensation measures, such as the use of Guarantees of Origin for renewable electricity and nature-based initiatives. These measures contribute to lowering net impact, but the primary focus remains on structural improvements within operations and the value chain.

Towards an integrated approach

Developments in 2025 show that CO₂ reduction within Novar is evolving from a relatively linear challenge into a more integrated system question. Erwin: “We are moving from measuring to really understanding what drives impact.”

The combination of growth, new technologies and an increasingly complex energy system requires better data and transparency across the value chain, new KPIs that reflect both scale and efficiency and a broader perspective on Novar’s role within the energy system.

The coming years will therefore focus on further professionalisation: moving from measurement to management and from individual measures to a coherent and integrated reduction strategy.



“We are now looking much more at efficiency indicators. Emissions per megawatt or per employee tell you more about how effectively you are operating.”

Erwin de Ruiter,
business controller



Generation Green:

Execution aligned with impact

As an EPC partner, Generation Green supports Novar with the engineering, procurement and construction of solar parks. In this role, the company plays a key part in delivering projects safely, efficiently and in line with sustainability requirements. The way projects are executed in this phase directly influences their environmental footprint, long-term performance and overall impact.



“Our collaboration is rooted not only in technical capability, but also in a shared perspective on CO₂ reduction.”

Jan-Kees Schep,
CEO Generation Green

Jan-Kees Schep CEO of Generation Green: “Our collaboration is rooted not only in technical capability, but also in a shared perspective on CO₂ reduction.” Founded with the ambition to accelerate the adoption of solar energy, Generation Green has evolved from a company focused on rooftop PV installations into a partner capable of delivering large-scale solar and battery projects. This transition has positioned the organisation as a relevant EPC partner for developers such as Novar, where scale, system integration and execution capability increasingly come together.

While ESG considerations are not always explicitly discussed in day-to-day project execution, they form an underlying alignment between both organisations. Generation Green has developed a clearly articulated ESG approach, which is reflected in both policy and practice.

This includes:

- **Social impact:** working with partners that employ people with a distance to the labour market, even when this involves higher costs
- **Responsible sourcing and transparency:** actively mapping the origin and impact of components across the value chain

- **Operational footprint reduction:** using electric transport where feasible and embedding energy awareness in daily operations

This shared mindset resonates with Novar’s own approach, where financial performance and societal impact are structurally seen as interconnected. “It’s not just about returns,” Schep notes. “It’s also about the impact you make. That’s how we see Novar as well.”

Measuring impact across the full lifecycle

A distinctive element in Generation Green’s ESG approach is its internally developed CO₂ dashboard, which captures emissions across the full lifecycle of a solar installation. This tool was developed in collaboration with Sustainable Student Consultancy, combining academic expertise with practical application.

Rather than focusing on the operational phase only, the model includes production of panels and components, transport and construction activities and energy use and mobility within the organisation

This results in a more complete view of environmental impact, including the initial ‘carbon debt’ before a project reaches its break-even point and starts generating net positive impact.



This lifecycle perspective aligns closely with emerging ESG and regulatory frameworks, which increasingly require companies to assess and report across the entire value chain.

From design to execution

Within Novar projects, Generation Green's role is primarily in execution. This includes implementing design choices that support biodiversity and responsible land use, such as measures to prevent soil compaction during construction. While ecological design is largely driven by the developer, the execution phase plays a critical role in ensuring that these intentions are realised in practice.

The collaboration between Novar and Generation Green illustrates how ESG is increasingly embedded across the value chain. It is not limited to strategy or reporting, but extends into how projects are built, how partners are selected and how trade-offs are made in practice.

Repowered:

Orchestrating the energy system

As the energy system becomes more complex, the role of renewable energy developers is evolving. It is no longer sufficient to generate electricity; the challenge increasingly lies in ensuring that energy is delivered, stored and used at the right moment and in the right place. With the development of its off-take strategy, Novar is taking a decisive step in this direction. Through its subsidiary Repowered, the company is expanding its role from energy producer to active participant in balancing and optimising the energy system.

As Repowered CEO Dirk Jan Masselink explains, this shift is rooted in a simple principle: “energy at the right place, at the right time.”

From generation to orchestration

Traditionally, solar projects were developed with a relatively straightforward model: generate electricity and feed it into the grid. However, increasing grid congestion and the variability of renewable energy have made this model less viable. “There are moments when we simply produce more energy than the grid can handle,” Dirk-Jan notes.

This requires a more dynamic approach, in which energy is no longer treated as a fixed output, but as a flexible resource. It can be:

- Delivered to or from the grid,
- temporarily curtailed
- stored in batteries
- or redirected to other forms of use

This marks the transition from energy production to energy orchestration.



“If you have excess energy, you need to find a way to use it; just like you would process surplus crops instead of wasting them.”

Dirk Jan Masselink,
CEO Repowered

A portfolio-based strategy

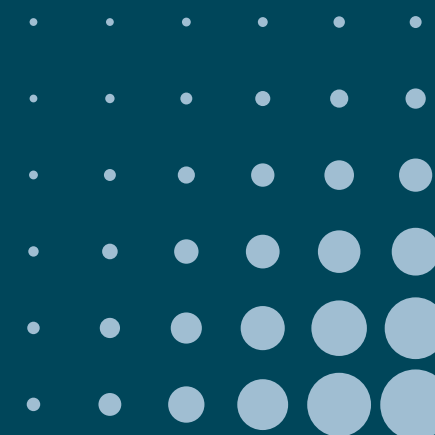
A key element of Novar’s off-take strategy is the shift from a project-based approach to a portfolio-based model. Where individual projects were previously financed and contracted separately, the focus is now on managing energy flows across a broader portfolio that includes solar assets, battery storage, charging infrastructure and – increasingly – wind and hydrogen.

By managing these assets collectively in a Green Energy System, Novar can balance fluctuations and optimise performance at system level. “If you manage assets as a portfolio, you can mitigate risks and optimise outcomes across the whole system,” Dirk-Jan explains.

Playing the energy market

At the heart of this strategy is active participation in energy markets. Through Repowered, Novar has built capabilities across multiple roles, including:

- **Congestion Service Provider (CSP)** – managing grid congestion by adjusting supply and demand
- **Balancing Service Provider (BSP)** – supporting grid stability through services such as frequency control
- **Balance Responsible Party (BRP)** – managing the buying and selling of electricity across day-ahead and intraday markets
- **Energy supplier** – handling settlement and delivery to end users





This integrated approach allows Novar to act as a one-stop shop for energy optimisation, both for its own assets and for third parties. “We provide access to all relevant markets and enable our clients to actively participate in the energy system,” says Dirk Jan.

Flexibility as a system solution

The growing importance of flexibility is closely linked to structural challenges in the energy system, particularly grid congestion and decentralised and fluctuating energy production. On sunny days, energy supply can exceed demand, leading to negative prices and curtailment. At the same time, demand for electricity is increasing due to electrification.

The solution lies in flexibility through storing excess energy in batteries, shifting consumption to periods of high supply and dynamically responding to market signals. Dirk Jan: “If you have excess energy, you need to find a way to use it; just like you would process surplus crops instead of wasting them.”

This analogy reflects a broader shift: energy is no longer a commodity that is simply produced and sold, but one that must be actively managed.

Enabling better use of renewable energy

A central goal of the off-take strategy is to increase the effective use of renewable energy. Rather than maximising production alone, the focus shifts to maximising utilisation, reducing curtailment and aligning supply with demand. This contributes directly to the efficiency and sustainability of the energy system.

From risk mitigation to value creation

Historically, energy projects relied heavily on long-term Power Purchase Agreements (PPAs) to reduce financial risk. However, these contracts are becoming less attractive in a volatile market. Instead, Novar is moving towards a model in which risks are actively managed within the portfolio.

“If you hedge everything upfront, you pay a high price for certainty,” Dirk Jan explains. “By managing a portfolio, you can balance risks more effectively.” This approach transforms uncertainty from a constraint into an opportunity for value creation.

Scaling flexibility

The next phase of the strategy involves scaling flexibility through the deployment of battery storage and other technologies.

While regulatory and infrastructural challenges have slowed down implementation in the past, developments in battery cost reductions, new grid access models and evolving regulation are now accelerating adoption. Repowered is already managing large-scale battery systems and expects further expansion in the near future.

Outlook

The evolution of Novar’s off-take strategy reflects a broader transformation in the energy sector. From generating energy to managing energy flows and ultimately orchestrating integrated energy systems. As Dirk Jan summarises: “It’s no longer about producing energy. It’s about making sure it ends up where it is needed, when it is needed.”

Social



Community ownership and social impact

The development of large-scale renewable energy projects is not only a technical and financial process; it is also a social one. The project in the Eekerpolder illustrates how long-term engagement with local stakeholders can translate into both acceptance and tangible local value.

Jaap Keuning has been closely involved from the very beginning. As chairman of the local energy cooperative in the project, he has followed its development from early concept to near completion. “I have been involved in this project from the very start, some seven years ago. Now that the project is almost complete, we are entering the next phase: making sure the benefits actually reach the community.”

As the project approaches formal completion, the focus is shifting from development and construction to the distribution of revenues. Through the cooperative structure, part of the project’s financial returns will flow back into the local communities.

From participation to value creation

To manage this, the cooperative has established a dedicated working group responsible for allocating funds across the municipalities of Oldambt and Midden-Groningen.

“In 2025 we have begun preparing how the revenues will be distributed,” Jaap explains. “That requires clear criteria, governance and accountability towards both the municipalities and our members.”

The first financial returns are expected from 2027 onwards, of course depending on market conditions such as energy prices. While exact figures remain uncertain, the expectation is that the cooperative will be able to support a broad range of local initiatives.

