Sustainability report 2021

GroenLeven Geeft je energie

GroenLeven

Geeft je energie

Featured content

GroenLeven has sustainability at the heart of our business. We want to take this one step further.

Contents

About this report

Welcome to our first sustainability report. As a frontrunner in the energy transition, GroenLeven has sustainability at the heart of our business. We want to take this one step further. Beyond fulfilling our role in the renewable energy market, we want to inspire others and share our learnings. We also believe that by being transparent in our reporting, we will be able to improve our own performance. We think big and do good.

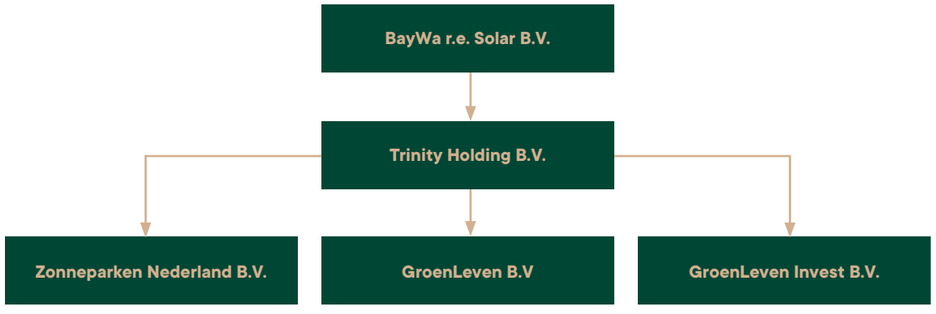
GROENLEVEN REPORTING

GroenLeven publishes an annual report that is available on our website at **www.groenleven.nl/jaarverslag**. This sustainability report complements the annual report and is the first milestone as we advance towards integrated reporting. This report is the outcome of a process that we started in the past year to identify six material themes, expand our reporting and deepen our stakeholder relationships.

This report is aimed at all our stakeholders, as we want them to join us on our journey through the energy transition in the Netherlands.

REPORTING SCOPE, BOUNDARY AND DEFINITIONS

GroenLeven is a subsidiary of BayWa r.e., a leading global renewable energy developer, service provider, distributor and energy solutions provider operating in 28 countries. BayWa r.e. Solar B.V. is a company in the energy segment of the BayWa Group, a major international player in the future market of renewable energies, listed in the Prime Standard segment of Deutsche Börse since 2000.



The data provided in this sustainability report relates to the activities and operations of GroenLeven B.V., Trinity Holding and BayWa r.e. Solar B.V. are holding companies with no operations. Zonneparken Nederland is the holding company for special-purpose vehicles (SPVs) of large-scale solar parks. GroenLeven Invest B.V.'s role is similar, with the SPVs used for rooftop projects and other energy solutions.

The current legal and financing structure will be reassessed in 2022 after changes to the shareholding structure were made in 2021 at BayWa r.e. level. Our operating context includes these companies, and the stakeholders set out on page 21.

We report on the financial year from 1 January 2021 to 31 December 2021.

We use the following time frames in our reporting:

- Short term – this year
- Medium term – the next three years
- Long term – the next five to ten years

MATERIALITY, APPROVAL AND ASSURANCE

We followed a materiality process to determine the content for this report (more detail on page 38). The materiality process ensured that we understand what is important to GroenLeven and our stakeholders when we talk about value creation and helped us think about how we are potentially eroding and preserving value. We include a variety of internal and external stakeholder perspectives in this report.

In developing the content of this report, we also considered the following frameworks and standards, inter alia to align key performance indicators (KPIs) used in this report to standard definitions:

- United Nations Sustainable Development Goals (SDGs)
- Global Reporting Initiative (GRI) standards
- Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014, amending Directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups
- Sustainability Accounting Standards Board (SASB) standard for Solar Technology & Project Developers

Our reporting journey aims to prepare GroenLeven for the requirements of the Corporate Sustainability Reporting Directive (CSRD), which will replace the Non-Financial Reporting Directive (NFRD). The latter is currently limited to listed companies. New sustainability reporting standards will be published in October 2022, and GroenLeven will be required to disclose accordingly. The Management Board recognises the contribution that GroenLeven can make to the activities as defined in the EU taxonomy and it is our intention to investigate eligibility and alignment over time. Through the EU Taxonomy, we can make a fair representation of our contribution to the environmental objectives.

The GroenLeven finance team guided the process to develop this report. They worked with internal content owners and external stakeholders to obtain information. Non-financial indicators in this report were not assured by an external party but were subject to internal controls where reasonably possible and management review. As part of our reporting journey, we are setting up the necessary processes to collect and report KPIs per material topic in the future.

The Management Board approved this report on 17 may 2022.

Roland Pechtold and Peter Paul Weeda

Message from the Chief Executive Officers

GroenLeven is a frontrunner in a slow transition towards renewable energy that started 50 years ago in the Netherlands and turned into a revolution in the past few years. Our dream at GroenLeven is to create a better world for future generations where solar, in combination with wind and energy storage options, will bring clean energy in abundance to all.

GroenLeven was started ten years ago by an entrepreneur who saw a great commercial opportunity. A few years later, the business gained momentum as it transformed under purpose-driven leadership.

Roland, for example, became the 17th employee at GroenLeven in 2018. At his former employers (amongst others Shell and Argos Oil), he gained valuable insights into the complexity of driving change from within while being part of an existing predominating system. He had a personal sense of urgency about renewable energy, and saw GroenLeven as a perfect opportunity. The business had the necessary approvals and subsidies in place to actively support the energy transition.

Roland and Peter Paul are both passionate believers in GroenLeven's ability to think big and do good. Peter Paul had a 17-year background in utilities and also saw in GroenLeven the opportunity to make a difference by turning a pipeline into realized projects.

Today, every 10th solar panel in the Netherlands is a GroenLeven panel. The company installed over 600.000 panels in the past year, bringing the total GroenLeven panels to more than two million.

A COMMITMENT TO SUSTAINABLE DEVELOPMENT

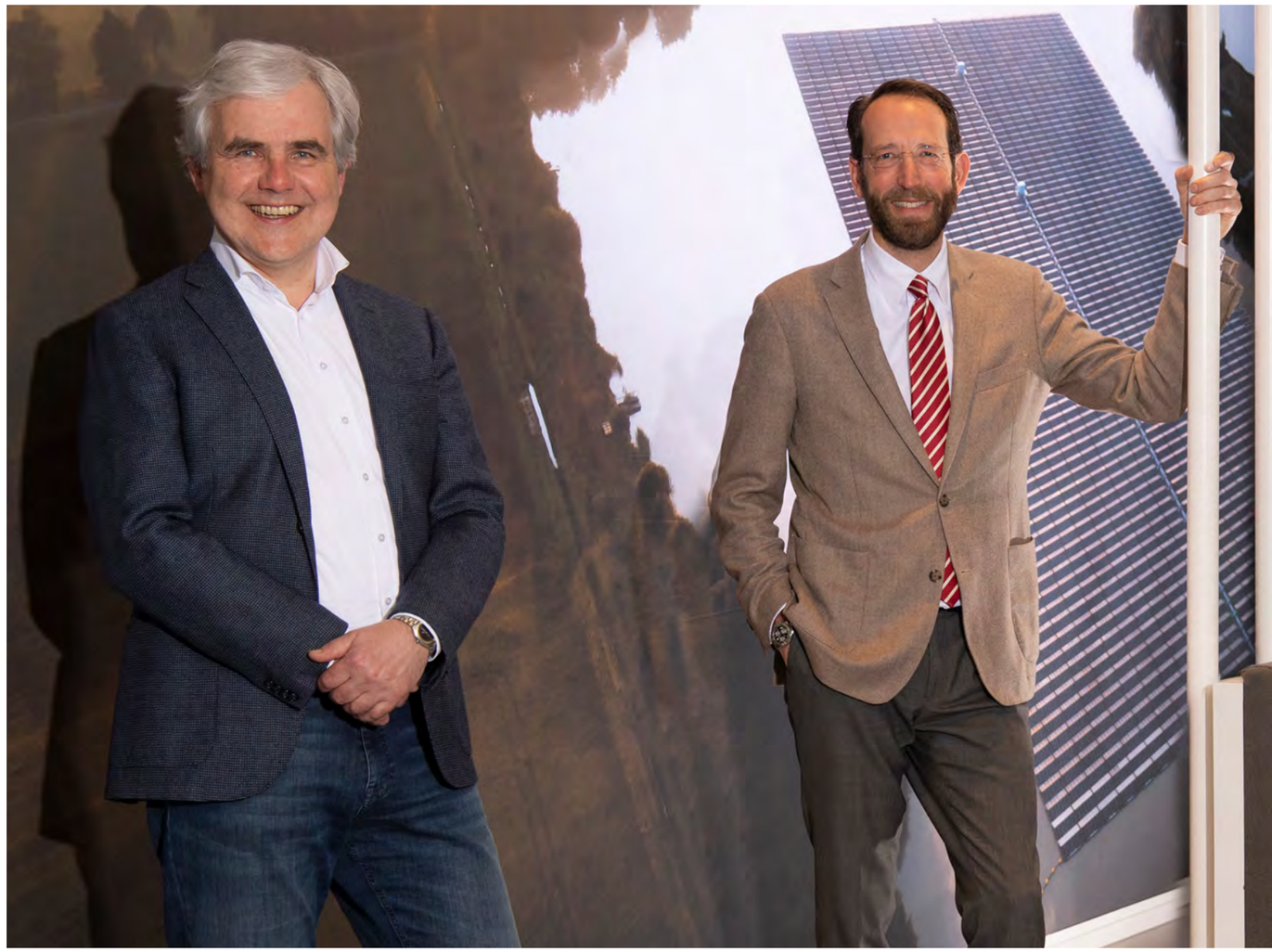
GroenLeven's contribution goes far beyond just solar energy. Proudly sporting an SDG badge on his jacket's lapel, Roland explains how GroenLeven supports more than goal seven's intent to provide the world with clean and affordable energy. GroenLeven's solar projects also support life below water, life on land, climate action, decent work and partnerships.

Roland and Peter Paul refer to GroenLeven's bigger purpose as the company's moral compass. They believe in leading by example, and with a long-term view.

While growing rapidly in the past few years, GroenLevens' Management Board also formalised and structured the business, ensuring the necessary controls, compliance and certification. However, GroenLeven's culture is about much more than that.

"We have a vision, mission and values, and we are all personally motivated to take every step in the right direction. On all project sites, for example, we generate our own energy, use electric machinery and try to be as efficient as possible in using long haul transport. Where we used to fly to Germany a few times a year to attend meetings with BayWa, we now use electric vehicles or trains, and rather do fewer journeys but stay longer."

"We know that there is still more to be done, especially in our supply chain. Solar panels are still manufactured using coal and shipping lines continue to rely on fuel. We want to bring all of this as far into the light as possible, and broaden our positive impact even further."



“Our approach is to listen and understand our employees’ needs, and then find a win-win solution. We use this approach with all our stakeholders.”

GroenLeven is actively involved in local community initiatives that align with our vision to create a new energy landscape for future generations. We partnered with and sponsored the Arcadia programme, Bosk, which creates a new perspective on the relationship between humans and nature. To us, the slow procession of 1.000 trees through the city of Leeuwarden is deeply symbolic of the transition to a new energy landscape.

Another initiative that focuses on a better future world is JINC’s Boss of Tomorrow. Our 2022 partnership will help introduce and inspire young people to different careers, especially in a new and evolving industry such as ours. We believe it opens them to more possibilities and builds GroenLeven’s pool of future talent.

GROWING THROUGH INNOVATION

With a turnover of € 132,6 mio GroenLeven is on a steep growth curve. Although profitability remains important, there are deliberate trade-offs in favour of innovation. Roland and Peter Paul admit that some of the earlier projects were loss-making and relied on cross-subsidisation, but were invaluable in learning how to reduce costs, and implement dual functionality to accelerate the energy transition.

Innovation is one of GroenLeven’s key successes. The company just announced a pioneering pilot project in collaboration with network company Alliander to generate hydrogen with solar power. Located next to the solar park in Oosterwolde, Friesland, this project will provide green hydrogen to a local taxi company and a fuel supplier from Heerenveen. It is not only an example of disruptive innovation but comes at a time when gas supply in Europe is under significant threat due to the Russian invasion of Ukraine.

Peter Paul explains that one of their most significant challenges is in finding the right skill sets, combining, for example, strong technical engineering skills with the ability to be innovative. The is at the heart of dual-function projects. Just think about soft fruit farming and solar panels: raspberries and strawberries need completely different solutions.

Innovation is also at the core of GroenLeven’s employee value proposition. The company does not only provide employment and good remuneration. Peter Paul and Roland explain that they make work as convenient as possible, while staying true to the GroenLeven moral compass and culture. This means having a green office building, being located near transport hubs, providing equipment for home offices and providing a gym at the office.

Arcadia programme, Bosk.

