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VAN LANSCHOT  
KEMPEN

INVESTMENT MANAGEMENT

Kempenn SDG Farmland Fund

# Annual Sustainability Report 2022

June 2023





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# Dear Investors,

We are pleased to present the Sustainability Report of the Van Lanschot Kempen SDG Farmland Fund. In it, we report on the progress we have made on our path to positive environmental and social impact.

The importance of shifting to more sustainable, regenerative agriculture and land conservation for achieving the United Nations Sustainable Development Goals (SDGs) should be widely known. We are committed to promoting sound agricultural practises and strongly believe that sustainable agriculture has the potential to improve environmental, economic and social well-being, both at the core of the agricultural community and beyond.

In this report, we also address the challenges we face in implementing sustainable practises and how these hurdles can be overcome. We are proud of what we have achieved so far, but we also know that we are only at the beginning of this journey and that there is still much work ahead. Changing 'big agriculture' requires a paradigm shift and involves many small steps towards a sustainable system. We hope that this report will be a useful resource for those who want to learn more about SDG Farmland's Fund for Sustainable Agriculture and how it can contribute to achieving the SDGs.

## The Van Lanschot Kempen Private Markets team



Richard Jacobs



Edzard Potgieser



Tim van den Pol



Sven Smeets



Bram Bikker



Jorrit Willigers



# 2022 in Review




# SDG Farmland Fund - Highlights 2022

**3.2m kg**  
Residue free olive oil



produced in Portugal

**4.9%**  
Of all arable land  
designated as  
nature reserve or  
areas of high  
biodiversity




**1,027** soil samples  
taken




to determine soil health and  
nutrient efficiency

**100%**  
of the assets are  
deforestation free



**Koalas**  
Roam freely in  
habitat that runs  
through  
The Watermark



We report on  
**14,491**  
hectares of land




that is surveyed and managed

**67%** of the  
assets have  
sensitive eco-  
systems we take attentive  
care of



**100%**  
of the assets work with a  
sustainability plan



\*Source: Van Lanschot Kempen IM and local partners, data as per 31/12/2022



# Making a headway to sustainable farming practices

This report is the first of its kind and aims to provide a framework for measuring sustainability in line with Leading Harvest's sustainability principles, that ultimately support our chosen Sustainable Development Goals (SDGs)\*. The purpose is to measure progress against our key performance indicators (KPIs) and to ensure we are making meaningful headway towards sustainable farming practices.

2022 is the first year where we have collected a full set of data from our farms in a comprehensive and systematic manner. Therefore, this report sets a baseline for all the metrics that we have prioritised so far for the various countries and crops that are in our portfolio. On the next page, you will be able to see some of the quantitative highlights of 2022 at a glance. The profitability of farming in 2022 has been high, particularly in Australia and the United States. However, there are also numerous economic uncertainties facing the world and affecting the global food supply. From disruptions caused by Russia's aggression against Ukraine to climate-related problems in all parts of the world. This highlights the fragility of the global food supply system and the importance of sustainable agricultural practices to ensure access to fertile farmland now and in the future. This in turn, highlights the need to achieve our goals and bring about a change in the farming system and mindset: turning conventional farming to conservation or regenerative farming.

We believe the change in system requires a paradigm shift in farming and our aim is to demonstrate the longer term environmental, social (health and wellbeing) and ultimately also financial benefits of this shift, with data and convincing examples.

After several field visits and discussions with next generation farmers, we have found that our goals and the goals of the farmers are well aligned. These farmers value our Dutch heritage in agriculture and our reputation in research and are open to cross-border exchange of ideas, best practises and even open to new (sometimes experimental) regenerative practises. To be successful, we strive for long-term business relationships with farmers where all parties hold each other accountable for achieving sustainable practises and goals. This report represents a milestone in our partnership towards our common goal.

In 2022, we made several acquisitions in Portugal, the US, Australia and New Zealand, which led to an expansion of our portfolio. It was also a year in which we saw the results of our efforts as we achieved the production of residue-free olive oil and took steps towards sustainability, such as installing solar panels and replacing chemical fertilisers with biofertilisers to promote soil health. These achievements will guide our focus in 2023 as we prioritise the implementation of sustainability plans for all assets acquired in 2022.