Strengthening local communities

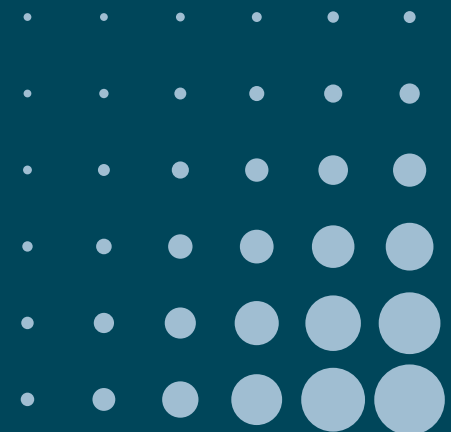
A key principle in the allocation of funds is to support a wide range of smaller initiatives, rather than concentrating resources in a limited number of large projects. “The idea is to support many smaller initiatives within the community,” Jaap notes. “That way, you create impact at the local level, across different villages and organisations.”

Local village councils and community organisations from the village centers Scheemda, Westerlee, Heiligerlee, Zuidbroek and Meeden are actively involved in shaping how the funds will be used. This ensures that decisions are grounded in local needs and priorities. The approach reflects a broader ESG principle: value creation is not only measured in financial terms, but also in how benefits are shared and embedded within the local environment.



“We have clear agreements with the municipalities that the revenues will benefit the local communities. This reflects the importance of transparency and accountability in community-based energy projects.”

Jaap Keuning,
chairman Energy
Cooperation Eekerpolder



Building acceptance over time

The Eekerpolder project also demonstrates how community acceptance evolves over time. “In the beginning, there is always resistance,” Jaap reflects. “Unknown makes unloved. But once people understand what the project will actually deliver, that changes.”

Through ongoing dialogue, transparency and a clear participation model, initial scepticism gradually shifted towards acceptance and eventually support. “We have had very little opposition in the end,” he notes.

The physical integration of the project into the landscape also played a role. The solar park is carefully positioned between dikes, limiting its visual impact.

A long-term process

The development of the project illustrates the long timelines involved in renewable energy. Planning for the Eekerpolder project began as early as 2019. Over the years, engagement levels fluctuated, with some early participants stepping back as progress took longer than expected.

“It takes years before a project like this becomes reality,” Jaap says. “That requires perseverance. We saw that a small core group stayed committed throughout the entire process.” Maintaining momentum over such a long period proved challenging, but ultimately essential to achieving the final result.

Governance and accountability

The cooperative structure also requires a robust governance framework. Agreements with municipalities ensure that revenues are distributed within the local area, in line with predefined allocation principles. Formal arrangements, including statutes and internal regulations, are being updated to support this next phase.

“We have clear agreements with the municipalities that the revenues will benefit the local communities,” Jaap explains. “This reflects the importance of transparency and accountability in community-based energy projects.”

From project to partnership

The collaboration between the cooperative and project partners has been a key success factor. “We have always worked very well together,” Jaap notes. “That has been essential in getting the project to this point.”

Financial and market conditions required adjustments during the development phase, including changes in shareholding. Higher interest rates, among other factors, reduced the cooperative’s financing capacity. Nevertheless, the cooperative remains an active stakeholder and continues to play a central role in ensuring local impact.

Delivering on the promise of participation

As the project enters its operational phase, the original promise of participation is becoming tangible. The transition from development to revenue distribution marks a critical moment: the point at which community involvement is translated into measurable benefits.

For Novar, the Eekerpolder project illustrates how ESG principles – particularly around stakeholder engagement, governance and social impact – can be embedded in practice over the full lifecycle of a project. It also underlines the importance of maintaining a strong social licence to operate: ensuring that projects are not only technically and financially viable, but also supported and understood by the communities in which they are developed.

This is not achieved through communication alone, but through long-term engagement, transparency and a credible mechanism for sharing value locally. It also shows that meaningful participation requires time, persistence and trust.

As Jaap summarises: “We knew this would take time. But we also knew that if we stayed committed, there would come a moment when it would all come together. That moment is now approaching.”

About Zonnepark Eekerpolder

Zonnepark Eekerpolder the largest solar park development in the Netherlands. Located between the municipalities of Oldambt and Midden-Groningen, the project combines large-scale renewable energy generation with nature development, recreation and local ownership. The solar park covers approximately 160 hectares and has an installed capacity of around 200 MWp, generating enough renewable electricity to supply approximately 67,000 households.

From the outset, the project was developed in close partnership with Coöperatie Eekerpolder, a local energy cooperative representing residents from the surrounding communities. The cooperative became a co-owner of the project and played an active role in shaping its design, including landscape integration, ecological measures and the distribution of future revenues to local initiatives.

The project is also notable for its focus on biodiversity and community value. More than a quarter of the project area is dedicated to ecological and landscape measures, including nature-friendly watercourses, habitat development and recreational facilities. Revenues generated through the cooperative structure will be reinvested in local communities, supporting social, environmental and community initiatives across the region.

This combination of renewable energy generation, local participation, biodiversity enhancement and long-term community benefit, makes Eekerpolder a leading example of how the energy transition can create value beyond energy production alone.

Employee wellbeing:

From intent to targeted action

For Novar, employee wellbeing is not a standalone topic, but an integral part of organisational development. In 2025, this ambition has been developed further. Not primarily through new policies, but through targeted interventions and by strengthening the HR foundation. As HR Director Judith Apeldoorn puts it: “We believe it is not just about writing down what we want to do, but about actually doing things that make an impact.”

As in previous years, the employee engagement survey provided a key starting point. The 2025 results show a broadly positive picture, with an average score of 4.0 (on a scale of 5) and a recommendation score of 4.3.

At the same time, clear areas for attention emerged, particularly around perceived workload, ergonomics and the need for recognition. “Work pressure remains a theme,” Judith explains. “But it is also very personal. That is why we have chosen to give people the tools to deal with it themselves.”

Strengthening mental resilience

One of the most important interventions in 2025 was the introduction of the ‘less stress mindset’ workshop. This programme, rolled out across the organisation, focuses on recognising early signs of stress and developing effective coping strategies.

The approach is explicitly preventive. Employees are not only supported when issues arise, but are given insight into how stress develops and how they can intervene earlier. “Often, you only see the impact when it is already too late,” Judith notes. “We want to support people at an earlier stage, so they better understand what is happening in their mind and body.”

While the programme has largely been completed, it has laid an important foundation for giving structural attention to mental health within the organisation.

A healthy working environment

Alongside mental wellbeing, investments were made in the physical working environment. In 2025, workspaces were reassessed from an ergonomic perspective, supported by external specialists. This led to practical improvements in workplace design and equipment, aimed at reducing physical strain and supporting healthier ways of working.

“Employee wellbeing goes beyond mental health,” Judith emphasises. “It is also about how people do their work, and whether they can do that in a healthy way.”



Wellbeing across the employee journey

In 2025, Novar also introduced a new HR strategy, under the name Power Up, in which wellbeing is explicitly embedded as one of the core pillars.

This strategy approaches the organisation from the perspective of the full employee journey; from onboarding to exit. Wellbeing is not treated as a separate topic, but as part of a broader ambition: creating an environment in which employees can perform sustainably and continue to develop.

“For me, wellbeing starts on day one,” Judith explains. “How you welcome people, how you introduce them to the culture. That largely determines how they experience the organisation.”

A key example is the renewed onboarding programme, which has been implemented across the organisation since 2025. New employees – both national and international – follow a structured programme focused on connection, culture and orientation.

Leadership and development

Wellbeing is closely linked to leadership. In 2025, Novar invested in the further development of its managers through an organisation-wide leadership programme. In parallel, a digital performance management cycle was introduced, providing greater insight into objectives, progress and development needs.

“Leaders play a key role,” Judith notes. “They need to have the conversation about development, workload and balance. We actively support them in doing so.”

At the same time, initial steps were taken towards a more structured approach to learning and development, with the ambition to establish a clear framework and more effective use of training budgets in the coming years.

Balancing ambition and capacity

The developments in 2025 also highlight the need for prioritisation. Novar’s rapid international growth placed significant demands on the organisation, particularly in recruitment and the development of international teams.

“With the capacity we had, we had to make choices,” Judith explains. “The focus was on

building the organisation. That also means we are not yet measuring or formalising everything as we ideally would.”

As a result, quantitative KPIs on wellbeing and inclusion are still under development, and further steps are being taken to strengthen monitoring and reporting in the future.

Diversity and inclusion: an organic development

In the area of diversity and inclusion, Novar is seeing organic growth. Recent hires show a clear increase in international diversity and gender balance, without the use of formal quotas. “We see that diversity is increasing naturally,” Judith notes. “But the question is how we can deepen and anchor that further.”

An initial ESG-aligned assessment shows that many initiatives are already in place, but not yet consistently embedded in formal policy.

Looking ahead, the focus is on further structuring and deepening the HR approach. This includes developing a clear learning and development framework, improving the monitoring of employee engagement, strengthening HR capacity – particularly in an international context – and embedding wellbeing more firmly within leadership and organisational culture.

The underlying principle remains consistent: wellbeing is not a separate programme, but an integral part of how Novar builds its organisation.



“Employee wellbeing goes beyond mental health. It is also about how people do their work, and whether they can do that in a healthy way.”

Judith Apeldoorn,
HR director



Governance



ESG governance in procurement and supply chain

In 2025, Novar further strengthened the way ESG requirements are embedded in its procurement and contracting processes. As a project-driven organisation, Novar recognises that a significant part of its environmental, social and governance impact is determined through its relationships with suppliers, contractors and financing partners. Contracts therefore form a critical instrument for translating ESG ambitions, regulatory requirements and internal standards into enforceable obligations across the value chain.

As Novar's director operations Paul van Velzen puts it: "A large part of our impact is not within our own organisation, but in the chain we work with. That means responsibility does not stop at our own boundaries."

A key step in 2025 was the continued strengthening of governance mechanisms around supplier expectations and responsible business conduct. Existing frameworks, including the Code of Conduct and escalation mechanisms, were further sharpened to ensure that concerns can be raised independently when practices do not meet Novar's standards.