A STAKEHOLDER-INCLUSIVE APPROACH

Local communities can be a particularly challenging stakeholder to consider when introducing a new solar installation project. People might support the concept of renewable energy, provided it is “not in my backyard” – what is called the nimby factor.

GroenLeven’s intent is to create broader buy-in and drive dual function projects where communities and customers understand and welcome potential multiple benefits, including ownership.

However, outdated regulation makes for slower progress than GroenLeven’s culture demands. Peter Paul and Roland describe employees as being so committed and motivated, that it is hard to slow them down. Decision-making takes place at the lowest level possible, which is why there are clear guidelines and values to give employees direction.

“GroenLeven has to find solutions within a regulatory system that was designed to support a few large power plants all moving electricity in one direction. Today we have millions of solar panels moving energy in different ways. We need different policies and regulations for the transition, and this can only work if energy and network companies, banks, permit providers, government and the EU all work together.”

GroenLeven’s culture, people and the financial backing of a strong, international shareholder bode well for a significant future opportunity in broader energy solutions. The two leaders are ambitious about a future where fragmented regional energy strategies converge and there is more integrated planning and bigger impact. Rather than focusing on what they call the concentrated pain of one region, they believe in the power of collaboration for the future of the Netherlands.

Message from BayWa r.e. CEO Matthias Taft

Sustainability is an integral part of our business at BayWa r.e. .
We are playing a leading role in driving forward the renewable energy transition and are enabling our customers to meet their sustainability commitments. But from our perspective, this is not enough.

We are continuously working on integrating sustainability into all aspects of our business. From reducing our carbon emissions, to further developing sustainability within our supply chain, there is a lot we can do to reduce our impact on society and the environment.

For us, sustainability is the reason to drive innovation and develop reliable solutions that address both economical and environmental considerations. GroenLeven leads the way with its innovative Floating-PV plants, its new office using sustainable materials and BayWa r.e.'s first green hydrogen electrolyser, which was recently built in the Netherlands.

With this Sustainability Report, GroenLeven is once more a frontrunner in the BayWa r.e. family and I am happy to see the energy and enthusiasm that the colleagues at GroenLeven put into their work every day - as you will see on the following pages.

I want to thank all employees at GroenLeven for their commitment and tireless efforts to continuously improve the way we do business - for our planet.

Matthias Taft
Chief Executive Officer of BayWa r.e. AG

The year of GroenLeven

2021

Expansion of double functions: solarpanels on **oxidizing peat soil, asbestos roofs and boat houses**

Corporates choose solar energy via GroenLeven with multiple solar roofs consisting of over 20.000 solar panels

Cooperation with **multiple energy cooperations** for **local purchase of green energy from solar parks**

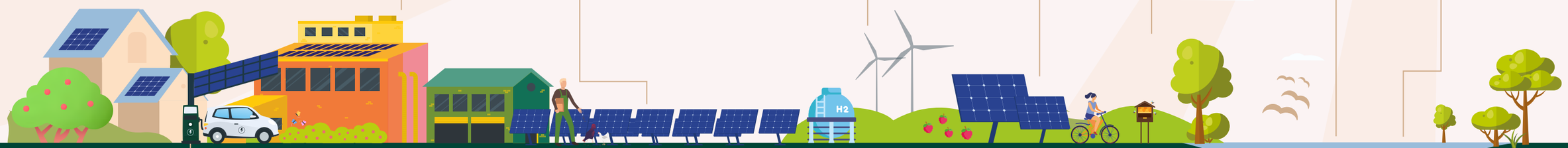
More and more fruit farmers are choosing **solar energy over their fruits**

GroenLeven chooses a **broader variety of energy solutions and energy-landscapes** with solar energy, wind energy, hydrogen and energy storage **from 2022**

Natuur & Milieu and GroenLeven advance the energy transition together through perception research and testing grounds

GroenLeven built more than 10 floating solar parks. **No 11: Sellingen is now the largest floating solar park in Europe**

External research confirms: **floating solar panels and ecosystems harmonize perfectly**



In 2021, GroenLeven installed

621.227
solar panels

distributed over

79
projects
on roofs, land, water, carports en over soft fruits

69
roof projects

10
large scale projects

294,3
megawatt

147.256 tonnes
CO_2-emissions saved

over **96.000**
households can be supplied with green energy

GroenLeven

Our profile

OUR MISSION

To deliver a substantial contribution to the energy transition in the Netherlands and to a cleaner and better world for future generations.

Sincere
GroenLeven works to do the right thing, with integrity, in order to pass on a beautiful, green world to the generation after us

Resourceful
GroenLeven's solar sources fulfil innovative dual functions

Decisive
By thinking big, GroenLeven has become the market leader in clean energy

The future
The fossil age is over. The future is solar and wind combined with storage and conversion.

The opportunity
We will broaden our horizons towards renewable energy solutions and large energy landscapes.

The approach
Benefiting, sharing and co-operating intensively with our colleagues at BayWa r.e.

Read more about our sustainability strategy on page 34.

ABOUT GROENLEVEN

GroenLeven is the leading solar project developer in the Netherlands, with our head office in Leeuwarden. Established in 2012, GroenLeven has become a market leader in the development, realisation and operation of large energy landscape solutions and rooftop-based solar. The company has strong roots in the agricultural sector, having focused initially on helping farmers become more energy efficient. Today, GroenLeven remains a leader in driving the renewable energy agenda with a pipeline of >1.000 MW, one of the most significant in Europe.

We work with public authorities, grid operators, the commercial sector, educational institutions, local stakeholders and entrepreneurs to create energy solutions. Our solar energy sources are located on roofs, car parks, waste sites, industrial parks, airfields, bodies of water and above soft fruit orchards.

We create value through our dual-function approach: we select locations that give renewable energy back to the world while enabling a positive impact for future generations.

We believe in doing what we say and saying what we do. The outcomes of our efforts are evidence of our vision and values in action.

OUR CORE BUSINESS

The Dutch Energy Agreement for Sustainable Growth requires a transition to clean energy, with demand far exceeding the supply currently available. Solar energy is the best way to meet the alternative electrification requirements for the built environment, industry, transport and mobility. Solar energy can reduce utility bills, can generate income when delivering to the grid, and reduce the risk of having to rely on just one source of energy.

GroenLeven is a leader in this transition by providing different solar energy solutions:

Large energy landscapes and solutions

GroenLeven develops and sells large-scale solar parks and other solutions. GroenLeven acts as the construction company and sells the completed installation to an SPV based on a general contract agreement. Zonneparken Nederland (as a shareholder of the SPV) sells the SPV to the owner.

GroenLeven's construction role includes developing the project with a land option, permits, subsidies and grid connection, coordinating construction and realising the park, as well as creating financed SPVs and selling these. The segments for which we provide large-scale solar parks include free-field developments, floating solar farms and some innovative dual functions.

Rooftop-based solar

GroenLeven develops solar projects on rooftops, either for the owner or as a rental rooftop. Entities with a rental proposition (rented roofs) are held by GroenLeven Invest, another subsidiary in the BayWa r.e. Group.

GroenLeven's role includes support in obtaining subsidies and grid connections, and coordinating construction activities. We operate in the following rooftop-based solar segments: agricultural rooftops (GroenLeven's historically core business), logistic rooftops and large retail and industrial locations. We also service other segments such as hospitals.

OUR CULTURE AND PEOPLE

The GroenLeven culture and employees are core strengths for our business. With a growing urgency in the energy transition, there is a labour shortage in our sector, especially in technicians and specialists. The happiness and health of our employees are therefore very important and necessary to us.

We continue to optimise the GroenLeven recruitment and selection process so that we can find the best people and fill our vacancies with high quality candidates. We are expanding our onboarding program to ensure new employees are well-trained.

A good onboarding of people makes them deploy faster and creates a stronger connection to GroenLeven.

We have focus on our biggest capital; our people. We have a conversation cycle, so that in addition to personal attention we can also bring focus on knowledge, talent and competence development. This is very important for us to understand potential future staffing gaps and opportunities and helps us to design individual employee development plans.

Read more about our employee satisfaction survey on page 23.

OUR JOURNEY AND MILESTONES

GroenLeven has been a trailblazer from the start. We keep on reinventing ourselves in a complex, fast-changing world that requires new solutions and innovative future thinking.

2012

GroenLeven was founded by Sytse Brouwer, Margriet Bolink and Hans van den Brug.

2018

BayWa r.e. acquired 70% of GroenLeven's shares.

2021

- We performed a sustainability ESG opportunity and issue analysis and launched a materiality process.
- We defined the most relevant SDGs and most material KPIs for GroenLeven.
- BayWa r.e. acquired the remaining shares to hold 100% of GroenLeven's shares.

2022

- Our first sustainability report was published.
- We plan to implement reporting governance and processes for more material topics.
- We are busy assessing data quality and assurance readiness.

2023

- We aim to develop regular substantive processes for monitoring and improving sustainability data.
- We plan to enhance the assurability and auditability of sustainability KPIs.
- Our reporting will be adapted in anticipation of future regulatory requirements from the EU CSRD and Taxonomy

10-year achievements

More than 1.000 renewable energy projects provide sustainable power

In 2021, prior to the 10-year anniversary, we realised 10% of all solar panels in the Netherlands

That equals green electricity for more than 300.000 households

This we do with more than 150 passionate and driven colleagues

In total this encompasses more than 1.000 MW of solar capacity

OUR FOOTPRINT

GroenLeven contributes to climate change mitigation by generating clean energy across the Netherlands.

"We are genuinely concerned about climate change. That is why we work passionately every day to provide the world with clean solar energy."

OUR STAKEHOLDERS

From local residents to regions and our continent, we can all benefit from more renewable energy. To achieve better outcomes, we need to work together and understand how each stakeholder perceives value. GroenLeven believes in engagement and communication.

Our complete universe of stakeholders is extensive. GroenLeven's most recent stakeholder analysis, approved in December 2021, contains 31 internal and external stakeholders, setting out their expectations and how GroenLeven responds. The table below includes a summary of key stakeholders: who they are and the focus of our engagement.

Customers	Our customers range from individual homeowners, farmers or business owners to pension funds and (local) investors keen to invest in renewable energy. They include the owners of large-scale rooftop parks, for whom we manage the operations and do maintenance. We have cooperation agreements with rooftop customers, for example, Friesland Campina and Unive. They expect GroenLeven to execute projects according to agreements, applicable standards and timelines.
Suppliers	Our suppliers include : • Astronergy/Chint Solar/Shanghai JA Solar/Trina Solar/LONGi Solar specialises in the manufacturing of photovoltaic products. • Zimmerman PV-Stahlbau GmbH & Co. KG designs and manufactures steel frames for solar installations. • Huawei Technologies B.V. (Netherlands), which provides inverters. • Kenter, which provides transformer stations. For them, it is important to receive clear guidelines and enough time to execute orders.
Funders	In addition to BayWa r.e. which finances the majority of our current projects, we have two major funders: • DZ Bank, a corporate German bank that supports sustainable capital-intensive large-scale projects. • Triodos Bank, a bank in the Netherlands specialising in financing entrepreneurs that work towards sustainable and positive social, environmental and cultural change. They expect GroenLeven to deliver on our purpose by doing things right for people and planet while providing prosperity.

Shareholder	BayWa r.e. is a 100% shareholder in GroenLeven as per 31 December 2021. They expect a return on their investment, which includes meeting financial targets and protecting GroenLeven's reputation.
Employees	We have 81 permanent employees and 40 employees deployed on a flexible basis. Over the past five years, our permanent employees have increased from 16 in 2017 to 81 in 2021 within 33,06% woman. Employees exclude the on-site teams who build solar farms and roofs. Our employees come from all over the Netherlands and constitute a range of nationalities. We provide all employees with the support and facilities to perform to their best ability and achieve personal and career growth. 59,50% of our employees are aged below 40, and 97,52% have been employed for five years or less. This is due to our rapid growth in the past few years.
Society and the environment	With high population density and intense economic activity, our society puts significant pressure on the environment. Environmental protection is, therefore, a matter of grave public concern. GroenLeven's reputation and legitimacy depend on public opinion, influenced by nimbyism ('not in my back yard').
Local and national authorities and regulators	This includes the Dutch government, regional authorities such as Stadskanaal in the northeast of the Netherlands and local municipalities. It is important for them to have a clear understanding of our long-term plans, and they require frequent visits and open communication.
Trade and industry organisations	Organisations such as Rijksdienst voor Ondernemend Nederland and Holland Solar facilitate grants and influence policy. We participate and share knowledge with them to ensure industry feasibility and sustainability.
Grid operators	TenneT is responsible for managing the national high-voltage grid, while seven network operators own the regional energy grids. GroenLeven relies on the grid operators for connections to substations and transport capacity and infrastructure. It is important for GroenLeven and the grid operators that projects are executed according to agreed requirements.
Contractors	We use between five and ten contractors to execute projects on sites. They work according to a contract and their success relies on good planning and efficient operations. Contractors are expected to follow GroenLeven's health and safety rules and applicable regulations, including ensuring that their equipment is in good condition and fit for purpose. For them, it is important that GroenLeven pays invoices on time and drive the Dutch energy transition to create future contract opportunities.