\* SDGs 2, 3, 6, 12, 13, 15



# Harvesting Sustainability:

## Themes and Key Achievements 2022

Our sustainability philosophy and reporting are based on eight themes. Below you can see how the farms fared on these themes in 2022

### 1. Sustainable Agriculture

- All farms have a 5-year sustainability plan

### 2. Soil Health and Conservation

- All of our farms have included a soil health plan in their overall sustainability plan and have provided their baseline soil results.
- The use of cover crops and minimal tillage is widespread across our portfolio
- Soil organic matter and pH are measured for all assets

### 3. Protection of Water Resources

- All farms have a water management plan
- We have measured the water consumption of all irrigated farms with the aim to reduce consumption by 10% over the next five years

### 4. Protection of Crops

- All our farms have a nutrient management plan and an integrated pest management plan in place
- We have measured fertiliser and pesticide/herbicide use on all farms with the aim of reducing it by 20% over the next five years

### 5. Energy Use, Air Quality and Climate Change

- We have calculated CO<sub>2</sub>e emissions by analysing survey data received from our operators and tenants. Our farms have set a target to reduce CO<sub>2</sub>e emissions by more than 20% on a 5-year basis, and we have established a baseline to measure and achieve this target

- Fertiliser application is the main source of Scope 1 CO<sub>2</sub>e emissions for most farms, with energy and transport (farming activities) from use also playing an important role. Scope 2 CO<sub>2</sub>e emissions are mainly caused by purchased electricity consumption

### 6. Waste and Material Management

- Two assets are using composting to reduce waste and turn it into a fertiliser for the soil. We strive to further improve this aspect as it improves soil health and crop productivity in several ways

### 7. Conservation of Biodiversity

- Our goal is to allocate at least 5% of each asset to biodiversity areas that provide habitat for local flora and fauna. We are currently at 4.9% and are working to increase this further to create more biodiversity corridors or "green corridors" These corridors consist of contiguous strips of native vegetation that connect restored landscapes to areas of high biodiversity and encourage the revitalisation of watersheds where biodiversity can thrive
- We use a minimum three-year crop rotation with at least one 'dormant crop', strip cropping, mixed cropping and/or different cover crops

### 8. Labour conditions

- 100% compliance with the legal minimum wage and certificate conditions (baseline measurement this year)
- The fund reports zero accidents or safety incidents and various initiatives to support ongoing training and education





**Our approach to  
regenerative  
farming**



# Our approach to regenerative farming

## Our mission

- To acquire land with the right properties for healthy and sustainable yields;
- Where we deploy regenerative or nature inclusive farming techniques that contribute to our SDGs
- Where we set KPIs to drive progress on SDGs

## Soil can store carbon dioxide

Using our soils to sequester carbon is a natural climate solution and can be improved by regenerative farming techniques that allow for plants to store carbon in the soil, for soils to infiltrate water and for biodiversity to thrive above and below the ground more effectively

Nature can store carbon dioxide, nature can restore or regenerate degraded lands, nature can restore a badly functioning water cycle and rapidly degrading biodiversity\*.

## How do we measure our impact?

Impact is defined as the contribution of all activities to achieve the SDGs. Every property agrees to a set of key performance indicators (KPIs), related to six Sustainable Development Goals: Food, Health, Water, Climate, Circular economy, and Soil and Biodiversity.

The KPIs can be action-oriented (for example, percentage of farms or hectares managed in a regenerative system) or can be result-oriented (for example, what is the average percentage improvement in soil organic matter, SOM). On an annual basis, we review the KPIs and SDGs, the goals are designed to be reviewed over a long period (>10 years).

## An active approach to investing in farmland can contribute to sustainability goals

1. Reducing greenhouse gas emissions and combating climate change
2. Improving biodiversity
3. Using water more sustainably

## Investing in Farmland

The agricultural sector plays a key role in several of the major problems currently facing our society. Alongside the many challenges, however, there are also opportunities. The transition to a more sustainable, nature-inclusive farming requires a long-term perspective and cooperation across the food chain. We believe that farmland could play a more important role in the investment portfolios of institutional investors. Farmland investments are an important part of this transition and well suited to linking financial returns with sustainability goals.



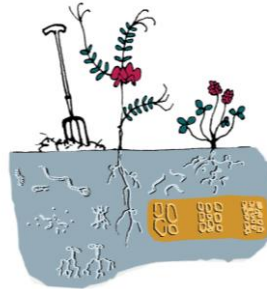
# Regenerative farming at a glance

## Crop diversity



- Extensive Crop Plan (Rotation)
- Perennials in Crop Plan
- Inter / Companion Cropping / Strip Farming
- SDG: 2, 12

## Soil Health



- Leguminous, deep rooted cover crops
- Soil Structure Management
- Manure / Animal Integration
- Field Data Systems
- SDG: 2, 3, 6, 12, 13, 15,

## No till



- Zero or low tillage
- Mulching Residuals
- Planting in Residuals
- Keep Root System
- SDG: 6, 12, 13, 15