At the same time, ESG expectations are increasingly linked to the contractual conditions under which capital is deployed, including in new financing arrangements. This reflects a broader

development in which ESG performance is no longer treated as a standalone ambition, but as an integral part of how Novar procures, builds and finances its projects.

From principles to proof

While the Code of Conduct provides an important normative foundation, Novar's focus is increasingly shifting from high-level principles to demonstrable compliance.

"It is not enough to say what we expect from our partners," Paul notes. "We need to be able to show – together – that those expectations are actually met in practice."

In practice, this means moving from general commitments on fair labour, responsible sourcing and environmental care towards

more specific contractual requirements on evidence, traceability and reporting. Suppliers and contractors are expected not only to adhere to Novar's standards, but to substantiate their claims with verifiable data and documentation.

This marks a clear step forward in the maturity of Novar's ESG approach: from defining expectations to actively validating them.

Increasing supply chain transparency and oversight

To support this transition, Novar has started to map its supply chain in greater detail. This includes gaining insight into what is purchased, which raw materials are involved, and where key ESG risks occur throughout the chain.

These risks may arise at different stages; from raw material extraction and product assembly to transport and on-site construction. By breaking down the supply chain into its constituent parts, Novar is building a clearer understanding of where environmental and social impacts occur and where intervention is most effective.

This also improves the quality of reporting and enables more targeted action. Better insight into the chain allows Novar to define more precise expectations and to determine which control mechanisms are both proportionate and feasible.



"Ultimately, it is about making sure that what we say, what we contract and what actually happens in practice are aligned. That is where ESG governance becomes real."

Paul van Velzen,
director operations

Supply chain due diligence

Monitoring and verification are seen as the logical next phase in ESG governance. Requiring suppliers to provide evidence is an important step, but it also raises a more fundamental question: how far can and should an organisation go in verifying what happens in its supply chain?

As Paul explains: “You can ask for information, but the real question is how much certainty you need and how far you are willing and able to go in verifying it.” And, more candidly: “You will never have full control over the entire chain. The question is not whether you control everything, but whether you understand where the risks are and act on them.”

This perspective reflects the practical reality of supply chain governance. Strengthening ESG oversight is not only about increasing requirements, but also about making conscious choices in how risks are identified, prioritised and managed.

To support this, Novar continues to invest in internal capability building. As due diligence becomes more detailed, teams require a deeper understanding of sourcing structures, production processes and risk indicators. ESG governance is therefore not only a matter of policy and contracting, but also of organisational learning and professionalisation.

Improving carbon insight and supplier requirements

On the environmental side, Novar is taking steps to improve the quality of carbon data in project delivery. The company is working towards more standardised requirements for suppliers to report project-related emissions after completion.

This provides greater transparency on actual emissions during the construction phase and enables Novar to define more targeted requirements over time. “The more insight we have, the more specific we can become in what we ask,” Paul adds.

Better measurement is therefore seen as a necessary precondition for more effective steering.

Better documentation of existing practices

An important insight in 2025 is that Novar already carries out a wide range of ESG-relevant activities in project development, but does not yet always document these consistently for external reporting purposes.

This applies, for example, to impact assessments conducted as part of project realisation, including stakeholder engagement, landscape integration and Natura 2000-related assessments. While these practices are embedded in day-to-day operations, their traceability and formal documentation require further improvement.

As ESG reporting requirements increase - particularly in the context of financing - this becomes more important. The challenge is not only to improve performance where needed, but also to improve evidence and communicate what is already being done.

Looking ahead

Looking ahead, Novar’s next step is to further develop its contractual framework so that ESG requirements become more explicit, measurable and verifiable across procurement, project delivery and supply chain management.

This includes strengthening due diligence, improving documentation, refining supplier evidence requirements and determining where additional verification is both necessary and feasible.

At the same time, Novar continues to invest in internal awareness and training, supporting a broader culture of compliance and responsible conduct across the organisation.

Taken together, these developments show a clear direction of travel: from intention to implementation, from policy to proof and from broad ESG commitments to more structured and controllable execution.



Connecting the system

WATT Infra: infrastructure, safety and control

The energy transition is often associated with visible assets such as solar parks and battery systems. Less visible, but equally critical, is the infrastructure that connects these assets to the energy system. Through its collaboration with WATT Infra, Novar ensures that the energy it produces can be safely and reliably transported to the grid. This infrastructure - often installed underground - forms the physical backbone of the system and plays a key role in addressing challenges such as grid congestion and limited network capacity.



WATT Infra is responsible for the engineering and realisation of the infrastructure required to connect energy assets to the grid. This includes the design of cable routes, the coordination of construction activities and the management of subcontractors responsible for execution.

While the physical work is carried out by specialised contractors, WATT Infra maintains overall control of the process. Project teams are present on site, coordinating activities, managing risks and ensuring that projects are delivered according to plan.

This model reflects a broader trend in the sector: increasing complexity requires strong coordination across the value chain. Particularly as infrastructure constraints become a limiting factor in the rollout of renewable energy.

Safety as a core responsibility

Given the nature of the work, often involving excavation, drilling and working in public spaces, safety is a central priority. As WATT Infra's QHSE-manager Diana Ruppert explains, "Responsibility does not end with the contractor performing the work. Even if employees of WATT Infra are not physically in the trench, we remain responsible for ensuring that the work is carried out safely."

To support this, WATT Infra has implemented an integrated management system covering quality, environment and safety. This system is supported by multiple certifications, including VCA** and the Safety Culture Ladder, Step 4. It ensures that safety is structurally embedded in both processes and behaviour.

Managing risk across the chain

Safety is addressed throughout the full lifecycle of a project, starting in the design phase. Before construction begins, project teams assess potential risks on location, often together with contractors and stakeholders. This can lead to adjustments in design, for example by rerouting cable trenches to reduce risks for workers, and impact to local residents or the environment.

During execution, detailed safety and environmental plans are developed for each project. These plans cover not only technical risks, but also environmental aspects such as soil conditions and biodiversity, as well as coordination between contractors. For specialised activities, subcontractors are required to contribute their own detailed plans which are integrated into the overall project approach.

From procedures to behaviour

Ensuring that safety measures are actually applied in practice requires continuous attention. On-site project teams carry out inspections, checking working conditions, the use of protective equipment and the overall safety of the work environment. These checks are complemented by formal workplace inspections, audits and regular safety meetings such as 'start work' meetings and toolboxes.

At the same time, WATT Infra places strong emphasis on culture. Through the Safety Culture Ladder, the organisation actively works on awareness and behaviour, encouraging employees and contractors to speak up and take responsibility. This combination of structured processes and cultural awareness helps to translate plans into safe behaviour on site.

ESG in practice

The work of WATT Infra highlights an important aspect of ESG in the energy transition: the role of the supply chain. While infrastructure is often invisible, it has a direct impact on the safety of workers and local communities, on environmental conditions during construction and on the reliability of the energy system. At the same time, well-designed and executed infrastructure is essential in mitigating grid congestion, enabling renewable energy projects to connect to the grid and operate effectively.

By managing these aspects proactively, WATT Infra contributes to the responsible development of energy infrastructure and to unlocking the capacity needed for further decarbonisation.

Looking ahead

Looking forward, WATT Infra continues to strengthen its management systems and expand its scope. This includes the ambition to further develop capabilities in areas such as information security, reflecting the growing digitalisation of infrastructure projects.

For Novar, the collaboration illustrates that the energy transition is not only about generating energy, but also about connecting systems, safely, reliably and at the scale required to overcome the constraints of the existing grid.



"While infrastructure is often invisible, it has a direct impact on the safety of workers and local communities, on environmental conditions during construction and on the reliability of the energy system."

Diana Ruppert

Complaints and whistleblower policy: from practice to compliance

Within the ESG domain, good governance forms a critical pillar. Transparency, integrity and the careful handling of concerns are essential conditions and are increasingly formalised through European regulations such as the Corporate Sustainability Reporting Directive (CSRD) and the EU Whistleblower Directive.

In 2025, Novar took important steps in formalising its complaints procedure and whistleblower policy. While the organisation had already established effective informal practices, these have now been further professionalised and made explicit.

Business Controller Erwin de Ruiter explains: “It was already working well in practice, but it was not consistently documented. That is what we have addressed in 2025.”

From implicit to explicit governance

Historically, both internal and external stakeholders were able to raise concerns through various channels. Employees could turn to managers, HR or confidential advisors, while external stakeholders could engage with environmental managers.

While these practices align with the intent of the EU Whistleblower Directive, they were not yet structured in a way that could be formally demonstrated.

Accessible and secure reporting channels

A key development was the introduction of a central reporting channel via Novar’s website. This channel allows both internal and external stakeholders to submit complaints, report integrity concerns and make use of the whistleblower procedure. Importantly, the system enables anonymous reporting; one of the core requirements under European regulation. “The most important thing is that people feel safe to speak up, without fear of repercussions,” Erwin notes.



“Looking ahead, the focus will be on further embedding the policy, improving monitoring, reporting and whistleblow practice in line with CSRD, and increasing awareness and accessibility across the organisation.”

Erwin de Ruiter,
business controller

While anonymous reporting lowers the threshold for raising concerns, it is also recognised that it can limit follow-up and dialogue. Balancing accessibility with effective handling therefore remains an important consideration.

Internal structure and protection of reporters

In addition to the central reporting channel, Novar maintains a layered internal structure that allows employees to raise concerns through multiple routes. This reflects the principle embedded in the EU Whistleblower Directive that individuals should have access to safe and diverse reporting channels.

In 2025, additional emphasis was placed on the principle of non-retaliation. Employees must be able to trust that raising a concern will not result in negative consequences. The introduction of an anonymous digital channel further strengthens this safeguard, particularly in situations where internal dependencies may exist.

External reporting and transparency

In line with European regulation, Novar also provides clear information on external reporting options. Stakeholders who prefer not to report internally are informed about alternative routes through national authorities.

This contributes to transparency and reinforces trust in the overall system.

At the same time, the role of environmental managers remains important for handling operational complaints, for example related to noise or visual impact of projects. These signals continue to be addressed directly and provide valuable input for continuous improvement.