"Involving the different GroenLeven stakeholders and consensus-building are core parts of environmental governance and transition to a sustainable future."

MEASURING EMPLOYEE HAPPINESS

GroenLeven has been growing rapidly over the past few years, including through the COVID–19 pandemic. Our employees have been key to this growth, and their well-being is very important to us. We did our first employee satisfaction survey in September 2021 by using an external tool. We had a great response: 84% of our employees participated. The results where shared, and line managers have taken up further discussions and initiatives to ensure that our employees remain happy. This tool can be used in the future also by our on- and offboarding process and provides insight into the subjects that are going on within the organization and how people feel about it.

One of our biggest challenges is finding the right people, particularly at a time when people have a lot of job options and choices. There are more vacancies than people who are looking for a job so that makes it extra challenging for recruitment. GroenLeven is a purpose-driven organization which makes us an attractive company to work for.

We keep these stakeholders informed and check in with them reguraly to make sure they are not experiencing problems on the project.

High level of interest

High level of power
Employees
Shareholder
Society and the enviroment
Grid operators
Contractors

These are the stakeholders that are decision makers and have the biggest impact on project succes, hence we manage their expectations cloely.

We keep these stakeholders informed periodically, but do not overdo it.

Low level of interest
Local and national authorities and regulators
Trade and industry organisations

Low level of power
Customers
Suppliers
Funders

We keep these stakeholders satisfied because of their influence, but try not to overcommunicate as they have a low level of interest.

"One of our biggest challenges is finding the right people, particularly at a time when people have a lot of job options and choices. There are more vacancies than people who are looking for a job so that makes it extra challenging for recruitment. GroenLeven is a purpose-driven organization which makes us an attractive company to work for."

Hildou Bootsma
GroenLeven Human Capital

Sustainability context, opportunities and risks

Solar energy is a fast-developing industry globally, built on rapidly increasing demand, new technology and an evolving regulatory agenda. It is characterised by complex trade-offs, and company valuations often demand an understanding beyond traditional financial measurements and ratios. Although the industry is assumed to contribute to lower greenhouse gas (GHG) emissions, other outcomes have to be managed responsibly, for example, in dealing with waste and biodiversity loss.

In most countries, the solar energy industry benefits from significant government assistance to reach national targets and adhere to global commitments.

The Netherlands has committed to several international climate agreements, such as the 1992 UN Framework Convention on Climate Change, the 1997 Kyoto Protocol, and the UN Climate Agreement in Paris in 2015. These agreements form the framework for Dutch policy on climate change.

The Netherlands has committed to reducing the country's emissions of greenhouse gases to zero by 2050. By 2023, 16% of all energy used in the Netherlands must be sustainable. This is outlined in the Energy Agreement for Sustainable Growth that the government made with 40 groups, including employers, trade unions and environmental organisations. The Energy Agenda sets targets for the years up to 2050.

Solar energy is one of six sustainable energy sources. To drive the use of these energy sources, government is offering investment incentives, including:

- The Renewable Energy Grant Scheme (SDE+) for large energy projects using geothermal heat and solar parks.
- Renewable energy grants for smart technologies that combine production and storage or contribute to smart grids.
- The Energy Investment Tax Credit for a range of energy-efficient, environmentally friendly technologies.
- Sustainable energy investment grants (ISDE) for heat pumps, solar water heating systems, biomass boilers and pellet stoves.

The energy transition's strategic path relies on accelerating the expansion of electricity generation using solar panels on rooftops, land and water. Growth is also expected in grant-free construction, guarantees of origin, energy storage and flexible solutions. The most significant risk for the energy transition lies in the increasing restrictions on access to the electricity grid and lengthy permit processing times. Nationwide consultative structures have now been set up so that public authorities, grid operators and producers can resolve such issues together.

REGULATING A GROWING INDUSTRY

In many respects, the renewable energy sector is still in its infancy. However, as the industry transforms to become more sophisticated and mature, formal structures and more regulations are emerging. This includes, for example, the 2020 requirement for independent solar power installations to be inspected. Called scope 12, this is a combined initiative by the Dutch Association of Insurers, Holland Solar and inspection companies. With the rising number of solar power projects and more instances of poor-quality installations, the cost of claims increased, leading to the development of minimum standards. We support these developments as they create more trust in the sector, and collaborate to share our knowledge and experience where possible.

WHY SOLAR ENERGY?

Affordability*	According to the World Economic Forum, the cost of renewable technologies like solar is falling significantly. This is fuelling the rise of renewables as the world's cheapest energy source – the cost of large-scale solar projects plunged 85% in the decade to 2020.
Job creation**	The socio-economic benefits of using solar include job creation. According to the International Renewable Energy Agency (IRENA), renewable energy employment worldwide, with solar leading the field, accounts for some four million jobs.
Rapid growth in demand***	The International Energy Agency expects global average annual electricity demand growth of 2.7% during 2022–2024 with record-breaking renewables growth (up 8% per year on average) set to serve more than 90% of net demand growth during this period.
Wide support	The Dutch government provides subsidies and tax benefits for solar energy production; however, this is decreasing as solar panels are becoming more affordable.
Responsible land use	The Netherlands is an intensely populated country, with land being a precious commodity. To ensure that agriculture, biodiversity and natural areas are preserved while expanding the solar energy industry, which requires significant space for large installations, regional energy strategies use a sun ladder approach. Priority is given to developments on unused roofs and open areas such as motorways and refuse dumps.

* https://www.weforum.org/agenda/2021/07/renewables-cheapest-energy-source/

** Renewable Energy and Jobs – Annual Review 2021, IRENA, October 2021 (Special Edition: Labour and Policy Perspectives)

*** International Energy Agency's Electricity Market Report, January 2022

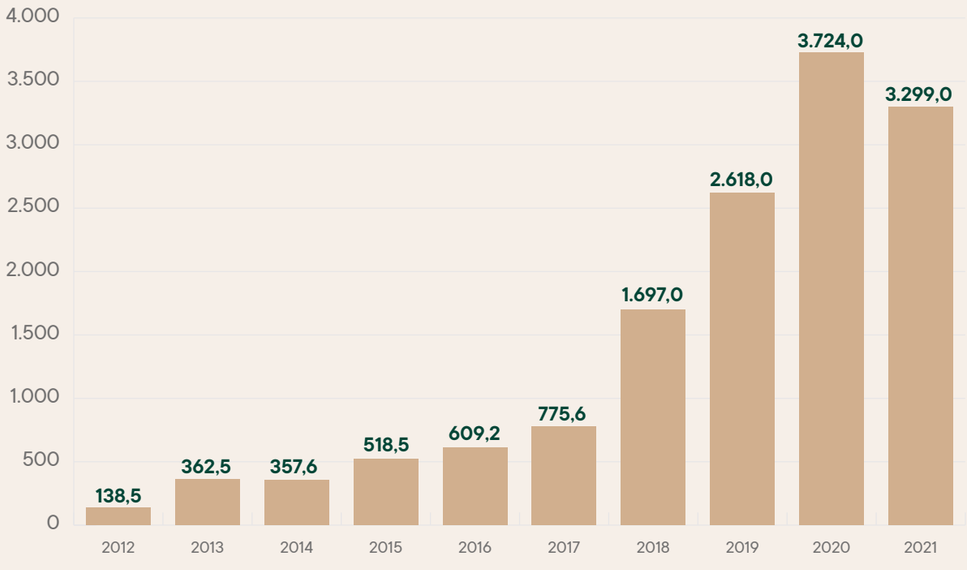
GROENLEVEN'S INCREASING SOLAR CONTRIBUTION

In 2021, the Netherlands installed 3.299 megawatts peak (MWp) solar panels, bringing the country's total solar capacity to 14.249 MWp.

GroenLeven contributed 294 MWp through solar park and rooftop installations in 2021.

New solar panel installations in the Netherlands

Expressed in megawatts-peak (MWp) (© Solar Magazine)



Considering that GroenLeven does not operate in the residential segment of the solar market, our growth and contribution in a very fragmented industry has been stellar. This demonstrates how we think big and do good.

GROENLEVEN'S KEY OPPORTUNITIES AND RISKS

At GroenLeven, the Management Board identifies opportunities and manages risks through a continuous process. With the company on a steep growth curve, we understand the need for formal structures, controls and oversight. Therefore, risk monitoring and reporting form part of the annual strategy development and planning process.

Risks and opportunities are considered when we set goals and are discussed continuously in our Management Board meetings and operational processes.

KEY OPPORTUNITIES

With increasing demand, government support and the recent push to reduce dependency on Russian fuel and gas, the energy transition offers significant growth opportunities. These rely largely on innovation paving the way for smart solutions. We have a pipeline of opportunities, supported by our investment in research and development.

solutions might not be the cheapest in most cases, the trade-offs benefit future generations over the long term.

Integrated energy landscapes

We believe that the synergy between and integration of different renewable energy sources have the potential to create a new energy landscape for the Netherlands. This will take the energy transition to the next level. The combination of solar, wind, batteries and hydrogen can solve long-term storage challenges, ensure better efficiency and grid stability, and help accelerate decarbonisation. GroenLeven's hydrogen project is an example of an investment to capture this opportunity.

Cable pooling

Grid congestion is driving alternative solutions. By pooling cable connection capacity, for example, by sharing grid connections with wind parks or other existing connections, we can expand the availability of renewable energy faster and more efficiently. By using inverters at the end of the line for dynamic control we can reduce congestion. By making grid reserve capacity available, energy peaks can be managed better. Grid reserve capacity was originally designed to accommodate network malfunction and maintenance but can potentially be used to temporarily accomodate input from a solar park during a peak on the grid.

More dual function projects

Dual function opportunities are at the core of our approach to new business. In all our projects, we seek to create more than just renewable electricity. We innovate to create added value. To date, for example, we have installed more than 230.000 solar panels on bodies of water. Dual function opportunities include carports, water basins, refuse facilities, roofs and solar routes along the highway. Even though dual-function

Battery and direct solutions

Storing renewable energy in batteries or hydrogen will soon be economically feasible, and marginal costs are expected to reduce rapidly. In areas where grid capacity is not sufficient to return large-scale generated solar energy to the grid, batteries and hydrogen will play a significant role. We are also advocating for direct supply on behalf of our bigger customers. This means that a third party could potentially facilitate electricity supply between large industrial-scale consumers where renewable energy is available, without intervention by the grid operator, especially when redelivery is not possible.

Partnerships

Successful innovation relies on partnerships, for example, with public authorities, grid operators, the education sector and entrepreneurs. Recent examples include the pilot green hydrogen project in collaboration with network company Alliander, and biodiversity research for floating sites with the ecological consulting firm, Buro Bakker. Read more about partnerships in the sections on innovative solutions (from page 54) and local community engagement (from page 74).

We also anticipate more collaborative opportunities in the BayWa Group to emerge in the short term. BayWa r.e. is already working across solar, wind and bioenergy, and is investing in the production, storage and use of renewable energy.

We continue to explore a range of opportunities to improve our services and commercialise new technology – for our business and that of our clients.

"Strong economic growth, combined with more extreme weather conditions than in 2020, including a colder than average winter, boosted global electricity demand by more than 6% – the largest increase since the recovery from the financial crisis in 2010. The fast rebound in overall energy demand strained coal and natural gas supply chains, pushing up wholesale electricity prices. Despite the impressive growth of renewable power, electricity generation from coal and gas hit record levels. As a result, the global electricity sector's annual carbon dioxide emissions leapt to a new all-time high after having decreased for the previous two years."

International Energy Agency's Electricity Market Report
January 2022

KEY RISKS

Financing

Our projects require significant upfront capital and have long pay-back periods, which means that we have a strong focus on cash-flow forecasts. We regularly assess the amount of cash and loans that GroenLeven and BayWa r.e. Solar B.V. requires to finance our activities. The projects in GroenLeven and its group companies receive advance funding from BayWa r.e. with some projects also receiving additional funding from Dutch and German banks. Forecasts consider compliance with these banks' covenants. Our preference is to partner with banks that share our commitment to sustainable development.

GroenLeven's financing agreements offer sufficient scope to fund ongoing projects. We are also exploring more innovative funding models to enable local ownership, for example, through cooperatives and crowdfunding.

Grid access and capacity constraints

Increasing restrictions to access the electricity grid and lengthy permit processing times are major risks. Grid capacity restrictions are an issue in almost all parts of the Netherlands. This means that energy from alternative sources cannot always be fed into the grid, causing delays in the energy transition. Lengthy permit processing times are slowing down both the introduction of sustainable energy and the expansion of the grid. We participate in nationwide consultative structures to resolve this collectively between grid operators, public authorities and producers. Positive movements in this regard include increasing availability of alternating current on the network. Management keeps a close eye on developments to mitigate grid access and capacity risks.