## Soil protection



- Field Covered All Year
- Drainage Systems
- Light Machines
- Traffic Lane System
- Terracing
- SDG: 6, 15

## Eco Areas



- Biodiversity Strips/ Corners/ Pools
- Field Margins/ Hedges /Wind Breakers
- Flower Strips / Pollinators
- Indigenous Vegetation
- SDG: 13, 15

## Circular (Bio) Farming



- Composting
- Integrated Pest Management
- Nutrient Recycling
- Precision Technology
- SDG: 3, 6, 12, 13, 15







“

One of the key objective of this fund is building a healthy soil that can effectively store carbon. Numerous other objectives, such as the production of healthy food, better water use, efficient nutrient cycling, crop resilience, climate change mitigation and increased biodiversity, are highly dependent on the quality of soil management and carbon storage capacity

Richard Jacobs  
Fund Manager

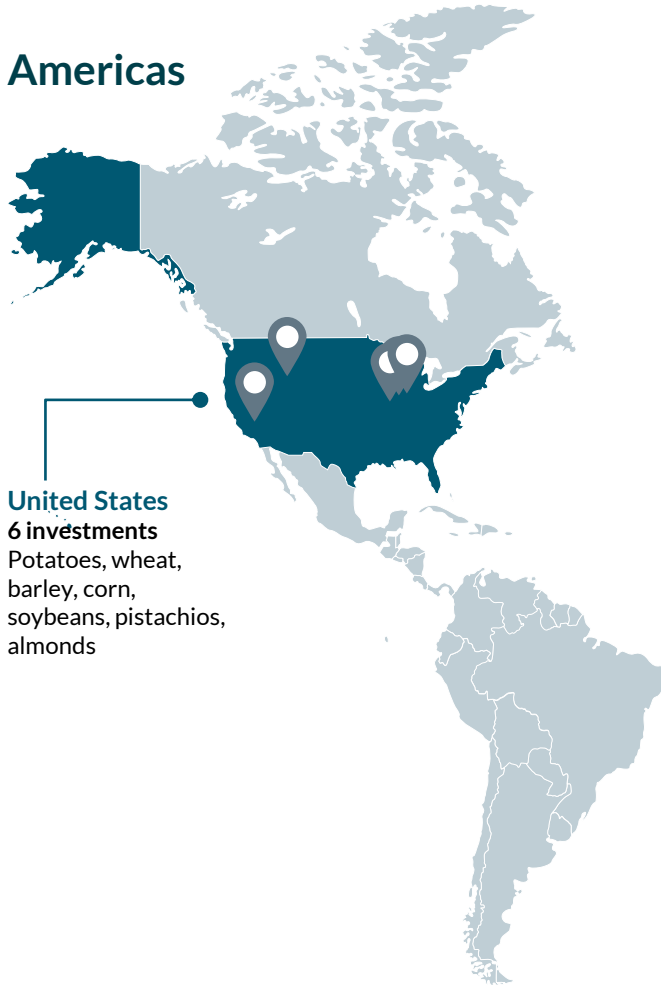


**Our portfolio**



# Portfolio Overview

## Americas



## Europe



## Australia & New-Zealand

### Australia

6 investments

Avocados, macadamia nuts, wheat, barley, canola, corn, chickpeas, soybeans, mung beans, sorghum



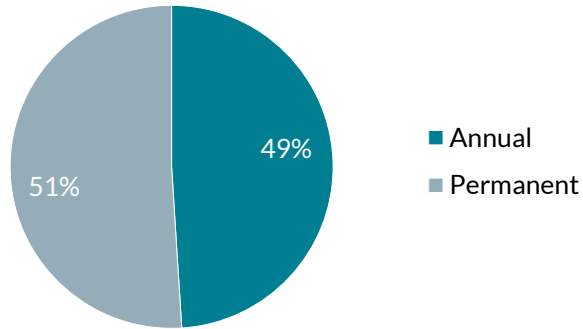
**New Zealand**  
2 investments  
Cherries, kiwifruit