Monitoring and first insights

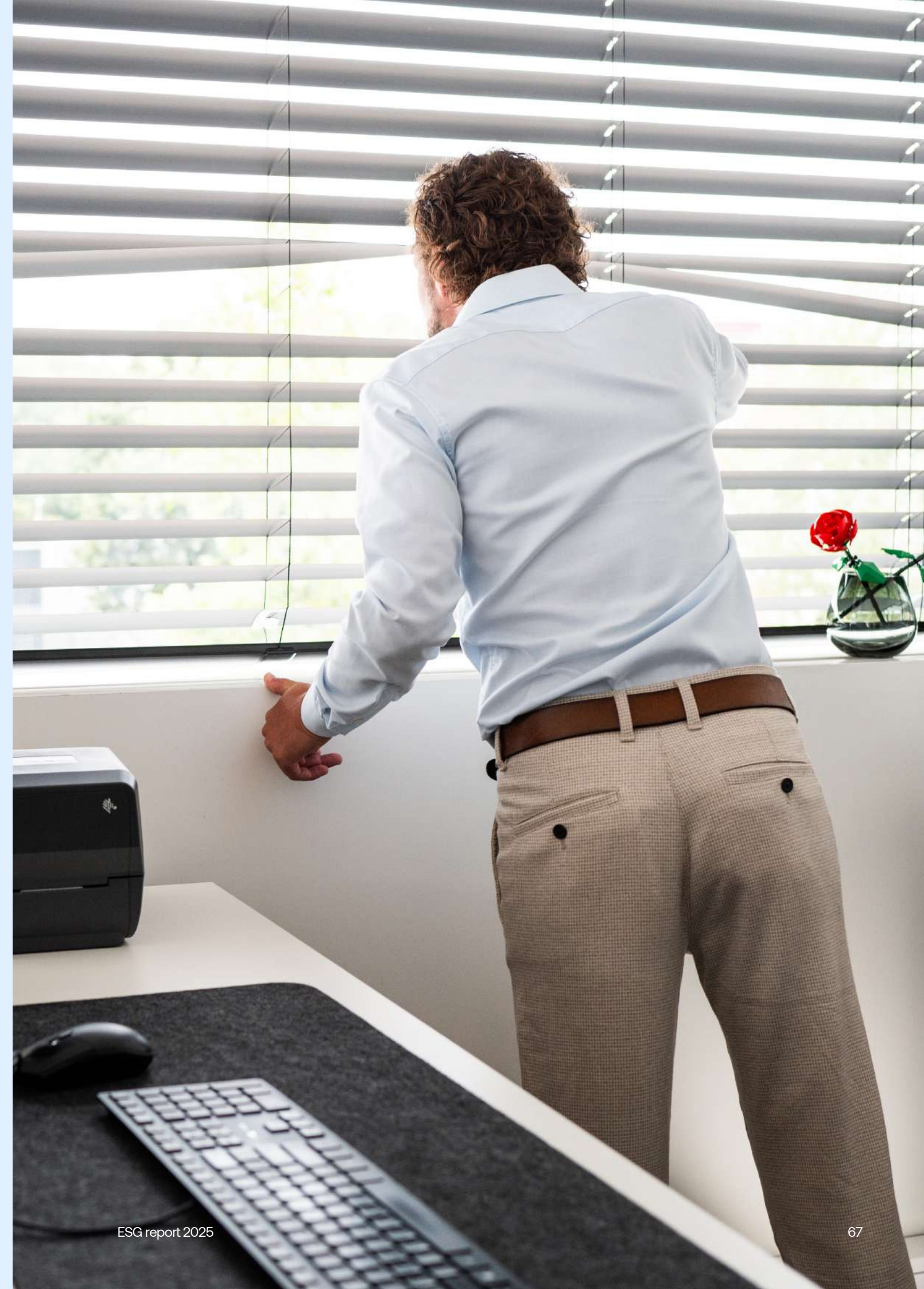
CSRD not only requires policies, but also insight into how these policies function. In 2025, Novar took the first steps towards structured monitoring of complaints and reports that were submitted through the website. The number of reported cases has remained limited. This is consistent with the observation that existing informal channels continue to function effectively. “Most reports still come through direct lines and are resolved there,” Erwin explains.

In the coming years, further steps will be taken to structure data and reporting, enabling better insight into trends and patterns over time.

Towards a mature governance structure

The developments in 2025 mark a transition from a practice-driven approach to a more formal, demonstrable and compliant system. For Novar, this is not only about meeting regulatory requirements, but about strengthening trust – internally and externally – by ensuring that concerns can be raised, addressed and learned from in a structured and transparent way.

Looking ahead, the focus will be on further embedding the policy, improving monitoring, reporting and whistleblow practice in line with CSRD, and increasing awareness and accessibility across the organisation.



Cybersecurity and AI:

Building a resilient energy system

The digitalisation of the energy system introduces new vulnerabilities, particularly at the intersection of IT (information technology) and OT (operational technology). For Novar, as a growing player in energy production and infrastructure, cybersecurity is therefore an integral part of asset management and system responsibility.

In 2025, Novar further strengthened and professionalised its cybersecurity approach, aligning with the NIS2 Directive and its ambition to comply with ISO/IEC 27001. As Head of IT Allert Knapper explains: “We are building an architecture in which we not only protect what we have, but continuously monitor what is happening.”

Acting as an essential entity

As an essential entity under the NIS2 framework, Novar places cybersecurity at the heart of governance and operations rather than treating it as a supporting function.

In 2025, Novar prepared for this transition by formally registering within the NIS2 domain, establishing structured reporting lines to the board and implementing risk-based security management. Regular reporting on incidents, vulnerabilities and the progress of security initiatives has become a key part of this governance structure.

IT and OT Security

A fundamental principle in Novar’s cybersecurity approach is the strict separation of IT (information technology) and OT (operational technology) environments. Keeping these domains isolated reduces the risk that a security incident in one environment can propagate to the other – a critical safeguard given that OT systems are directly linked to physical energy infrastructure such as inverters, SCADA systems, and grid connections.

In 2025, significant steps were taken to strengthen this security posture. SIEM/ SOC systems were implemented covering both IT and OT environments, enabling consistent monitoring and rapid detection of incidents across all domains. In addition, cybersecurity has been deeply embedded in development processes, with fixed security requirements defined and applied from the earliest phases of any new





system or integration. This ensures that security is not an afterthought, but a structural foundation of how Novar builds and operates its technology.

Expanding scope: from infrastructure to data platforms

The importance of cybersecurity is further reinforced by Novar's evolving business model. Through subsidiaries such as Repowered, the company increasingly operates data-driven platforms that process large volumes of real-time energy data and interact directly with energy markets.

This adds a new layer to the cybersecurity landscape: from protecting physical assets to securing data flows, algorithms and digital interfaces.

As these platforms rely heavily on AI and continuous data exchange, maintaining control over data environments and system architecture has become critical. This development strengthens the need for an integrated approach to cybersecurity across both infrastructure and data-driven services.

Zero trust and identity-centric security

A central building block of Novar's cybersecurity architecture is the implementation of a zero trust model. This approach assumes that no user or device is trusted by default.

Access to systems is restricted to registered and managed devices, supported by centralised identity and access management and continuous verification of user behaviour. Network segmentation further limits exposure between systems.

Endpoint protection plays a key role in this model. Security clients monitor behaviour across devices and detect anomalies, enabling a shift from static protection to behaviour-based security and faster incident detection.

Managed security and scalability

To manage the growing complexity of cybersecurity, Novar has adopted a managed security model. In 2025, a specialised managed service provider was integrated into the IT architecture, providing continuous support across multiple layers, including network monitoring, endpoint detection and response, ransomware mitigation and backup and recovery.

This approach ensures that specialised expertise is continuously available and reduces the risk of single points of failure, while supporting scalability as the organisation grows.

Security operations and testing

Alongside preventive measures, Novar has strengthened its capabilities in detection and response. Regular penetration testing across IT and OT systems, continuous monitoring of network traffic and endpoints, and the analysis of suspicious activities through security tooling have become standard practice.

These activities align with the requirements of NIS2, where continuous monitoring and incident response are central.

AI as an accelerator of threats

The rise of AI is fundamentally changing the threat landscape. Attacks are becoming faster, more automated and more difficult to detect. As Allert Knapper notes: "AI can do in seconds what used to take a hacker hours or was humanly impossible."

The attacks include AI-driven scanning of networks for vulnerabilities, rapid exploitation of known weaknesses and increasingly sophisticated phishing attacks. In addition, new attack vectors are emerging, such as prompt injection, where AI systems are manipulated through hidden instructions in data or documents.

Securing the use of AI

At the same time, Novar is actively developing a controlled AI architecture for internal use. The deployment of AI is centrally managed, with clear principles around the use of approved platforms, control over data exchange, particularly with a focus on EU-based hosting and the prevention of uncontrolled data exfiltration.

Work is also underway on an integrated AI platform that allows multiple models to be combined, including the option to host proprietary models in a closed environment. This enables the use of AI in business processes without compromising security or compliance.

Collaboration across the sector

Cybersecurity extends beyond individual organisations. In 2025, Novar actively participated in sector-wide initiatives, including the ISAC collaboration within the solar energy sector.

Through these initiatives, threat intelligence is shared, connections with national authorities are strengthened and incidents can be detected and addressed more quickly. This collective approach enhances the resilience of the sector as a whole.

Outlook

The steps taken in 2025 mark the transition towards a mature cybersecurity architecture, in which IT, OT and AI are addressed in an integrated way. In the coming years, the focus will be on further implementing ISO 27001 as a risk management framework, expanding anomaly detection into OT environments, standardizing identity and access management and scaling AI applications in a controlled manner.

In doing so, Novar is building a digital foundation that is not only compliant, but also resilient in the face of a rapidly evolving threat landscape.



"We are building an architecture in which we not only protect what we have, but continuously monitor what is happening."