Compliance

The construction of solar power systems involves regional, national and European legislation, regulations and good practices with regard to building, safety, land holdings and permits, grants, etc. It is critical for GroenLeven to stay abreast of relevant legislation and regulations. Given the innovative nature of our processes and projects, this is a high-risk area. To deal with a wide variety of regulatory risk factors and ensure compliance, GroenLeven has internal legal capacity with a team focusing on monitoring, applying and complying with legislation and regulations. We have a grant project manager specialising in applications and compliance, and an internal tax specialist for monitoring and applying tax laws and rules. This multi-disciplinary team is one of our competitive strengths.

Compliance requirements and responsibilities include, for example:

- New GroenLeven customers, municipalities or communities potentially impacted by projects have the option to request a screening based on the Public Administration (Probity Screening) Act (Bibob) as part of the permit process. When requested, we participate and provide evidence of GroenLeven's business integrity and tax status.
- We perform an annual project analysis in terms of multi-real estate judgement (multivastgoed arrest). In this respect, we have a Transfer Pricing (TP) policy that requires a functional and economic analysis, which is considered in line with the current Dutch TP practice and the Organization for Economic Co-operation and Development (OECD) guidelines. Our analysis includes benchmarking based on the return on assets for similar companies.
- BayWa provides internal audit services and ensures that all internal controls and documentation are in place, with a strong focus on risk management and information technology for projects. PwC has been serving as external auditor since 2021.
- Read more about GroenLeven's integrated management system and certification in the occupational health and safety section from page 68.

Shipping and raw material constraints

Constrained supply of solar panel components such as polysilicon, aluminium, cabling and other building materials limits growth and causes project delays. Long lead times for electrical components, for example, are expected to be exacerbated by the Ukrainian war. Since the onset of COVID–19, global supply chain disruptions have caused major port congestion all over the world, causing significant production delays and escalating costs. For the Netherlands and GroenLeven, this means that we cannot scale up as quickly as needed. However, these challenges stimulate creative thinking to find new solutions. We plan much longer in advance and do continuous risk assessments that help us to be resilient when facing pervasive uncertainties.

Supply chain dependencies

GroenLeven is dependent on solar panels imported from China with limited visibility of raw material sourcing and labour practices in the upstream manufacturing process. This is a significant human rights risk as these suppliers might be using forced and child labour in unacceptable working conditions. Although we continue to explore alternative suppliers, our approach is to rather continue doing business with these suppliers while actively addressing the problem in a responsible, sustainable way. We also recognise that it would be impossible to meet the Dutch energy transition targets without any solar panels from China. Read more about our initiatives to promote human rights in the section from page 42.

Inflation and market challenges

Although the Dutch economy proved resilient during the coronavirus pandemic, growth and recovery will be impacted by the duration of the war in Ukraine. For GroenLeven, this might result in increasing project input costs as inflation rises rapidly. This affects the affordability of renewable energy projects for landowners and may result in lower rates of return for investors. Minor changes in project variables can have a significant impact on the profitability of the projects in our pipeline. These challenges emphasise the value of an innovative culture, and our ability to find alternative solutions for a sustainable business.

"As a new member of parliament for the CDA, I am committed to the energy debate. Climate change is one of the most important issues of our time. It requires a joint approach where we look at all elements that contribute towards a clean, sustainable future. It also requires a joint effort from all stakeholders.

Government, society and businesses all contribute towards this goal. GroenLeven, with its solutions in the field of solar energy, plays an important part in moving the energy debate, and the transition, forward."

Henri Bontenbal
Member of Parliament, CDA

Our project management model

There are a variety of factors and risks to consider when installing a solar park. You have to deal with legislation and regulations, subsidy applications and technical and financial challenges. At GroenLeven we have a tried and tested project approach. Our multidisciplinary teams consist of passionate people who know what they are doing, and who want their projects to deliver for generations to come.

Project development teams and the project management teams work according to set accountabilities but in an integrated way. They are supported by other teams – such as the operations and maintenance teams, or an asset manager as part of commercial project management – during the different phases of projects.

Every project features a unique combination of factors, be it sunlight requirements for a soft fruit orchard or a site prone to hailstorms or wind. Project duration can also vary from days to months, depending on permits, materials, or technical challenges, for example, related to roof construction requirements. It is therefore critical that all project stakeholders have clear roles and responsibilities for the duration of the project. The diagram illustrates the typical responsibilities of the project developer and project manager during different project phases.

Project development team

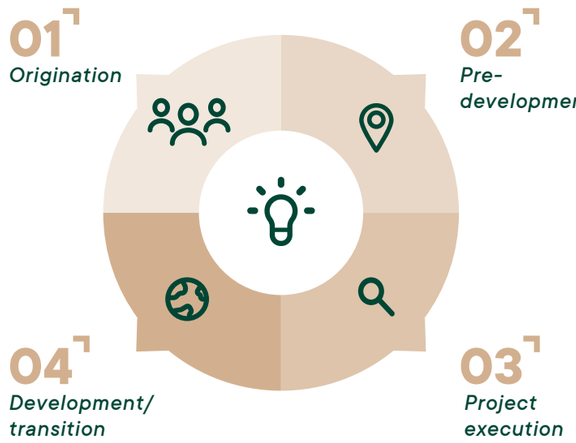
Each project has a project developer that leads a team that includes a technical (construction team member), a commercial, power purchase agreement (PPA) and a legal team member. The project manager is also included in this team.

Project management team

Each project has a project manager leading a team that includes a technical (construction team member), a commercial, power purchase agreement (PPA) and a legal team member. The project developer also forms part of this team but will be less involved towards the end of the transition phase but can still be included in team meetings on demand. Ideally, team members stay the same as in the development phase, but this cannot be guaranteed.

	Project stages				
Team member	Origination	(Pre-) development	Development / transition	Project execution	Closing
Project developer (PD)					
Project manager (PM)					

GROENLEVEN PROJECT PHASES AND ACCOUNTABILITY



01. *Origination*

BayWa and GroenLeven both identify opportunities for new projects and locations. These can take many different forms. When entering into a project development agreement (PDA) with a project development partner who is doing the development from scratch, we talk about “co-development“. When we engage third parties only for specific services (for example environmental studies or land scouting), we talk about a pure BayWa greenfield development. In this phase, we do an internal feasibility study.

02. *Pre-development*

Once an opportunity has been identified, the project developer scouts locations and makes contact with landowners. The next step is to negotiate a lease agreement with the landowner and secure property rights for the cable route to ensure access.

The project developer is responsible for the permitting process, including the preparation and submission of permit applications. The project developer is the main contact person with the municipality, requests the grid connection and reserves grid capacity.

In this phase, the project developer also prepares a first layout in collaboration with the engineering team. This might involve several technical site visits and assessments.

The development of an investment model also forms part of this phase. The project developer evaluates economic and rent payment feasibility and determines which other stakeholders to involve. As a next step, an SPV is set up and tax structuring is done.

03. *Development/transition*

When we go into the actual development phase and the installation is ready to be actioned, the project developer does a detailed handover to the project manager. This includes documentation such as all signed contracts, permits, licenses, SPV-related documents and budgets, a stakeholder map of relationships and legal structures.

Once permits are obtained, the grid connection had been secured and defined, and the cable route available, installation can start.

04. *Project execution*

The project manager coordinates the engineering process with a technical team member who is responsible for construction according to the approved layout. In this phase, an external yield study may be requested.

The project manager is responsible for the full procurement process, which includes materials, labour and energy. The latter is generated on-site according to the project requirements. Once installation is complete, the project manager initiates the sale and project financing process.

Closing

In the last phase, financial closure is initiated, and the project is sold. After execution and closing, we remain involved where possible through operations and maintenance (O&M) and commercial management (CMA).

Sustainability strategy and governance

GroenLeven has four sustainability pillars that focus our efforts to think big and do good. The four pillars contribute to specific SDGs, and each is enabled through focus areas.

GroenLeven's sustainability pillars			
Contribution to the Dutch energy transition and to a cleaner and better world ("sincere")	Ethical way of working, considering (local) environment, society, people and nature ("inventive")	Construction of innovative solar parks with dual function	Market leader in renewable energy ("decisive")
7 AFFORDABLE AND CLEAN ENERGY; 13 CLIMATE ACTION	11 SUSTAINABLE CITIES AND COMMUNITIES; 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE; 15 LIFE ON LAND	8 DECENT WORK AND ECONOMIC GROWTH; 7 AFFORDABLE AND CLEAN ENERGY
Our strategy is aligned to the BayWa Group's four goals			
• Conserving resources	• Creating quality of life	• Working in partnership	• Sustainable business practices

We are committed to supporting the 17 SDGs toward creating an honest and sustainable world by 2030.

The BayWa sustainability strategy determines the general direction of the Group. BayWa r.e., in turn, seizes on the Group's goals while addressing regional expectations and key challenges specific to its business.

As is the case with BayWa r.e., GroenLeven focuses and structures its sustainability approach according to the Group's goals and aligned with the United Nations SDGs. With its environmental, social and economic aspects, it covers the sustainability outcomes for planet, people and prosperity.

> "Clean energy is the responsibility of our generation. We are actively shaping the future."
>
> BayWa r.e

GOVERNANCE STRUCTURES AND PROCESSES

At GroenLeven, the balance between environmental, social and governance factors is our moral compass. We work as one multidisciplinary team towards the same outcomes.

We have formal governance structures with clear mandates and defined levels of authority. We ensure these bodies are informed at regular intervals about progress and issues.

Employees, suppliers or customers can report unethical behaviour through the confidential whistle-blowing facility at **www.baywa.compcor.de/en**

Shareholders of BayWa r.e. Solar B.V.	Shareholders attend the annual general meeting and vote on resolutions tabled.	One meeting per year
Advisory Board and Functional Advice roles within the Bay-Wa group	We plan to establish an Advisory Board that will consist of independent, non-executive and executive members to provide oversight and ensure the necessary controls are in place to create value for stakeholders over the long term. Furthermore, functional advice members will provide advice on their disciplines.	Quarterly meetings
Chief Executive Officers and Management Board	The Chief Executive Officers (CEOs) provide leadership and are accountable for the effective implementation of the sustainability strategy. They are also accountable for the effective execution of marketing and communication, management and office support, health, safety, environmental and quality (HSEQ), human capital and new business. The Management Board is responsible for GroenLeven's long-term value creation and developed the sustainability strategy accordingly. The Management Board consists of the two CEOs and the following: • Chief Operating Officer, responsible for the project management of energy projects, technical operations, procurement and engineering, operations energy solutions, operation and maintenance services, and asset management. • Chief Commercial Officer, responsible for the commercial aspects of energy projects, relationship management, sales and business development for energy solutions. • Chief Financial Officer, responsible for treasury, control, tax and administration, project finance, project sales, power purchase agreements and guarantees of origin, information technology, legal, risk and insurance.	Weekly meetings

"GroenLeven receives social money (subsidies), and therefore should also effort a loss-making project if the business can realise sustainable energy generation. And that's what GroenLeven does. As a company, GroenLeven must remain liquid while also installing as much renewable energy as possible. This means keeping your eyes on the horizon and adjusting your plans to get there. It's not about projecting forward from where we are now. We all have to take some pain now, otherwise the future pain will be too much."

Kristel Lammers
Managing Director, Regional Energy Strategy

Materiality determination process

To contribute to a successful energy transition, we need to focus on those matters that will create the most value during the transition process. We want to achieve positive impacts, and need to know how to avoid or mitigate areas that will erode value for our business, stakeholders and society at large.

STEP 1
DESK RESEARCH →
STEP 2
STAKEHOLDER CONSULTATION →
STEP 3
REVIEW BY THE BOARD

We followed a process that enabled us to better understand emerging opportunities and risks, strengthened our engagement with key stakeholders, and distilled the key issues and resources necessary for success.

We started our first environmental, social and governance (ESG) materiality assessment in October 2021. This is the route we followed to end up with six top material matters:

STEP 1

We started our materiality process with desk research. We analysed BayWa's materiality matrix to identify themes that might also be relevant for GroenLeven and then considered five industry peers' 2020 sustainability reports. This gave us an overview of common material topics. The SASB standard on Solar Technology and Project Developers provided further input on sustainability issues that are most likely to impact the operating performance or financial condition of a typical company in our industry, regardless of location.

We further considered the upcoming EU Corporate Sustainability Reporting Directive and Taxonomy regulation and potential mandatory reporting topics. New sustainability reporting standards are expected to be published in October 2022.

The outcome of this phase was a long list of potential material topics.

STEP 2

We consulted with internal stakeholders and asked them to rank the longlist of material topics according to the five most important and the five least important topics. This gave us an indication of the relative importance of the topics and was used to confirm the key material matters. In addition, the internal stakeholders were asked to consider which topics external stakeholders value most, to get an initial perspective on this.

Next, we did in-depth interviews with external stakeholders, which included amongst others Triodos Bank, farmer-client Jan Reinier de Jong and Kristel Lammers (Regional Energy Strategy).. The interviews explored respondents' points of view, experiences, and perspectives on GroenLeven. Interviewees were, for example, asked about their relationship with GroenLeven, the importance of sustainability and potential benefits for the stakeholder, as well as future expectations in terms of sustainability. Further discussion focused on proposed material topics and their importance for each stakeholder.

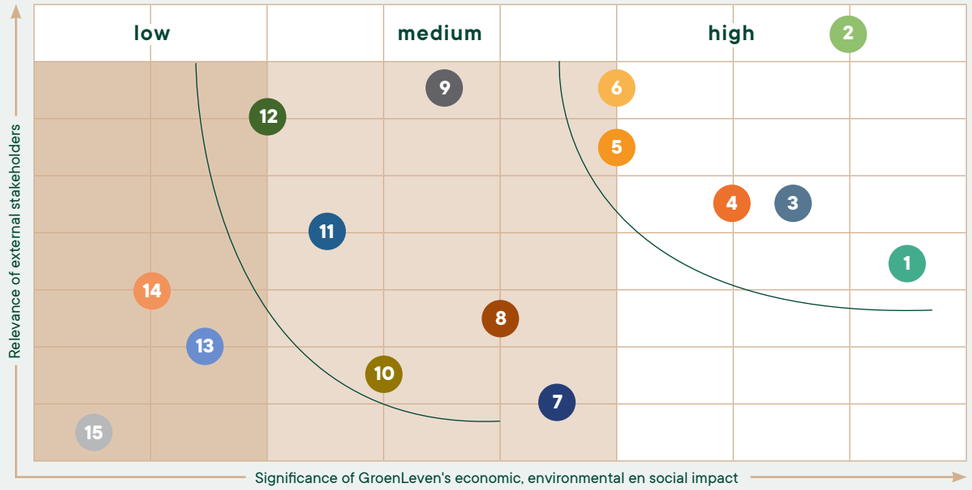
The outcome of this phase was a materiality matrix showing 15 material matters according to their potential influence and the significance of their impact.

STEP 3

The GroenLeven Management Board considered the materiality matrix in terms of relevance for external stakeholders and the significance of GroenLeven's economic, environmental and social impact. Six themes were identified as the most material.

In the sections that follow we focus on the six topics that were identified as the most material for GroenLeven. However, we are mindful of matters such as the circular economy that also emerged as highly relevant to our external stakeholders. This topic relates particularly to measuring, understanding, and preventing waste, reusing and recycling, and including a circular approach in product design and procurement processes. We intend to expand our disclosure on this topic in future reports.

MATERIALITY MATRIX



1. Innovative solutions for clean energy technology
2. Ecological impact and conservation of natural habitats
3. Efficient energy supply from renewable sources
4. Occupational health and safety
5. Human rights
6. Local community engagement
7. Employee development
8. Inclusion & diversity
9. Circular economy
10. Availability of skilled workforce
11. (Critical) materials sourcing
12. Compliance with laws and regulation
13. Managing risks, opportunities and investments to strengthen resistance to climate change impacts
14. Reduce energy consumption and GHG-emissions (including scope 3)
15. Anti-corruption

GroenLeven's six material sustainability topics

WHAT OUR EMPLOYEES SAY IS IMPORTANT

"Our aim is to deliver as much clean energy as possible while limiting energy loss in the process."

"We don't want a world filled with renewable energy where nothing grows anymore. We therefore have to care about the environments around our installations."

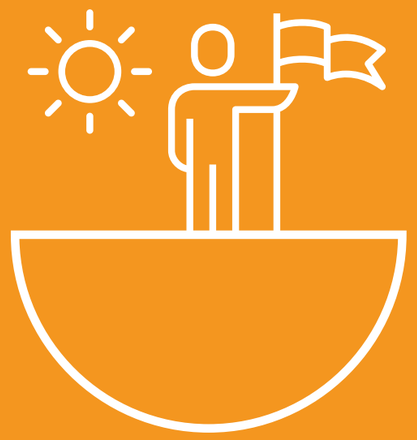
"It would be great if we could address the emissions generated in the production of our products, so we don't offer a solution that is actually worse than the problem."

"Recycling of photovoltaic systems at end-of-life is a big challenge to be solved."

"Ecology and local participations are two of the main topics that GroenLeven is engaging on from a corporate citizen perspective. Pressure in terms of these topics will only increase in years to come."

"Unavailability of energy infrastructure capacity is the biggest obstacle for the addition of more renewable energy and therefore we should pioneer energy storage/ hybrid solutions in our projects."

"We won't be able to achieve these goals if our colleagues cannot function well. To attract and retain good people in a difficult labour market is at the foundation of this industry."



Human rights[7]

We are contributing to a better world by providing sustainable solar options that support the energy transition. More than that, we want to be a responsible, inclusive corporate citizen that respects all human rights. This also means contributing to the UN SDGs through our business and practices.

HUMAN RIGHTS

We are a company that not only works in a sustainable product category but that also cares about people and employees throughout our value chain. We are committed to providing safe environments and taking our responsibility for due care seriously.

However, we also acknowledge the current limitations on full transparency and balance in our supply chain. Our supplier universe includes suppliers of panels, components, inverters, cabling and labour. These products are procured and sourced trough BayWa r.e. from different parts of the world.

Even though human rights are protected by the Universal Declaration of Human Rights, the International Bill of Human Rights, a series of international human rights treaties, constitutions and laws, there are still transgressions. GroenLeven has zero tolerance for any human rights infringements.

First and foremost, there is the unacceptable adverse impact on people. Additionally, human rights contraventions will have a reputational impact that can directly affect GroenLeven's projects, might disrupt our supply chain, and affect our ability to attract good employees.

HUMAN RIGHTS RISK ANALYSIS AND SUPPLIER SCREENING

BayWa is preparing a launch for a new supplier code of conduct (read more on page 47). The code and contractual clauses ensure that the Group complies with the German Human Rights Due Diligence law, and requirements apply to GroenLeven.

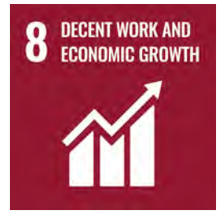
In addition to weekly sanctions and terrorism screenings done by the BayWa Group, we do screening on local suppliers that includes a chamber of commerce check, a review of the supplier's financial statements and a Dutch jurisprudence assessment. The latter includes any legal findings against landowners.

OUR KEY MEASURES TO MITIGATE HUMAN RIGHTS RISKS

We ensure that GroenLeven implements the right control measures to maximise our commitment to zero tolerance for human rights violations. We adhere to the BayWa Group codes and policies, and use the tools and standards available to the global group to continuously improve our monitoring.

This year we included compliance provisions in contractor agreements that set standards relating to employment, living conditions and social security payments to government. One allegation was investigated, but the due diligence indicated no cause for concern.

We continuously strive to mitigate the risks related to labour within supply chains and living conditions and social security for contractors' labour.



We contribute to Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

In particular contributing to target:

- 8.7: Take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour, eradicate forced labour, and by 2025 end child labour in all its forms including recruitment and use of child soldiers

GOVERNANCE OF HUMAN RIGHTS

We have a formal escalation process if a human rights violation incident is reported or discovered. Such a process would start with the affected employee and would then be escalated to the relevant line manager. From there, it has to be reported and will be discussed at the weekly Management Board meeting. Any such incident would also form part of the HSEQ quarterly report to the Advisory Board. Actions to address a human rights violation include a controls assessment, disciplinary action or supplier sanction.

PROGRESS IN 2021

Although we support the intent and work done by the Social and Economic Council of the Netherlands, we did not take up formal membership this year. After various conversations and an extensive legal assessment of the International Responsible Business Conduct (RBC) agreement, we have concluded that GroenLeven is not yet in a position to commit to a social contract where the scope is not fully defined for our industry, and the potential risks are still unknown. We continue gaining information on our supply chain to enable us to make balanced future decisions. GroenLeven still has the intention to join the covenant in the near future and is preparing for this internally.

We are working on expanding our supplier screening to measure and ensure compliance. Screening is currently done by the finance team, but the capability will be rolled out to all operating functions.

Framework agreements are being reviewed to provide for supplier audits, which will include human rights requirements.

FUTURE PRIORITIES

New rules proposed by the European Commission will ensure human rights are protected throughout global value chains. Although adoption might take some time, GroenLeven will use this as a guideline to identify and, where necessary, prevent, end or mitigate adverse impacts of our activities on human rights, such as child labour and exploitation of workers.

One of our first priorities is to formalise our bill of materials and require suppliers to identify the origins of all components. We also support production in the EU.

HUMAN RIGHTS AS PART OF OUR EMPLOYEE CODE OF CONDUCT

All GroenLeven employees are required to adhere to the BayWa code of conduct. The code includes guidelines on upholding human rights:

"...people are always at the centre of our actions, and we always assume responsibility. We therefore consider the globally applicable regulations for the protection of human rights to be fundamental, universally valid requirements. This includes, first and foremost, the prohibition of child labour and forced labour. We treat each other fairly and respectfully and treat colleagues, business partners and customers as we would like to be treated ourselves.

We condemn any form of harassment (for example bullying or sexual harassment), welcome and accept different opinions and attitudes and respect that all colleagues have the same personal rights and responsibilities. We promote a fair and tolerant environment where every individual feels a sense of belonging and acceptance, and has the opportunity to develop their full potential."

The code also emphasises that we naturally respect the personal rights of our employees, business partners and customers. We oppose any kind of discrimination, for example on the basis of ethnic origin, religion, ideology, disability, age, sexual orientation, gender or other personal characteristics.

The code furthermore confirms our compliance commitment. We respect and observe applicable laws as well as the Group's internal regulations. We are committed to complying with the regulations and laws applicable in all countries in which BayWa operates.

BAYWA'S NEW SUPPLIER CODE OF CONDUCT

Prepared for launch in 2022, the new supplier code of conduct is a commitment on behalf of the BayWa Group to an ecologically, ethically and socially responsible corporate governance system. As part of the Group, BayWa r.e. expects corresponding integrity and sustainability both of its direct contractual partners and throughout its supply chain.

The code sets out environmental and human rights standards as required by the German Supply Chain Act. Suppliers have to provide a signed confirmation of compliance and may be audited by BayWa r.e. in this regard.

The code's commitment to human rights and humane working conditions includes:

- The prohibition of child labour and employment of adolescents
- Prohibition of forced or compulsory labour
- Equal opportunities and non-discrimination
- Working hours and remuneration
- Health and safety in the workplace
- Employment of security personnel

The code's commitment to protection of the environment and sustainable use of resources includes:

- Reduction of energy consumption and emissions
- Resource efficiency
- Prohibition of hazardous substances and waste
- Securing basic human needs

The code's commitment to integrity, ethics and anti-corruption includes:

- Data protection and confidentiality

Suppliers and customers can report violations of the Supplier Code of Conduct to BayWa r.e. via the digital whistle-blower system.

"Human rights is one of our top priorities, and we require a continuous in-depth understanding of our value chain to be able to take appropriate action, and as a result, to make the world a better place."

Kerabi Aslan,
Chief Commericial Officer

Ecological impact and conservation of natural habitats[1]

Solar panels are not the only ones using light energy: humans, flora and fauna all rely on the sun for survival. We want to preserve nature while generating energy. We recognise that the arrival of a renewable energy source such as a solar park could influence the environment, including the existing ecology and biodiversity.

ECOLOGICAL IMPACT AND CONSERVATION OF NATURAL HABITATS

We bring mostly positive changes. Consider, for example, the negative impact of agricultural land use against a solar project that converts arable or grassland to more biodiverse areas. We continuously commission and participate in research, studies and tests that prompt innovations to ensure that solar energy and nature can coexist in harmony or even reinforce each other.

We consider the potential ecological impact of our projects in the planning stage when applying for permits, in design and during installation and maintenance. GroenLeven's large scale projects, for example, are recognisable for the fact that there are a minimum of two metres and up to three metres between panels to allow for light and air penetration and movement. We also pay attention to landscape integration by planting indigenous hedges, creating nature-friendly banks and sowing flower-rich herbal mixtures.

We have also started preparing to meet the requirements for the new eco-certified label that will be implemented from 2025.

The certification will focus on guidelines for designing and managing solar parks to create value through biodiversity and soil quality preservation. Solar installations carrying this label will benefit from a social licence and might have the ability to fast track project approvals.

A strong commitment to positive ecological impacts and conservation of natural habitats comes with costs and risks. However, investing in biodiversity aspects is usually a small trade-off compared to the total project costs. Our most significant challenge lies with landowners whose priority is to increase the value of their land per hectare rather than increasing biodiversity. Land associated with endangered species also presents significant challenges for any development.

HOW WE DEFINE AND MEASURE ECOLOGICAL IMPACT AND CONVERSATION OF NATURAL HABITATS

This material topic is about GroenLeven's efforts to manage and protect the natural habitat of species and measures to mitigate our impact. This includes preserving biodiversity in solar parks and preventing deforestation.