Allert Knapper,
head of IT

Vodafone:

Cybersecurity across solar parks

Behind the physical infrastructure of solar parks lies a critical digital layer: the networks that enable monitoring, control and optimisation of energy assets. As solar parks become more integrated into the energy system and have become increasingly digital and connected, this backbone is emerging as a key focus area for cybersecurity.

As solar parks become part of critical infrastructure, the potential consequences of cyber incidents increase. In extreme cases, a breach affecting system visibility or control could require operators to temporarily shut down a park as a precaution.

In collaboration with Vodafone Business, Novar has implemented a dedicated security architecture designed to protect the flow of data between its solar parks and central systems.

This architecture is designed to improve visibility, control and monitoring across Novar's connected assets.

"If you can no longer see what is happening on the park, you need to act," says Johnny van de Voort, manager solutions at Vodafone Business. This makes cybersecurity directly relevant to operational continuity and energy reliability, not just IT compliance.



A unified security layer across all parks

At the core of this approach is a Secure Access Service Edge (SASE) architecture. This creates a virtual security layer across all solar parks, through which all data traffic is routed, filtered and monitored.

At site level, firewalls ensure that only authorised traffic can access the network. On top of that, the SASE layer provides centralised control, enabling inspection of all inbound and outbound traffic, real-time detection of anomalies and centralised access management across locations. Johnny: “All traffic is routed through a virtual layer where we can monitor and regulate what is happening.

Bridging IT and OT

The importance of this architecture lies in the connection between IT and operational technology (OT). On the OT side, solar parks rely on systems such as:

- inverters and field devices
- monitoring and SCADA systems
- grid connection and control infrastructure

These systems continuously generate and exchange data related to performance, status and control of the park.

The security architecture focuses on all traffic entering and leaving these systems via the network, creating a controlled boundary between operational systems (OT) and external environments (IT, internet and remote access).

While Vodafone Business is not responsible for the internal operation of these systems, the network layer ensures that all communication to and from the park is secured and monitored.

From protection to visibility

In an environment where absolute security cannot be guaranteed, the emphasis shifts towards detection and response. “No system is ever 100% secure,” Johnny notes. “But we can make sure we see what is happening and act when something deviates.”

By centralising monitoring across all sites, Novar gains real-time insight into unusual access attempts, abnormal traffic patterns and unexpected system behaviour. This enables rapid intervention and reduces the likelihood of incidents escalating.

A changing threat landscape

The nature of cyber threats is evolving rapidly. Increasingly, attacks are not purely technical, but exploit human behaviour. “Many attacks are no longer about breaking in technically, but about getting someone to open the door,” Johnny explains.

According to Vodafone Business, the most significant risks include:

- large-scale phishing attempts targeting employees
- indirect access attempts through compromised credentials
- and a growing volume of malicious network traffic

This highlights the importance of combining technical controls with organisational awareness and governance.

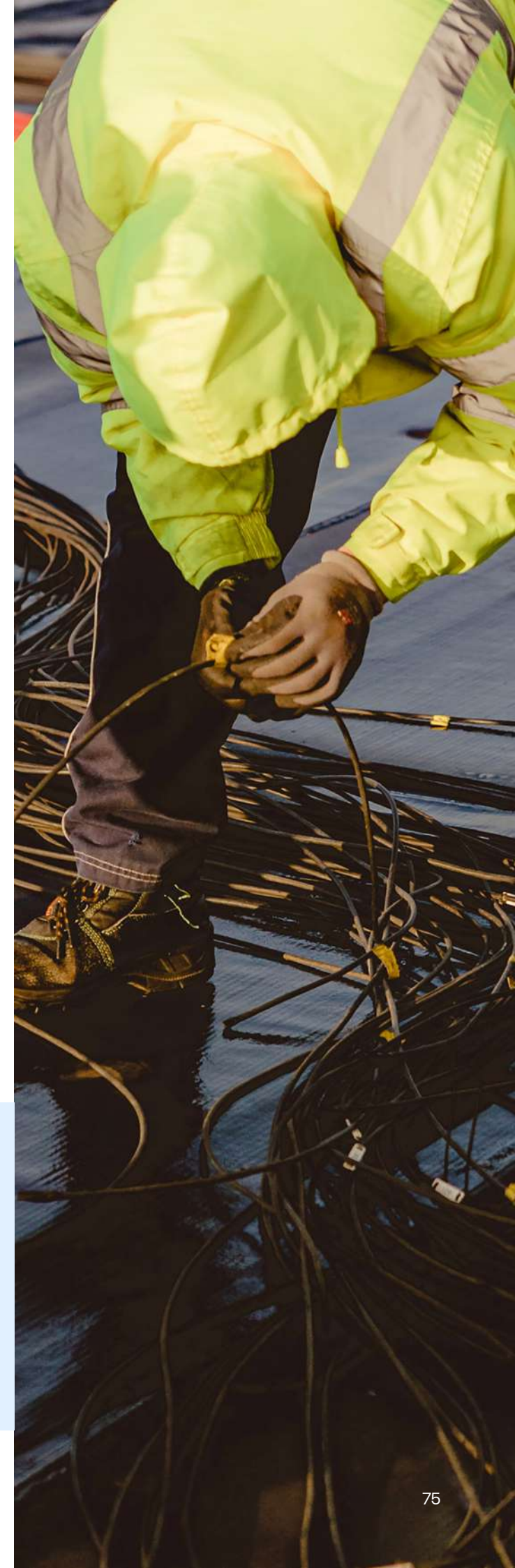
Building resilience through partnership

The collaboration between Novar and Vodafone Business illustrates how cybersecurity is increasingly addressed across the value chain. By combining a secure network architecture, continuous monitoring and specialised expertise. Novar is building a layered defence that reflects the growing complexity of the energy system.



“The objective is straightforward: full visibility and control over all data traffic.”

Johnny van der Voort,
manager solutions Vodafone Business



Repowered:

Data, AI and system control at scale

As Novar's off-take strategy evolves through Repowered, the role of data becomes increasingly central to how value is created. Repowered operates in a highly data-intensive environment, where large volumes of real-time data are continuously collected from connected assets, market interfaces and external systems. Each asset generates frequent data streams, which are structured, processed and used to train algorithms and optimise performance across the portfolio.

This creates a layered data architecture, where raw asset data forms the foundation, multiple processing layers add context and intelligence and algorithms translate this into actionable insights and market decisions. In practice, this means that energy optimisation is no longer driven by static models, but by continuously learning systems that operate at scale.

In the context of the energy transition, this capability is becoming increasingly relevant. As renewable energy generation grows, so does the need to balance supply and demand more



"Data is no longer a byproduct of operations, but a core strategic asset."

Dirk Jan Masselink,
CEO Repowered



intelligently. Flexibility – enabled by data and real-time optimisation – plays a critical role in reducing curtailment, managing grid congestion and ensuring that renewable energy is used more effectively. In that sense, data-driven energy orchestration directly contributes to a more efficient and resilient energy system. It also strengthens Novar’s broader ESG impact by enabling higher utilisation of renewable energy, reducing system inefficiencies and supporting the transition to a low-carbon energy system.

AI as a core capability

Artificial intelligence plays a central role in this architecture. A significant part of the development process – such as coding and model generation – is increasingly supported by AI. At the same time, the value lies not in the tools themselves, but in how they are applied and controlled. “The barrier to start using AI is very low,” as Dirk-Jan Masselink explains. “But maintaining control over how it is used, that is where the real challenge lies.”

To address this, Repowered has deliberately chosen to develop and manage its own AI, including internally hosted language models. This ensures that data remains within a controlled environment, algorithms can be trained securely and the organisation retains full control over how models are applied and scaled.

From infrastructure to data-driven systems

This approach reflects a broader shift in the nature of energy systems. Where traditional energy companies focus primarily on physical infrastructure, Repowered operates at the intersection of operational systems (assets and hardware), digital infrastructure (data platforms and interfaces) and market integration (trading and optimisation).

Scaling complexity

As the platform grows, so does the scale and complexity of the data environment. Repowered already manages large volumes of structured and unstructured data across multiple integrations and markets, supported by increasingly sophisticated algorithmic models.

This requires not only technical capability, but also organisational focus. Dedicated roles in infrastructure and data security are being expanded to ensure that the platform can scale in a controlled and reliable way. In this context, maintaining control over data environments and system architecture is not just a matter of performance, but also a prerequisite for secure and resilient operations.

Data as a strategic asset

As Dirk-Jan notes, “Data is no longer a by-product of operations, but a core strategic asset. It enables the organisation to structure and interpret information, train algorithms effectively and translate insights into real-time decisions.”

This positions Repowered as a critical component in Novar’s transition from energy production to energy orchestration, where value is created not only through assets, but through the intelligent use of data, and where flexibility becomes a key lever in addressing the systemic challenges of the energy transition.





Novar's ESG team



Paul van Velzen



The world around us is changing fast. Faster than many had anticipated, and not always in the direction we had hoped. When the Paris Climate Agreement was signed in 2015, something remarkable happened: a widely shared belief emerged that society, working together, could build a better, more climate-friendly world. A belief that united politics, business and citizens alike.

For us at Novar, that was the moment we made a clear choice. We committed – with renewed conviction – to playing our part in the energy transition. It is a responsibility we have carried with pride ever since.

In recent years, however, we have seen that context change. Geopolitical tensions, rising uncertainty and an increasingly polarised public debate have made the playing field more difficult to navigate. When I look at the news today, it sometimes feels as if our shared concerns about climate, nature and a liveable future are fading into the background. At the same time, it reinforces for me why this work matters and why stepping back is not an option. That gives us pause, but it also strengthens our resolve. Because it is precisely in times like these that we must stay the course.

At Novar, we believe the energy transition is not a luxury we can pursue only when conditions are favourable. It is a necessity – for people and nature alike – that we cannot afford to lose sight of, even under pressure.

This ESG report is therefore more than an account of figures and performance. It reflects who we are, what we stand for and how we continue to act on our ambitions. Even when the wind is against us.

We are proud of what we have achieved over the past year. And we are ready to continue making our contribution in the years ahead. Towards a world worth working for.

Paul van Velzen,
director operations

Erwin de Ruiter

Before I joined Novar in 2023, I was still figuring out where I wanted to make a meaningful contribution in my career. For me, that has always meant contributing to progress without causing harm to the world around us. In other words, enabling sustainable growth. One of the main reasons Novar attracted me was that this ambition sits at the very core of the company: improving the world by developing sustainable energy projects. That is exactly why I chose to join Novar, and it continues to motivate me every day.

In recent years, it has become increasingly clear that sustainable energy is about more than meeting climate goals alone. Geopolitical developments have also shown how important it is to strengthen our energy independence and long-term resilience. That makes Novar's work relevant not only from an environmental perspective, but also from an economic and strategic one. To me, that broader relevance also brings responsibility. If sustainability is so central to what we do externally, it should also be visible in the way we work internally.

For me, that means making sustainability part of daily decision-making, reporting transparently on our progress, and being ambitious not only in our

project development, but also in our ESG efforts. It means treating sustainability not as a separate topic, but as something embedded in how we work, the choices we make, and the standards we hold ourselves to as an organisation.

That is what motivates me to contribute to Novar's ESG ambitions, and why I have been involved in ESG since joining the company. Through that involvement, I have seen that Novar is making a genuine effort to live up to these ambitions, and that is something we can be proud of. We are already taking meaningful steps to strengthen our ESG approach and to embed sustainability more clearly in the way we work. At the same time, I see it as an important next step to continue building on that progress and make it more consistent and well organised across the company. That is also what led me to join the steering group.

If we want to make a lasting impact, I believe sustainability should be embedded not only in what we deliver, but also in how we operate as a company.

Erwin de Ruiter,
Business controller



David de Jong

Since 2019, I have been responsible for Marketing and Communications at Novar. My role is to build strong brands and stay sharply focused on how we can continuously create meaningful value for our customers and stakeholders. Novar's mission is to improve the world through sustainable energy. That mission is deeply personal to me. I do not see my customer as only the buyer of sustainable energy, but also as future generations and the planet itself. It is a simple idea, but for me it is the core reason why I work at Novar and why I try every day to make a real difference.

When we started, and Novar was one of the first developers of large-scale energy systems, our work was driven by a shared ambition to help achieve climate goals, inspired by the Paris Climate Agreement. At that time, the Netherlands still had a long way to go. In recent years, the position of solar energy has shifted from being seen mainly as a progressive issue to becoming a geopolitical one. Energy independence, affordability and security are now widely recognised as essential priorities. I welcome that development, especially now that sustainable energy is increasingly competitive with fossil energy. At the same time, the broader impact of our sector has become less prominent.

That is exactly why I believe it is so important to help lead ESG and sustainability within Novar. I have been part of the ESG steering group for the past three years and was one of the project team members involved from the start in shaping Novar's ESG policy. A strong business case is essential for our continuity, but without a clear commitment to society and nature, we risk becoming no different from the large fossil-based companies that came before us. Especially in times of geopolitical uncertainty, I am proud that, as a market leader, we show that strong entrepreneurship goes hand in hand with broader responsibility. It is something that is supported from the top, but driven from within the organisation. It keeps us sharp and challenges us to make a difference every single day.



And it can be done. Sustainable energy, a positive contribution to biodiversity, and healthy, motivated people can go hand in hand. That is what drives me.

David de Jong,
Head of marketing

Building the foundation for strategy



Financing & due diligence

Novar's strategic ambitions – from international expansion to extending its role across the value chain – require a robust and flexible financing base. At the same time, the current energy market places higher demands on investors and financing structures. Within this context, Novar reached an important milestone in 2025 by securing a €160 million financing facility. This not only represents a financial achievement, but also reflects the growing maturity of the organisation.

As a developer and owner of renewable energy projects, Novar operates in a capital-intensive sector. Investments are required across the full lifecycle; from development to construction and operation. At the same time, Novar deliberately retains assets within its own portfolio, in line with its strategy of value chain extension. This makes access to growth capital a critical enabler.

Increasingly, access to such capital is also linked to ESG performance. Investors are not only assessing financial returns, but also the quality of governance, transparency of data and the ability to manage environmental and social risks across the value chain.

From capital need to strategic choice

As part of the funding process Novar explored many financing routes, including a listed bond issuance. The solution was ultimately found in a €160 million private debt facility with Copenhagen Infrastructure Partners (CIP), acting as sole lender through its Green Credit Funds.

As Novar CEO Gerben Smit explains: “Closing this financing is an important step in delivering on Novar's growth plans. Together with the support of our existing investment partner CVC DIF, it enables us to expand our portfolio to approximately 1,400 MW of operational assets by 2027.”

A flywheel for growth

The chosen structure provides not only access to capital, but also the flexibility to invest selectively in development, construction and acquisitions.

The financing model follows a flywheel principle: investments in new assets generate operational cash flows, which in turn enable further funding opportunities. “This mechanism accelerates project delivery and strengthens the scalability of the platform,” Gerben explains. “At the same time, it requires disciplined capital allocation. Investments in operational assets typically generate returns faster than development projects, which have longer lead times.”

The financing therefore does more than enable growth; it implicitly drives execution, focusing the organisation on delivering and commissioning projects. Successful growth, in turn, unlocks access to additional investment capacity of up to €100 million.

Due diligence as a test of quality

A crucial part of the financing process was the extensive due diligence trajectory. Within a relatively short period of approximately three months, the organisation and projects were assessed in depth.

This process placed high demands on internal reporting; from financial data and asset performance to legal structures and operational processes. Increasingly, this also included ESG-related aspects, such as governance structures, risk management processes and the traceability of data across the organisation.

Novar deliberately assembled a multidisciplinary team, bringing together expertise from across the organisation, including country management, legal and asset management.

“The speed and effectiveness with which we completed the process reflect how much the organisation has matured in recent years,” Gerben notes. “Improved data quality, better insight into asset performance and more streamlined processes allowed us to respond quickly and substantively. The team delivered an exceptional performance.”



Building investor confidence

The outcome of the due diligence process provided investors with confidence in both Novar's business model and its execution capabilities.

Two aspects were particularly decisive. First, Novar's ability to create value in a complex market environment. While negative power prices put pressure on traditional business cases, the company is able to generate additional revenue streams by actively positioning its assets in flexibility and balancing markets.

"This shows that value is not only created through energy production itself, but increasingly through optimisation," Gerben explains. "That capability is supported by the platform of our subsidiary Repowered."

Second, Novar demonstrated its ability to actually deliver projects. In a market where many initiatives remain in the development phase, Novar distinguishes itself through the scale and complexity of projects that are successfully realised and operated. "The fact that we build what we develop may sound obvious, but it is not," Gerben notes. "Execution at scale is a key differentiator."

At the same time, the due diligence process confirmed that Novar's approach to governance, data quality and risk management meets the expectations of institutional investors. This alignment between strategy, execution and ESG performance is increasingly a prerequisite for accessing long-term capital.

Organisational impact and strategic focus

The new financing provides the means to accelerate strategy execution, but also requires sharper choices. Novar has refined its development strategy, focusing in the Netherlands on larger, economically viable projects, while accelerating growth in other European markets. At the same time, a more critical approach is taken towards early-stage development investments, where capital is more scarce and risk levels are higher.

These choices contribute to a more balanced and future-proof portfolio.

A foundation for growth and governance

Successfully completing the financing and due diligence process represents more than a financial transaction. It is an external validation of Novar's strategy, organisation and underlying systems. Improved data quality, the professionalisation of asset management and strong cross-functional collaboration formed the basis for this achievement.

In this context, ESG is not treated as a separate reporting requirement, but as an integral part of how Novar demonstrates control, transparency and long-term value creation to investors.



"Ultimately, this is about more than financing. It is about proving that we have the organisation, the data and the discipline to deliver on our ambitions."

Gerben Smit,
CEO



Holland Solar:

Connecting ESG, geopolitics and system impact

As Novar continues to scale its activities across Europe, the company is increasingly operating at the intersection of multiple ESG themes; ranging from biodiversity and carbon reduction, to supply chain transparency, cybersecurity and energy system resilience. To better understand how these themes are evolving at sector level, Novar engaged with Nold Jaeger, director of policy at Holland Solar.

His perspective not only reflects broader sector developments, but also helps to sharpen Novar's own approach to ESG: moving from a project-based view towards a more integrated understanding of system impact, value chain responsibility and long-term resilience.

The rapid growth of solar energy is fundamentally redefining its role within the energy system. What was once seen primarily as a scalable solution for CO₂ reduction, is now increasingly part of a more complex set of challenges and responsibilities.

“Solar is still often seen as a relatively simple technology. But in reality, it is becoming deeply embedded in our energy system, with all the complexity and responsibilities that come with it,” according to Nold Jaeger.

From CO₂ reduction to system responsibility

At its core, solar energy remains one of the most effective ways to reduce emissions. The scale at which the sector is now operating, is really significant. Jaeger: “We are adding gigawatts every year. Comparable to the output of a nuclear power plant. That is the reality of what this sector delivers.”

At the same time, the conversation is shifting. It is no longer only about how much CO₂ is avoided, but also about how solar energy integrates into the broader system. Issues such as grid congestion illustrate this shift. Rather than being part of the problem, solar increasingly forms part of the solution, especially when combined with storage and smart system integration.

“If you generate energy locally, you avoid transport,” says Jaeger. “That means you also avoid part of the congestion problem. That story, however, is still not sufficiently understood.”

For Novar, this reinforces the importance of moving beyond asset development towards a more active role in system integration and optimisation.

Supply chain transparency and a changing global context

One of the most complex ESG topics remains supply chain transparency, particularly in relation to the production of solar panels and the sourcing of critical materials. Jaeger is clear about this: “You cannot keep playing the sustainability card if you do not also address your own supply chain.”