KEY 2021 PERFORMANCE INDICATORS

> 10 ecological research projects performed in 2021 with amongst others Hanze Hogeschool Groningen, Ecocean, Deltaris and Wageningen University.

We contribute to Goal 15: Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

We focus on these targets:

- 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
- 15.3: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world
- 15.5: Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

PROGRESS IN 2021

We started investigating how to improve our projects' biodiversity and soil quality in cooperation with Holland Solar and other renewable energy developers this year. This will prepare GroenLeven to obtain the eco-certified label within four years.

More detail on completed projects and projects in process are available on our website: **www.groenleven.nl/projecten**

BIODIVERSITY AND LANDSCAPE INTEGRATION

The large-scale solar installation at Exloo is the best example yet of an integrated ecological GroenLeven project. Eleven of the 65 hectares form an ecological zone that includes nature-friendly banks, amphibian pools, wild fields and bee walls. Various indigenous red list plant species, such as the eglantine and the dune rose, have been planted. Selective milling was also carried out under the supervision of an ecologist to allow decades-old seeds in the peat layer to germinate again. Even the fencing promotes biodiversity by using long-term indigenous herb mixtures at strategic locations, creating so-called 'nectar bars' for bees and insects.

We collaborated extensively with the municipality of Borger-Odoorn to ensure the landscape integration of the solar park based on the diversity of species of the original peat landscape. To speed up the process, heather sheep are grazing between the panels.

In the ecological zone outside the fencing, grazing and mowing will only occur after flowering and only where overgrowing is evident. Within the solar park, a combination of pressure grazing, mowing and storage will be done. This means that the southern part can slowly deteriorate, which is beneficial for biodiversity, while the sheep can spread seeds in the northern part. After two to three years, the grazing method will change so that the positive effects of both management methods can reinforce each other, and resistance in the soil can be prevented.

These combined initiatives at Exloo have a significant positive environmental impact, including lower CO_2 emissions.

RESEARCHING SOLAR PARK IMPACTS

We ask ourselves a range of questions when considering the ecological impact of a solar project. Because our innovations and the technology we use is relatively new, very little research on impacts or biodiversity loss is available. This year we launched a study with Buro Bakker to use Bomhofsplas as a case study to better understand our impact. We want to know: How do we stimulate the ecology surrounding a floating solar park? Do the fish and birds leave the area once the solar panels have been installed, or do they adapt? And if they don't leave, how do they adapt? What influence does the solar park have on the water temperature? And how does that affect aquatic life?

GroenLeven proactively included a range of biodiversity elements in designing the unique floating system at Bomhofsplas. It features glass-glass panels in broad pathways to ensure that sunlight and air continue to reach the surface water. We used bio huts, wooden baskets and shells in the water for hatching fish.

The study looks broadly at impacts, from phytoplankton and plants to fish and birds, above and below water. We know that solar panels can lead to less photosynthesis under surface water, resulting in less food being available. On the other hand, certain fish species take cover under the panels, while reduced wave action through the park could benefit riparian plants and dragonflies.

Specific measurements are taken at different times and analysed according to the different life cycles of flora and fauna.

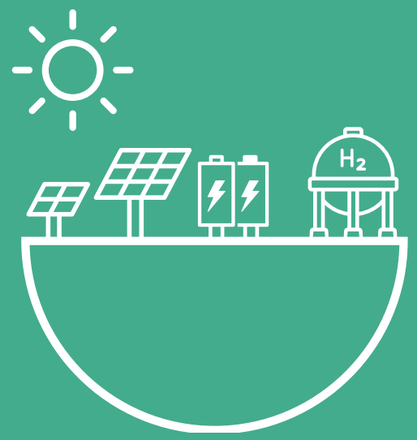
Early results show that the oxygen content under the floating solar panels remains healthy. Water quality proved to be equal to the rate commonly observed in deep pools, with the solar energy system not limiting the formation of a so-called jump layer in the water. The latter forms a boundary between two layers with different temperatures or densities and determines the level of ecological processes under the surface in deep pools.

The chlorophyll-A content that measures the phytoplankton content and thus the nutrient richness remained relatively low. This fits well with the existing data on deep pools.

We will continue the research at Bomhofsplas to determine more longer-term impacts and plan to measure water quality at more GroenLeven floating solar installations.

FUTURE PRIORITIES

We will appoint an ecological expert as a specialist resource for GroenLeven, thereby creating more capacity, planning and focus on mitigating the impact of our projects. We aim to ensure that we develop or convert more projects that include biodiversity aspects in the next year.



Innovative solutions for clean energy technology

Ten years ago, the local renewable energy sector was still in its infancy. Today, it is growing and evolving rapidly, mostly shaped by innovation that meets a growing demand for accessible, affordable and clean energy.

INNOVATIVE SOLUTIONS FOR CLEAN ENERGY TECHNOLOGY

Innovation can help to speed up the energy transition. For GroenLeven, it also creates new sources of competitive advantage. Over the past ten years, examples of innovation included new locations for solar panels (carports, water and fruit farms), setting new standards for quality and safety through continuous improvement and new biodiversity or social benefits. GroenLeven has been a sector pioneer and a leader in many of these innovations. We are truly proud of our track record and the way our innovation capability helps to propel the market forward while granting us a competitive edge.

We've seen widespread adoption of the GroenLeven innovations in the Netherlands, including the roll-out of these technologies by BayWa r.e. There are opportunities to implement these Dutch inventions internationally.

However, innovation is not just in visible infrastructure. We also apply incremental innovation in engineering, funding, managing, and rolling out projects.

GroenLeven is customer-oriented and always strives for a solution that fits the customer's needs. This orientation leads to product innovation. For example: a customer wants to realise a project in an area troubled by grid congestion.

Our team of internal experts and partners would then look for tangible solutions to overcome the issue and still realise the project without jeopardising the business case. We then identify potential partners to help build and test the solution.

We implement the solution with the help of our partners and involve our engineering team's expertise. Throughout the implementation process, we seek ways to streamline and embed the new technology for use in future projects.

We contribute to Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

In particular contributing to target:

- 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

We contribute to Goal 11: Make cities and human settlements inclusive, safe, resilient andsustainable

And Goal 13: Take urgent action to combat climate change and its impacts

In particular, contributing to target:

- 13.2: Integrate climate change measures into national policies, strategies and planning.

PROGRESS IN 2021

AN INNOVATION AGENDA

GroenLeven has been a first-mover on several innovations. These were the outcome of a fairly informal, project-based approach. In the past year, we started formalising our process by establishing an innovation agenda to better direct our planning and resource allocation:

1
We list current potential innovations from a wide range of projects and stakeholders.

2
We rank these innovations based on their proximity to our core business.

3
We categorise these based on their potential impact on our business goals and the investment required.

REFINING FLOATING INSTALLATIONS

We made an array of innovative, small improvements on projects this year, especially for floating installations. These improvements increased energy output and reduced cost, for example in anchoring, cabling, layouts and boat sizes.

NEW CARPORT FEATURES

Raw material supply and cost challenges prompted us to work on carport standardisation, including design improvements requiring less steel. We intend to use materials more efficiently and develop designs and technology applications that are scalable and more sustainable.

A further carport innovation is the multiple benefits we now include in the design. In addition to the fact that carport solar provides shaded parking while generating energy, carports now also feature electric vehicle charging points. Companies that have been unable to transform their fleets to electric cars due to charging point limitations can now install charging points and storage hubs as part of a solar carport solution. By using the solar carport, we optimise connection points and put less strain on the grid.

We also did a lot of work with insurance companies this year to ensure we offer trusted carports that can be fully insured.

MORE DUAL FUNCTION FRUIT

Following the successful dual function innovation at Babberich with raspberry cultivation, we explored the feasibility of solar installations involving different kinds of fruits. The installation allows for the right amount of light for the plants, provides protection from rain, hail, extreme temperatures and too much sunlight, and eliminates the need for plastic covering that has to be replaced annually.

In our research, we collaborated with the Sunbiose consortium which included input from, among others, Wageningen University and Research (WUR), LTO and TNO. WUR would typically monitor plants while TNO provided advice on sunlight requirements. In addition to Sunbiose, we also work with partners such as Fruitmasters and innovative panel suppliers such as Insolight.

Pilot project projects focused on the following:

- raspberries, strawberries and blueberries in 2019 – 2020
- red currants through a 1.5-hectare project in 2021
- apples through a BayWa project in Germany
- pear and cherry in 2022

TAILORED ENERGY SOLUTIONS

High volatility in energy prices and increasing restrictions on the grid have been driving the need for optimised energy systems based on local consumption. This enhances the business case for clients and retains momentum for the energy transition. Finding appropriate storage solutions is an important element in this puzzle. For an increasing number of customers, we are integrating storage into the photovoltaic project. Further electrification options such as electric vehicle adoption, enable innovative, tailor-made solutions.

Innovation is key to finding the right energy solution for customers with different electricity profiles, thereby creating behind-the-meter solutions. Therefore, we leverage the knowledge present at BayWa r.e. with regards to product development, but we also look for local partners to further speed up and strengthen this process.

Storing renewable energy in batteries or hydrogen will soon be economically feasible. In areas where grid capacity is not sufficient, batteries and hydrogen will play a significant role.

Read more about GroenLeven's opportunities in energy landscapes, solutions and partnerships on page 27.

INVESTING IN RESEARCH AND INNOVATION

Five years ago, investors had a low appetite and interest in the local renewable sector. The sector was unregulated, and growth prospects seemed to be capped with the belief that the market would be saturated quickly due to the limited availability of land and overall cost structures. There was little capital available for companies in this sector to grow.

Today, investors are chasing good quality ESG investments. Regulatory interventions, such as Scope 12 inspections, create trust in the sector. Solar technology has proven reliable with a track record of older, well-functioning and dependable installations. People can even visit floating sites during a storm to observe how robust these are. As a result of more trust and exposure to the sector, the cost of capital has come down, and more players are interested in funding research and development.

GroenLeven invested in specific biodiversity research for floating sites in the past year. With the help of an ecological consulting firm, Buro Bakker, we launched a unique study into how the ecology surrounding floating solar parks can be stimulated. We used the Bomhofsplas site – an industrial sand extraction lake above Zwolle and the biggest floating solar installation outside China – to map how flora and fauna respond to a solar park. We expect this research to deliver environmental and social benefits to the surrounding community and habitat. Read more about this study in the section on ecological impact on page 50.

In a further study we partnered with a consortium consisting of Deltares, NIOO-KNAW, Witteveen+Bos, Evides, Indymo, Adamant Solar, Rijkswaterstaat, STOWA, Sovon Vogelonderzoek and the Hanze University of Applied Science. This project investigates the direct and indirect effects of solar parks on water. This can potentially lead to new thinking and innovation to improve floating park installations.

We use the outcome of research projects to refine our project plans, improve efficiency and develop new solutions in support of our mission to deliver a cleaner and better world for future generations.

THE EXLOO TELESCOPE SOLUTION

At the solar park near Exloo, GroenLeven faced a unique technical challenge. The installation of 136.000 solar panels was in the vicinity of a very sensitive low-frequency array (LOFAR) telescope. The telescope forms part of the largest radio telescope in the world and uses low frequencies to explore the first galaxies, black holes and gas clouds. We had to ensure that the solar installation did not interfere with the telescope. We reduced the electromagnetic field per invertor to an extremely low level. With the help of Huawei, special filters were developed to reduce the electromagnetic field. With the help of Mannen van Staal, we also designed a Faraday cage and used special filters on the outgoing cables. This solution was built, tested, piloted and implemented on-site.

The technical innovation exceeded the telescope requirements and might have future applications in other aspects of our solar installations.

THE HYDROGEN OPPORTUNITY

With the rapid growth of renewable energy, one of the sector's most significant challenges is the timing of supply vs demand and the fact that energy can only be produced when the sun is shining.

To allow a better balance between supply and demand, the market for storage becomes increasingly attractive for GroenLeven. We are tracking developments in other markets as we prepare for the impact of breakthrough storage solutions. Hydrogen is one of the most promising innovations in storing energy. It can also reduce grid congestion as hydrogen-based fuels can be used to transport energy from low to high demand areas.

GroenLeven partnered with network company Alliander to develop a pilot installation that converts sustainably produced electricity into green hydrogen. The long-term intent is to generate energy through large-scale solar installations in areas with insufficient grid capacity. When there is surplus energy available that cannot be absorbed by the grid, an electrolyser converts the solar energy into hydrogen. In this way, renewable energy can be stored locally in a sustainable form.

The outcome of the pilot will be assessed in terms of commercial opportunity and feasibility. It can potentially make a significant contribution to our intent to think big and do good. Read more about the partnership for this innovation in the leadership report on page 10.

COMMUNITY OWNERSHIP AND BENEFITS

The floating solar park at Oudehaske delivered a lot more than just solar energy to the local community in 2021. GroenLeven followed an inclusive process in developing the project, with the intent to drive local ownership and activate community interest.