“We are no longer a niche. We are building gigawatts every year. That gives us both responsibility and the right to be part of the solution.”

Nold Jaeger,
director of policy Holland Solar

The sector operates within a global context that is difficult to fully control. The production of solar panels is highly concentrated, with strong dependencies on China. The dependency on one region presents a strategic risk; not just for companies, but for Europe as a whole. For Novar, this underscores the importance of strengthening supply chain transparency and embedding ESG requirements more explicitly in procurement and contracting.

Towards a European solar industry

Where cost efficiency previously dominated decision-making, geopolitical developments have shifted the debate. “Five years ago, nobody seriously talked about European solar panel manufacturing. Today, it is a strategic necessity,” says Jaeger.

Initiatives such as SolarNL and broader European programmes aim to rebuild a domestic solar industry. This is not about replacing global supply chains overnight, but about reducing vulnerability and strengthening long-term resilience.

Jaeger presents a more pragmatic perspective on how the current situation can be leveraged: “We should also see it for what it is. China has heavily subsidised the scaling of solar production. That has made panels affordable. If we can recycle those materials effectively, we can eventually build a European industry on top of that. Thanks to Chinese taxpayer money.”



This perspective, acknowledging both dependency and opportunity, reflects the evolving strategic position of the sector.

Circularity as a future advantage

Circularity is emerging as a key theme in this transition. While current volumes of end-of-life panels are still limited – the first solar parks will reach end-of-life some ten years from now – the sector is preparing for a significant increase in the coming decade.

Recycling systems are already in place, supported by producer responsibility schemes and collective initiatives. Jaeger: “We are not starting from zero. The systems for recycling now allow for 95% of the panel weight to be recycled. The next step is scaling and improving the quality of material recovery.”

Technological challenges remain – particularly in separating and reusing solar cells from the panels – but progress is being made. For Novar, this reinforces the importance of anticipating future material flows and integrating circularity more explicitly into long-term asset and supply chain strategies.

Biodiversity: from obligation to opportunity

Another area where the sector has made significant progress is biodiversity. Research initiatives, including large-scale studies conducted with academic institutions, have provided new insights into the ecological impact of solar parks. The data now shows how solar parks can contribute to biodiversity, if designed and maintained properly.

Interestingly, developments in the energy system itself may help address this. The increasing role of batteries shifts the optimisation logic of solar parks. For quite some time parks were designed to spread production evenly during the day. With large scale battery systems, parks can now be designed to maximise output. This in turn, creates more margin for biodiversity design options too.

Jaeger: “System developments are starting to align with ecological benefits. That creates new opportunities, but it also requires us to rethink how we design and maintain our projects.”

Cybersecurity and systemic risk

As solar energy becomes more integrated into the energy system, cybersecurity is emerging as a critical issue. The distributed nature of solar assets provides resilience, but also introduces new vulnerabilities, particularly through digital connections and remote control systems. The risk is not in a single solar park, but the system that connects them.

According to Jaeger, awareness of these risks is still developing, particularly at the policy level. “I dare say, the Dutch government does not yet fully understand the impact of the solar and battery sector on the energy system as a whole.”

For Novar, this underlines the importance of an integrated approach to cybersecurity, in which both physical infrastructure and digital platforms are addressed.

A maturing sector and a more integrated ESG approach

Taken together, these developments illustrate how the solar sector is maturing. What started as a technology-driven growth story, is evolving into a complex system role with broader responsibilities.

“We are no longer a niche,” states Jaeger. “We are building gigawatts every year. That gives us both responsibility and the right to be part of the solution.”

For Novar, this transition reinforces the need for a more integrated ESG approach; one that connects individual topics such as carbon reduction, biodiversity, supply chain transparency and cybersecurity into a coherent strategy.

The coming years will therefore not only be about scaling capacity, but also about shaping how solar energy is understood and positioned: not as a standalone technology, but as a critical component of a resilient, sustainable and increasingly interconnected European energy system.

Key insights from the sector

Insights from Nold Jaeger highlight how the role of solar energy is rapidly evolving beyond a single ESG dimension.

- From CO₂ to system impact

Solar is no longer just about reducing emissions, but about enabling a stable and resilient energy system.

- ESG is becoming interconnected

Topics such as biodiversity, supply chain transparency, cybersecurity and circularity are increasingly linked and need to be addressed as a whole.

- Supply chains are a strategic risk

Dependence on global production – particularly in China – requires a more active European response and stronger due diligence.

- Circularity as a future opportunity

Advances in recycling are laying the groundwork for a potential European manufacturing base built on recovered materials.

- Policy is still catching up

“The government does not yet fully understand the impact of the solar and battery sector on the energy system as a whole.”

SDG commitments



Our ESG themes aligned with global goals

Alignment with SDGs:

3

5

7

8

9

10

11

12

13

15

16

Affordable energy											
Environmental	CO ₂ Reduction		✓					✓	✓		
	Biodiversity							✓	✓	✓	
	Circular Economy				✓			✓	✓		
Social	Occupational Health & Safety	✓		✓							
	Employee Wellbeing	✓		✓							
	Diversity and Inclusion		✓	✓		✓					
	Affected Communities						✓		✓		✓
Governance	Ethical business conduct			✓							✓
	Value Chain Transparency				✓			✓			✓
	Cybersecurity				✓						✓





Strategic framework



Environmental

Social

Governance

Environmental



Climate change

Climate change is central to Novar’s purpose and long-term strategy. By expanding renewable energy capacity and reducing emissions across our operations and assets, we contribute to a more resilient energy system. In 2025, we further strengthened the methodology for measuring our greenhouse gas emissions and translating these insights into targeted action.

KPI	Description	Baseline 2025	Target 2026	Target 2030
GHG Intensity (excl. BESS)	Reduction of greenhouse gas emissions per MWp of installed capacity. This KPI measures how efficiently our operations limit emissions relative to asset size and is currently defined as Scope 1 plus Scope 2 emissions in tCO2e, divided by the installed capacity of our asset base. The calculation includes only assets that were operational for the full year and excludes BESS assets. As a result, Eekerpolder and Bellingwolde are not included for 2025. BESS is currently excluded because it results in significant GHG emissions, while its carbon avoidance is not yet taken into account. Please refer to ‘Carbon Avoidance’. Including BESS at this stage would therefore give an incomplete and potentially unfair picture.	GHG Intensity: Scope 1: 0,071 Scope 2: 2,846 Total (excl. Scope 3): 2,917	5% reduction compared to baseline	15% reduction compared to baseline
Carbon Avoidance	This KPI still needs further definition. The key point is that BESS assets should not be assumed to have only a negative impact on GHG emissions. In practice, carbon avoidance depends on the marginal generator - the plant that would have met the next unit of demand if the battery had not discharged.	TBD	TBD	TBD
Renewable energy production	Amount of energy produced from renewable sources. This KPI tracks progress towards expanding our renewable energy generation capacity.	322 GWh	520 GWh	1040 GWh



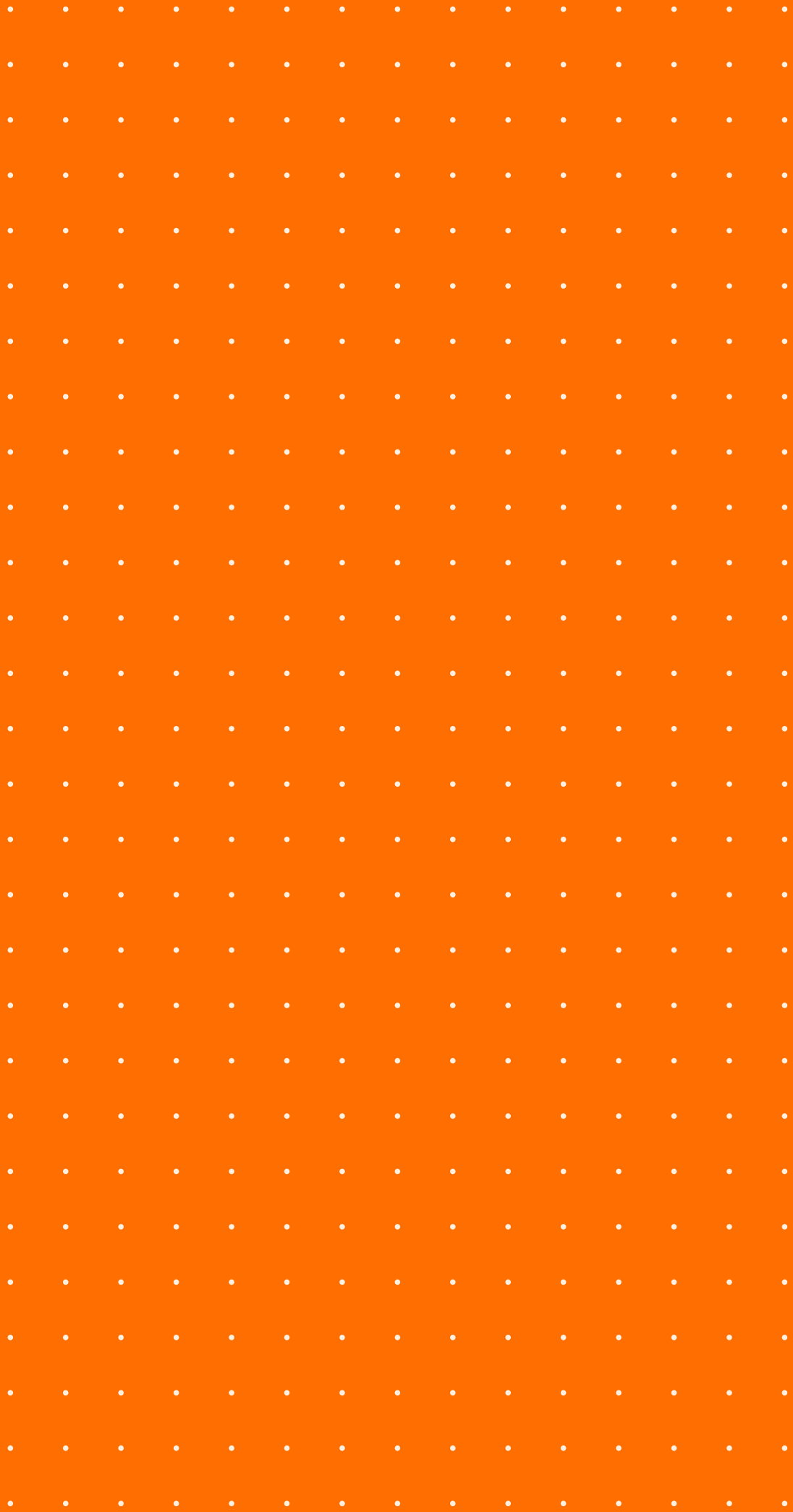
Biodiversity and ecosystem

Renewable energy development and ecological value must go hand in hand. In 2025, we strengthened our approach by embedding biodiversity management throughout the operational lifecycle of our assets. Through site-specific plans, ecological monitoring and adaptive maintenance, we aim to understand how ecosystems develop and create the conditions for lasting ecological improvement.

KPI	Description	Baseline 2025	Target 2026	Target 2030
Number of PV assets commissioned after 2024 with ecological measurements, maintenance plans, and continuous ecology and biodiversity monitoring and reporting.	Number of PV assets integrated into broader area development plans that contribute to local biodiversity in collaboration with local policymakers and nature organisations.	1/1	3/3	25/25
Number of PV assets commissioned before 2024 with ecological measurements, maintenance plans, and continuous ecology and biodiversity monitoring and reporting.	Number of PV assets with continuous ecology and biodiversity monitoring and reporting. This KPI tracks how many solar assets are systematically monitored and reported on with regard to ecological performance and biodiversity impact over time.	2/18	3/18	7/18



Circular economy principles help us reduce resource use, minimise waste and retain the value of materials for as long as possible. We integrate circularity into project design, procurement and end-of-life planning. By working closely with suppliers and improving insight into material flows, we aim to make circular thinking a practical part of our operations. We are currently reassessing our key performance indicators to ensure they provide meaningful insight and help steer us towards measurable circular outcomes.



Social

Own workforce

Our people are essential to Novar’s ability to grow and deliver the energy transition. We aim to provide a safe, inclusive and supportive working environment in which employees can develop and perform at their best. Our approach brings together health and safety, wellbeing, professional development, diversity and equal opportunities.

KPI	Description	Baseline 2025	Target 2026	Target 2030
Employee Engagement Score	Overall engagement question, 1-5 scale, annual survey.	4	4.1	4.3
Employee Retention Rate	Percentage of permanent employees who remain employed throughout the full calendar year, measured as of 1 January / 31 December.	83,2%	85%	87%
Absenteeism Rate	Sick leave days / available working days x 100%, in accordance with the CBS definition.	3,32%	4,50%	4%
Unadjusted Gender Pay Gap	Difference in average gross annual salary between men and women as a percentage of men's salary, measured as of 31 December, Netherlands scope.	17,50%	15%	10%
Diversity and Inclusion	As Novar is expanding internationally, fostering diversity and inclusion within our teams and embedding inclusive practices into our processes have become of paramount importance. Hence we decided to review our policies thoroughly for the coming years and define new KPI's accordingly.		TBD	TBD

Affected communities

Our projects become part of the places in which people live and work. Early dialogue and meaningful participation help us understand local priorities and incorporate them into project development. By building long-term relationships and seeking shared interests, we aim to create value for communities while strengthening the quality and local acceptance of our projects.

KPI	Description	Baseline 2025	Target 2026	Target 2030
Average satisfaction score of local stakeholders	Developing a methodology for a 0 score. We identify two assessment moments: 1. The development phase (at the submission of the permit application) 2. The operational phase (one year after commissioning) Grid Solutions conduct the assessment at moment 1, while Klaer conducts the assessment at moment 2.	Not applicable, we will conduct a baseline measurement in 2026.	The target will be determined based on the 2026 baseline measurement (with the aim of achieving a sufficient score).	Quantitative: The objective is an increase of 1.0 compared to the satisfaction score in 2026. Qualitative: The outcomes of previous satisfaction surveys have resulted in improvements to the participation process.
Number of material concerns (zienswijzen) raised by local communities (and % addressed) - ESRs S3-3, S3-4 (Channels for raising concerns) (CSRd)	Counting the number of concerns for projects for which concerns can be submitted. *We have only partial influence on reducing the number of concerns.	In 2025, a total of 123 concerns were submitted for 4 projects. Noordhorn: 8, Doorwerth: 31, Beerze (Boxtel): 40, De Vorst (Boxtel): 44.	Compared to 2025, the average number of concerns per project has decreased by 5%.	Compared to 2025, the average number of concerns per project has decreased by 15%.

Governance



Ethical Business Conduct

Integrity provides the foundation for how we make decisions and work with employees, partners and other stakeholders. We continue to strengthen the policies, contractual safeguards and training that support responsible conduct throughout our organisation. In doing so, we aim to prevent misconduct, address concerns transparently and maintain trust as Novar grows.

KPI	Description	Baseline 2025	Target 2026	Target 2030
Number and nature of confirmed incident of corruption and bribery, and % of confirmed cases remediated	Measures the number, type, and severity of confirmed corruption and bribery incidents during the reporting year, including the percentage of confirmed cases for which corrective and/or disciplinary actions were completed.	0 confirmed incidents registered in 2025.	0 confirmed incidents; 100% of confirmed cases remediated.	0 confirmed incidents; 100% of confirmed cases remediated.
% of employees in relevant functions trained on anti-bribery, corruption, conflicts of interest, and business ethics	Measures the percentage of employees in relevant risk functions who completed mandatory business conduct training during the reporting year, including procurement, finance, project development, management, legal, and contract management.	N/A	50% of employees in relevant risk functions trained.	100% of employees in relevant risk functions trained, with refresher training every 2 years.
% of Tier 1 suppliers contractually bound to the Supplier Code of Conduct or equivalent ESG/business conduct clauses, including flow-down obligations for Tier 2 and Tier 3 suppliers	Measures the percentage of active Tier 1 suppliers contractually bound to the Supplier Code of Conduct or equivalent ESG/business conduct clauses, including requirements to cascade relevant obligations to material Tier 2 and Tier 3 suppliers.	Tier 1 coverage targeted at 100%; Tier2/Tier3 flow-down coverage not measured.	100% of new strategic, EPC and high-risk Tier 1 suppliers covered; 75% include Tier 2/Tier 3 flow-down obligations.	100% of strategic, EPC, and high-risk Tier 1 suppliers covered; 100% include Tier 2/Tier 3 flow-down obligations.
% of procurement spend covered by a Sustainable Procurement Policy, Supplier Code of Conduct, or ESG clauses	Measures the percentage of total annual procurement spend with suppliers contractually covered by the Sustainable Procurement Policy, Supplier Code of Conduct, or equivalent ESG clauses.	N/A	At least 80% of total procurement spend covered.	At least 95% of total procurement spend covered.



Value Chain Transparency

Greater visibility across our value chain enables us to manage environmental and social risks more effectively. In 2025, we developed a more structured approach to supplier disclosures, contractual ESG requirements and supply chain mapping. This helps us improve accountability, support responsible sourcing and extend our ESG ambitions beyond our own operations.

KPI	Description	Baseline 2025	Target 2026	Target 2030
% of EPC and sub-contractors providing minimum ESG and supply chain transparency disclosures, in line with the ESG Rider.	Measures the percentage of EPC and major suppliers that provide the required ESG disclosure package, including information on GHG emissions, labour rights, human rights due diligence, resource use, supplier codes of conduct, and supply chain mapping for critical components.	ESG disclosures partially requested; Supplier ESG information and supply chain mapping are not yet collected through one standardized disclosure package	After the finalisation of the ESG Rider: 100% of awarded suppliers submit annual disclosures; critical components mapped to Tier 2/Tier 3 where feasible.	100% of awarded suppliers submit annual disclosures; critical components mapped to Tier 2/Tier 3 where feasible.

ESG Strategic framework



As our activities become increasingly data-driven and interconnected, cybersecurity is fundamental to Novar’s operational resilience. In 2025, we further strengthened governance, awareness and safeguards across our IT and operational technology environments. This protects the continuity of our assets and services, while maintaining the confidence of customers, partners and other stakeholders.

KPI	Description	Baseline 2025	Target 2026	Target 2030
% P1/P2 incidents logged within 4 hours of detection	Reflects the organisation’s ability to promptly register high-priority security incidents. A high percentage indicates timely escalation and supports faster containment and reduced business impact.	N/A	80%	100%
% newly commis-sioned parks delivered with signed security handover / EPC checklist	Measures process performance (timeliness and regulatory compliance) without disclosing incident counts or details.	N/A	60%	100%
% employees completing mandatory security awareness training	Reflects the organisation’s investment in building a security-aware culture. A high completion rate signals strong governance and risk awareness across the workforce.	60%	95%	95%
Percentage of user accounts protected by multi-factor authenti-cation (MFA) and Zerotrust on Microsoft 365 / Entra ID	Reflects the organisation’s implementation of strong identity and access controls. High coverage indicates reduced risk of unauthorised access from compromised credentials and unauthorized devices.	N/A	100%	100%



Nederland

Groningen
Emmasingel 4
9726 AH Groningen

Rotterdam
Marten Meesweg 8
3068 AV Rotterdam

Arnhem
Jansbuitensingel 30
6811 AE Arnhem

info@novar.energy
www.novar.energy

Frankrijk

Avignon
81 Rue du Traité de Rome
84140 Avignon

Toulouse
12 avenue Yves Brunaud
31500 Toulouse

Duitsland

München
Hermann-Weinhauser-Straße 73
81673 München

Berlijn
Europaplatz 2
10557 Berlin

Zweden

Göteborg
Mårten Krakowgatan 2
411 04 Göteborg