Oudehaske floating solar park, developed in collaboration with the VM Group and the municipality of Heerenveen, supplies renewable energy to about 2.000 households. In November 2021, the Heerenveense Energy Cooperative and Fûns Skjinne Fryske Enerzjy acquired the floating solar park from GroenLeven and BayWa r.e.

This enabled local, collective ownership of a long-term renewable asset that generates income for their members. It thus allows communities to become significant players in the energy market and transition.

Oudehaske is the tenth floating solar park that GroenLeven completed.

Read more about local community involvement in solar energy projects from page 74.

FUTURE PRIORITIES

We are in the process of researching and developing several new solutions, whereby we strive to:

- apply dual functions to optimise unused land
- achieve cost efficiency by supplying low-cost energy to the market
- be sensitive to the landscape
- enable social participation

We remain committed to a partnership approach, including for greenhouses and new types of panels that will increase the energy yield while reducing the amount of silver required. As always, we continue to find and build relationships s based on trust and mutual benefit through innovation.

"At Triodos Bank, we take a holistic view of sustainability and link it to the SDGs. We developed our own balanced scorecard and rate our clients at least annually. What we see with GroenLeven is more focus on dual land use than any other developer. And it's real dual-use, not just three sheep beneath some solar panels. We also rate GroenLeven high for sustainability throughout the business, for example, with your new office building, innovations such as the floating projects, hydrogen and see you as a frontrunner in the market. You don't take what's in the market but develop solutions yourself."

Harold Hofenk and Jackelien Vries
Triodos Bank

Efficient energy supply from renewable sources

We want to ensure that we supply clean energy in the most efficient way, so that our operations do not cause harm to the environment and society in other ways. We optimise our installations by using new technology, careful planning and continuous improvement in execution.

EFFICIENT ENERGY SUPPLY FROM RENEWABLE SOURCES

At GroenLeven, efficiency is not only about improving margins. Efficiency is about better quality, design, maintenance and safety.

When GroenLeven started installing solar modules, the sunlight conversation rate into energy was much lower than today. We had made significant progress in managing losses, based on extensive studies done for every park and installation over the years. As we gained more experience, applied new technology, standardised and improved installation speed, we achieved significantly better conversion rates.

"We need to always ask ourselves: what do other stakeholders see as value? Efficient energy supply is not only about a better margin. It's about doing every project better in every way."

Joep Sparidaens
Head of Operations Energy Solutions

HOW WE DEFINE AND MEASURE EFFICIENCY

This material topic is about ensuring reliable supply while improving energy efficiency. This includes minimizing network losses and managing the risks associated with integration into existing energy infrastructure.

KEY 2021 PERFORMANCE INDICATORS

621.227 solar panels installed

294,3 MWp installed

*147.256 ton CO_2 emission reduction achieved with the installation of solar energy**

79 solar projects constructed in 2021 of which 10 are large scale projects 69 are rooftop projects

*96.000 households can be provided with solar energy from GroenLeven***

*Based on a CO_2 conversion factor of 0,556 kg CO_2/kWh (grey electricity)
**Based on the Dutch average electricity consumption of 2750 kWh per household per year.

We contribute to Goal 7: Ensure access to affordable, reliable, sustainable, and modern energy for all

In particular, contributing to target:

- 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix by 2030

And Goal 13: Take urgent action to combat climate change and its impacts

In particular, contributing to target:

- 13.2: Integrate climate change measures into national policies, strategies and planning.

PROGRESS IN 2021

OPTIMISING THE SUPPLY CHAIN

In the past two years, we invested in new extended trucks that cause lower emissions and offer better fuel efficiency. These long trucks are well suited to transport solar panels and building material. We are also now using electric forklifts.

FASTER CONSTRUCTION

Our first floating solar park encompassed 1.5 hectares and 5.000 solar panels, and took almost six weeks to construct. In 2021 we covered 24 hectares and more than 70.000 solar panels in seven weeks. Efficiency gains resulted from better planning, improved logistics and material availability on-site, and the use of innovative conveyor solutions into the water.

LESS DISRUPTION

Faster construction reduces the disruptions caused by installation, for example, in the movement of trucks, noise pollution and impacts on the environment. We tread lightly by using energy-neutral construction using solar energy to provide temporary power for equipment, tools and administration requirements.

LOWER COST FOR CONSUMERS

Taking inflation into account, we have been able to cut the cost of similar systems over the past two years. This is due to a combination of more efficient energy conversion, better loss management, more efficient mounting structures and better-skilled employees. Better quality installations now come at a lower comparable cost for customers, thereby making solar energy more affordable for more people.

OUR EFFICIENCY CREATES VALUE FOR CUSTOMERS

The decision to invest in solar energy can be daunting for landowners, farmers and businesses. They are faced with complex considerations, including location, subsidies, financing and aesthetics. Over ten years, GroenLeven has built up the experience, capability and insight to guide customers through an efficient process, and advise them on the best decisions, suited to their needs.

This results in the best chances for success in obtaining the highest funding, the most energy generated for the least space, and the highest returns on investment. The outcome is less climate impact and more benefits for society.

FUTURE PRIORITIES

We are looking at using more prefabricated elements to reduce building time. This will enable us to have fewer employees on-site, leading to better safety and, for example, less time on roofs, which are dangerous, especially in bad weather.

With the current supply chain challenges and scarcity in some components, we are looking at longer lead times and better capacity planning, despite uncertainties. We will maintain intense engagement with network operators to manage potential connection delays and congestion challenges.

"Grid congestion means that an installation ends up standing there unused, and not generating any income. We sometimes have to find creative solutions, for example working with a temporary connection to make use of the installation. And all of this is delaying the energy transition and thus providing the Dutch people with more renewable energy."

Willem Biesheuvel
Head of Project Management

Occupational health and safety

GroenLeven is committed to conducting our business activities with no harm to people, no damage to and care of the environment. This means continuously listening to our stakeholders and achieving the highest quality assurance and control standards.

OCCUPATIONAL HEALTH AND SAFETY

We want to deliver a cleaner world to the next generations by taking constant care of our environment and complying with environmental legislation, including a specific focus on occupational health and safety. We believe that incidents are preventable and that a collaborative effort from professional and responsible individuals will drive this ambition. If we create a safe environment, it supports a working culture that attracts and retains employees.

Due to the nature of our business, employees and contractors are required to work on rooftops, on water and in other potentially dangerous situations, handling heavy equipment and being on sites with a variety of materials and machinery. We have a duty of care and legislative requirement to keep people safe.

For every project that we start, we have a meeting with the contractors to go through the potential hazards and risks, making sure they can prevent harm and follow our safety guidelines.

HOW WE DEFINE AND MEASURE OCCUPATIONAL HEALTH AND SAFETY

This material topic is about ensuring healthy and safe working conditions for people. Healthy and safe working conditions are recognised as a human right and addressed in authoritative intergovernmental instruments such as the International Labor Organization (ILO) and the OECD.

KEY 2021 PERFORMANCE INDICATORS

2 registered incidents related to H&S

35 workplace inspections between June and December 2021*

4,33 lost time injury frequency rate (LTIFR)

* A workplace inspection is an inspection of a project site, installation, or workplace in which the focus is on identifying situations that are unsafe or impose a risk of becoming unsafe over time. In addition, the inspection focuses on whether the people present work in accordance with the agreements made in the health and safety plan and in accordance with legal requirements.

We contribute to Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

In particular contributing to target:

- 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular, women migrants, and those in precarious employment

OUR POLICY STATEMENT

GroenLeven has an HSEQ policy that applies to all employees and freelancers. It sets out accountability for ensuring the health and safety of others and ourselves through a commitment to our HSEQ Standards.

Principles in the policy include:

- Maintaining and strengthening stakeholder relationships, understanding and meeting their needs and expectations, and creating value for all.
- Enhance CO2 reduction by using environmentally friendly machinery and materials.
- Actively develop flora and fauna protection.
- Taking care of our people in all work-related activities through risk identification, assessment and management of processes.
- Zero accident and incident philosophy.
- Being a leader in our industry by means of excellent operational equipment, competent employees and the highest possible standards.
- Continuous improvement of our integrated management system by the Plan-Do-Check-Act cycle.

To support the implementation of the policy, GroenLeven has an integrated management system that fulfils the requirements from ISO 9001, 14001 and the Veiligheid Checklist Aannemers (VCA-P) management system. The HSEQ team tracks a set of quarterly indicators and reports on these to the Management Board.

CERTIFICATION

GroenLeven has been certified according to the following standards:

- ISO 9001 (quality assurance)
- ISO 14001 (environmental management)
- VCA-P Dutch standard for creating a healthy and safe working environment
- Install-Q standard for electrical and PV installations

"This is my first year at GroenLeven, and it's been so positive. The people at GroenLeven have been so willing to embrace health and safety. As with all things here, people might not be aware of something they need to know, but as soon as you tell them there is no resistance, and they just take it on!"

Juliette de Bruin
HSEQ Manager

CREATING A REPORTING CULTURE

We do things properly. Our processes are all clearly described, and the appropriate documentation is available to the right people at the right time.

In 2021 we started using Quentic, which is fully integrated with BayWa r.e. as our reporting system for health and safety. The system enables users to handle occupational safety, sustainability and environmental and quality management digitally. Despite being very willing to use the system, employees were initially unsure what and how to report. After a few training sessions on risk assessment, auditing and incident reporting, the quality and number of reports went up dramatically. Now we can start focusing on increasing environmental awareness and emergency response plans.

Whereas GroenLeven's approach has been more towards fixing rather than reporting incidents, this is changing as people start seeing value in reporting trends and statistical profiles. The 2021 data provided us with a solid baseline. Our focus now is shifting to preventative action based on root cause analysis. This will further improve our safety record and commitment to zero incidents.

CONTRACTOR ACCOUNTABILITY FOR HEALTH AND SAFETY

Contractors play an important role in GroenLeven as many projects are executed with their assistance. In 2021, 47% of incidents, non-conformities and near-miss incidents showed contractor involvement. Therefore, they are critical stakeholders in ensuring safe worksites that meet our objective of zero incidents.

GroenLeven developed and introduced a new guideline for managing (sub)contractors that was rolled out in November 2021. The guideline aims to ensure that competent contractors are contracted and that they will comply with GroenLeven's safety rules and applicable regulations throughout the contract period. This includes ensuring that their equipment is in good condition and is fit for purpose.

As part of the rollout, we held internal training sessions for operational employees, communicated about guidelines with contractors at review meetings and set our expectations for implementation within six months.

We are committed to working with contractors that have been verified and approved through our selection process. We require, for example, that all contractors have a VCA or ISO45001 certificate.

Following the rollout of the new guideline, we have started measuring contractor performance in Quentic and through workplace inspection analyses. The results of the workplace inspections are analysed to identify the top five most frequently observed non-conformities for every quarter. For these, we develop actions plans to improve the situation, which are communicated to all parties involved. GroenLeven actively monitors follow-up of these actions.

The results of the workplace inspections are used as input for a final evaluation of the contractors, which also includes KPIs related to price, quality, and flexibility. The contractors are scored according to these performance indicators. If the required improvements are not achieved, GroenLeven will terminate the relationship. This has resulted in more robust reporting, especially for the rooftops segment, where we have a larger number of contractors.

2021 PROGRESS HIGHLIGHTS

- COVID–19 monitoring continued with preventative measures fully implemented and now seen as part of good business practice
- Safety training and awareness sessions were held on topics such as risk awareness, incidents, ISO 9001 and ISO 14001 [Consider defining and describing training]
- Keeping health and safety top of mind through new HSEQ departments, participation in management, operational and project level meetings, and HSE coaches on project sites
- All new employees now receive a formal HSEQ induction that includes Quentic registration

FUTURE PRIORITIES

We have a 2022 dashboard that sets out our health and safety objectives and how these will be measured. The objectives include:

- Zero incidents, focusing on workplace inspections and transfer of skills
- Health and safety awareness through inductions, inspections and the implementation of a safety culture
- Environmental awareness and reporting, including a successful ISO14001 audit
- Quality improvements in recording and responding to incidents

Local community engagement

When it comes to solar energy projects, local communities want to have a voice. They want to be involved and want to understand the reason for decisions as some of the impacts and unintended consequences can trigger quite intense emotional responses. We have learnt that it is important for GroenLeven and communities to listen to each other's viewpoints and then decide how to align and proceed.

LOCAL COMMUNITY ENGAGEMENT

Our commitment is to build relationships based on our value of being sincere: we want to do the right thing, with integrity, in order to pass on a beautiful, sustainable environment to the next generations to come.

The local community is an important stakeholder in obtaining a permit for new large scale solar developments. Depending on the zoning for a particular area, the municipality awards permits and follows a participative process to consider any objections from the community.

COMMUNITY INVESTMENT

In our engagement with communities, we might agree to invest beyond just providing renewable energy solutions. Working with local councils, our agreement may include, for example, developing recreational areas for children or creating a local renewable energy fund through rebates.

LOCAL OWNERSHIP AND SUPPLIERS

The National Energy and Climate Plan features a 50% local ownership goal for renewable electricity production in the local environment, for example by involving local citizens and businesses, by 2030.

GroenLeven supports local ownership and has achieved this for several projects. Even though it is in most cases more efficient and more profitable to contract with a professional investor – where the necessary structures and contracting capability are already in place – we often commit to local ownership. This might be riskier and more time consuming, but we believe it is the right thing to do.

Solar project constructions are short term interventions when considering economic impact, for example in job creation. There is an initial investment, followed by a long period of low operational expenditure. We therefore involve as many local contractors as possible for the initial phase. For example, we almost always use local contractors for waste management and site security on large scale projects. Local suppliers know the area and the civil works, and are best positioned to deliver this service.

Our community investments are transparent and adhere to our ethical code of conduct. We believe in giving back to society in a meaningful way. For GroenLeven, it is not just about profit but about win-win relationships.

Communication is a key element of our community engagement. We use a variety of media and channels to provide information on our local projects. In some cases, we proactively engage with environmental organisations when planning a project. During the construction phase, we endeavour to invite the local community and take them on a site tour. These initiatives help us understand and get to know the community and enable us to live our values.

HOW WE DEFINE AND MEASURE LOCAL COMMUNITY INVOLVEMENT

This material topic is about GroenLeven's economic impacts and the broader societal benefits we can offer local communities. It also relates to respecting the rights of broader society and mitigating any negative economic impacts.

KEY 2021 PERFORMANCE INDICATORS

At all large scale projects, local businesses were involved in the construction in 2021.

* We define local businesses as those within 30 km of a project.

Although we are already working with several local suppliers during construction, this is still small compared to the total project size. As such, we are working on a meaningful way to define, measure and plan for local business involvement and local community engagement. This will assist us in improving our local footprint and economic impact in the medium and longer term. Our aim is to show progress in a reliable and accountable way on this material topic.

We contribute to Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

"The local environment and nature are important topics on which everyone engages. So, the more involved we are with the local environment and nature, the more we help protect and better embrace the local community."

Willem Biesheuvel
Head of Project Management

PROGRESS IN 2021

For each solar project, a wide range of data is collected, and adjusted for local community issues or risks. In the case of the floating solar project Sellingen, we worked with a well-established consultancy with ecological expertise, and engaged a local bird counter to assist with data collection. Having a local specialist on our team brought local knowledge, historical insights and ensured a more nuanced response.

We continued our joint research with the University of Wageningen on our solar park at Appelscha to develop the eco-certified label, which will include a requirement for local engagement. Our solar parks at Exloo, Appelscha and Bomhofsplas form part of the study.

LOCAL SOLAR OWNERSHIP

We are gaining more experience and success in transferring ownership of solar parks to local entities. This ensures that the positive economic benefits of our projects create direct value for the community where the park is located.

The Bomhofsplas floating solar park was sold to the local energy cooperative Blauwvinger with the help of Energiefonds Overijssel and local investors. It is the largest floating solar park purchase concluded in the EU. The transaction transitions the ownership of the floating solar park from GroenLeven to the local Zwolle energy cooperative Blauwvinger which became responsible for supplying renewable power to more than 7.000 households on 1 July 2021.

The Beilen floating solar park, which was built in 2021, was sold to local partners, Coöperatie Project de Mussels U.A. and Waterschap Drents Overijsselse Delta in 2022. The solar park features 40.000 panels and delivers renewable energy to about 5.000 households while generating income for local players.

A community fund was created at the Exloo solar park, with GroenLeven making a financial contribution. Money from the fund will be used for initiatives that contribute to local social and sustainability projects. GroenLeven also contributed to improved energy supply to the open-air swimming pool as a further value-adding initiative. We are also planning a crowdfunding initiative where interested parties from the local community can participate in ownership.

At the Oudehaske floating solar farm, we transferred ownership of the 17.000 solar panels to a local energy corporation. We established the solar farm together with VM Group and the municipality of Heerenveen on the sand extraction lake in Oudehaske. We went even further and offered residents at the solar park the opportunity to buy solar panels and inverters at discount prices.

The local ownership commitment forms part of the early planning phase and can even be a permit requirement for some of the large-scale projects. Local energy corporations are becoming more active project partners and potential owners.

VALUE MULTIPLIERS FOR EXLOO

The Exloo solar park demonstrates the positive outcome of local collaboration and innovation. It ensures better use of land and income for farmers, contributed to the energy transition for the local community, and will enable local ownership and community benefits through crowdfunding.

Local farmers pooled high-risk agricultural land, thus providing the municipality with a broader choice for selecting the best solar park location. The farmers that participated were assured of a fee even if the park was not built on their land. For this purpose, a unique option fee system was applied.

To address environmental and landscape concerns from the local community, a large part of the solar park has been sown with a herb-rich mixture, and additional bee hotels have been placed on the site.

GroenLeven made financial resources available to the Exloo area fund, which invests in sustainable and social initiatives in the vicinity. We also contributed to the Exloo outdoor swimming pool.

Various local stakeholders remain involved. For example, local partner Avitec from the municipality of Borger Odoorn is responsible for the civil work for the project. The bee hotels are built by Leerbouwen from Groningen, and a unique inverter cabinet has been developed and produced by Mannen van Staal from Leeuwarden.

FUTURE PRIORITIES

For all our projects, we are committed to extending the positive and limiting negative economic impacts. Our approach is to learn from every project and apply newly tested solutions to the next project. This also aligns with our value of being resourceful and fulfilling innovative dual functions.

We are continuously strengthening our local procurement relationships as these bring us closer to the community and optimise the project through shorter routes and lower impacts.

“I am a farmer and one of the first GroenLeven clients installing a big solar system. The challenge for your business is to build relationships. You do an installation, but once you are done, and it's working, the relationship is mostly over. You should know that farmers use a lot of energy, and using solar makes sense. There is an opportunity for GroenLeven to look at other kinds of energy solutions. For us, once you have worked with GroenLeven, you stay with GroenLeven.”

Jan Reinier de Jong
Farmer in Odoorn

Key definitions and calculations

Agricultural rooftops	Rooftops on agricultural businesses.
Bill of materials	List of items needed to manufacture a product.
Constructed projects	Projects which are constructed during the reporting year.
CO_2 emissions	Carbon Dioxide emissions are the gases released in the atmosphere from burning fossil fuels: coal, oil, and natural gas
Directive 2014/95/EU	The Non-Financial Reporting Directive (NFRD) that lays down the rules on disclosure of non-financial and diversity information by certain large companies. This directive amends the Accounting Directive 2013/34/EU.
Dual function approach	The combination of an existing function extended with a PV system.
Dutch Energy Agreement for Sustainable Growth	https://ap.lc/bdtDR
Dutch National Climate Agreement	https://www.klimaatakkoord.nl/documenten/publicaties/2019/06/28/national-climate-agreement-the-netherlands
Ecological impact	Any extraction, removal, withdrawal, elimination or subtraction from, insertion, deposition, discharge, emission, release or other addition to, onto or into, or other activity resulting in a change to, of or in any ecological system or any feature, function or component of an ecological system.
Ecological research	The process in which a development site is assessed and analyzed over time to gain insight into the ecological impact of the project in the project area.
Energy Investment Tax Credit	A corporate tax credit that is applicable to commercial, industrial, utility, and agricultural sectors. Eligible technologies for the EITC are solar water heat, solar space heat, solar thermal electric, solar thermal process heat, photovoltaics, wind, biomass, geothermal electric, fuel cells, geothermal heat pumps, CHP/cogeneration, solar hybrid lighting, microturbines, and geothermal direct-use.
Energy transition	The global energy sector's shift from fossil-based systems of energy production and consumption — including oil, natural gas and coal — to renewable energy sources like wind and solar, as well as lithium-ion batteries.
EU CSRD	The proposal for the Corporate Sustainability Reporting Directive, adopted by the European Commission on 21 April 2021, which would amend the existing reporting requirements of the NFRD. The Commission's proposal for a CSRD envisages the adoption of EU sustainability reporting standards, which are developed by the European Financial Reporting Advisory Group (EFRAG).
EU Taxonomy	The EU Taxonomy Regulation is a reporting regulation introducing a classification method under which subjects must report their contribution to one out of six environmental objectives.
Floating solar farms	A formation of solar panels on construction that floats on a body of water, in most cases an artificial basin or a lake.
Framework agreement	Arrangements between one or more buyers and one or more suppliers that provide the terms governing contracts to be established for a certain period of time.
Free-field developments	Development of large scale PV system on unused plots.
Greenhouse gas (GHG) emissions	Greenhouse gas emissions from human activities strengthen the greenhouse effect, causing climate change. The most contributing gas is carbon dioxide from burning fossil fuels: coal, oil, and natural gas.
GRI	The Global Reporting Initiative is an international independent standards organization that helps businesses, governments and other organizations understand and communicate their impacts on issues such as climate change, human rights and corruption.

Integrated reporting	Integrated reporting is a complete report of components involved in the creation of a company value over the short, medium, and long term. Integrated reporting comprises communication of financial capital and non-financial capital contributing to the creation of organizational value. Financial capital and non-financial factors, such as human capital skills, intellectual capital, and social reputation, shape the value of an organization.
ISO certification	The International Organization for Standardization is an international standard-setting body composed of representatives from various national standards organizations. For example, the ISO 9000 family of quality management systems (QMS) is a set of standards that helps organizations ensure they meet customer and other stakeholder needs within statutory and regulatory requirements related to a product or service.
Large scale projects	PV systems with an average size > 10 Mwp.
Local community	Persons or groups of persons living and/or working in any areas that are economically, socially or environmentally impacted (positively or negatively) by an organization's operations.
Local ownership	Transfer of shares in the operating SPV to an established entity managed by, or for local residents.
Logistic rooftops	These roofs are often flat, free of objects and have sufficient size, so they are perfectly suitable for large installations.
Lost time injury frequency rate (LTIFR)	The number of workplace injuries that resulted in an employee's inability to work relative to the total number of worked hours in the accounting period.
Materiality assessment	A tool used to identify and prioritize potential Environmental, Social, and Governance (ESG) issues that are critical to an organization's success, linking into the organization's ESG strategy. GRI defines material topics as: 'topics that represent the organization's most significant impacts on the economy, environment, and people, including impacts on their human rights'.
Plan-Do-Check-Act cycle	Method to step-by-step improve your performance.
Project development agreement (PDA)	Documents that work together to govern the relationship between the landowner and the party (or parties) constructing and operating the solar power project. These agreements are sometimes called "solar leases," "solar easements," or "solar power contracts."

Renewable Energy Grant Scheme (SDE+)	The SDE+ scheme is an operating subsidy which means that the party who produces energy receives the subsidy for the sustainable energy that is generated. The generation of sustainable energy is often higher than the generation of energy from fossil fuels. Therefore, it is not always possible to have a profitable business case for generating sustainable energy. It is now replaced by the SDE++ scheme.
SASB	The Sustainability Accounting Standards Board (SASB) is a non-profit organization, founded in 2011 by Jean Rogers to develop sustainability accounting standards.
Scope 12	An inspection of solar panels and solar power installations based on various standards, including NEN 1010, NEN-EN-IEC 62446-1, NEN-EN-IEC 61439-1, NEN-EN-IEC 62305, NEN 3140.
SDGs	The Sustainable Development Goals are a collection of 17 interlinked global goals designed to be a "blueprint to achieve a better and more sustainable future for all". The SDGs were set up in 2015 by the United Nations General Assembly and are intended to be achieved by 2030.
Special Purpose Vehicles (SPVs)	An SPV is a legal entity (usually a limited company of some type or, sometimes, a limited partnership) created to fulfil narrow, specific or temporary objectives. SPVs are typically used by companies to isolate the firm from financial risk.
Supplier screening	Supplier screening is an activity to identify risks when conducting business with a new supplier. A supplier screening can consist of the following steps: 1. Business license 2. Product test reports / Certificates 3. Quality management system certification (e.g. ISO 9001) 4. Social compliance audit reports (e.g. BSCI)
Sustainable energy investment grants (ISDE)	The Sustainable Energy Investment Grant (ISDE) stimulates both households and companies to use less gas and more sustainable heat. It is applicable for individuals and business users within the Netherlands.
Workplace inspections	A workplace inspection is an inspection of a project site, installation, or workplace in which the focus is on identifying situations that are unsafe or impose a risk of becoming unsafe over time. In addition, the inspection focuses on whether the people present work in accordance with the agreements made in the health and safety plan and in accordance with legal requirements.

2021

COLOPHON GROENLEVEN SUSTAINABILITY REPORT 2021

Content: GroenLeven | **Concept and design:** NEWR agency
Photography: GroenLeven, PixelBrouwers en Fotopersburo Heerenveen