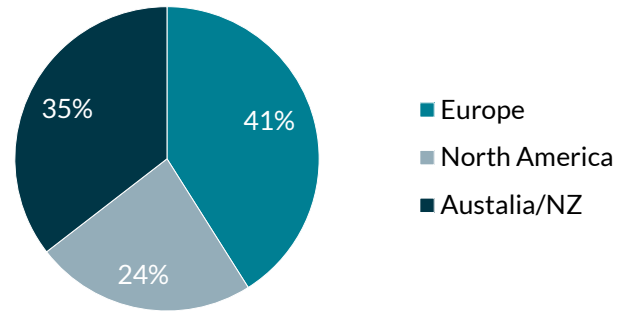
# Portfolio Overview

Per December 31, 2022

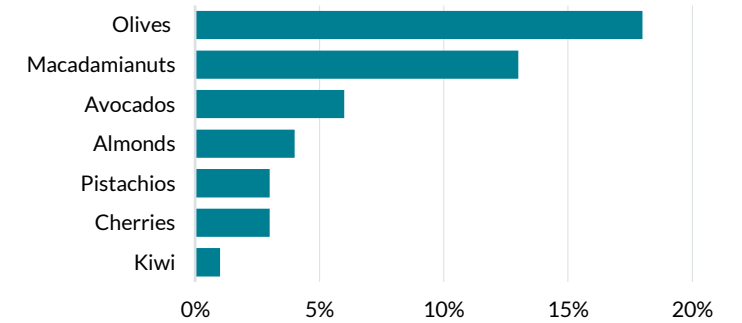
Crop type



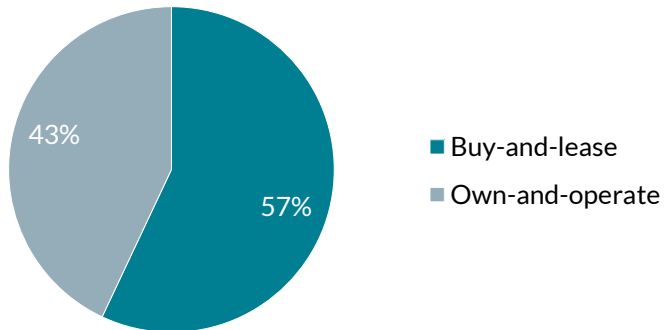
Region



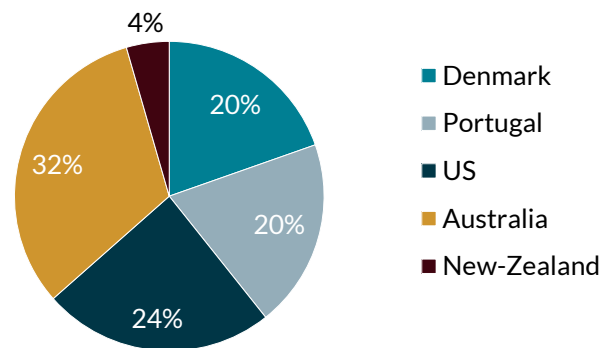
Permanent crops\*



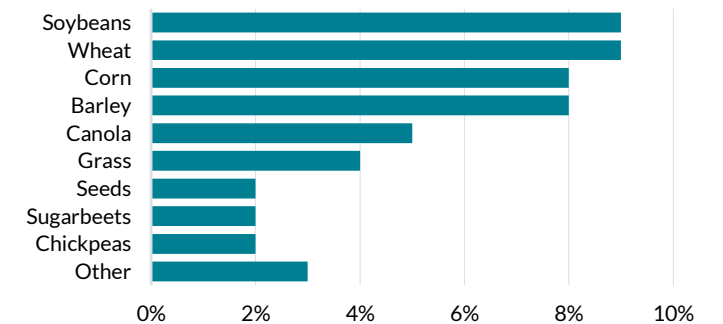
Operational model



Countries



Annual crops\*



\* Estimates, for row crops based on a typical rotation for the specific asset  
Source: Van Lanschot Kempen IM, data as per 31/12/2022





# Investment Overview

Asset	Location	Crops Grown	Acquisition Date
<b>Portugal</b>			
Rio de Azeite SA	Alentejo	Olives, almonds	March 2021 & July 2021
<b>Denmark</b>			
Tjele	Jutland	Vegetables, grains, grasses	November 2021
Darketgaard	Lolland	Grains, seeds, sugar beets	December 2021
Western Zealand	Zealand	Grains, seeds, sugar beets	January-March 2022
<b>United States</b>			
Northflow	Idaho	Potatoes, wheat, barley, alfalfa, grass	July 2021
Whitten	California	Pistachios, almonds	September 2021
Lake Delavan	Wisconsin	Corn, soybeans, wheat	January 2022
Stephenson	Illinois	Corn, soybeans, wheat	February 2022
Marshall	Illinois	Corn, soybeans, wheat	October 2022
Moravec	Illinois	Corn, soybeans, wheat	December 2022

Asset	Location	Crops Grown	Acquisition Date
<b>Australia</b>			
Mountain Top Orchard	New South Wales	Avocados	August 2021
Rocky Creek	New South Wales	Wheat, barley, canola, corn, soybeans	October 2021
The Watermark	New South Wales	Wheat, barley, canola, chickpeas, sorghum	June 2022
Gragin	New South Wales	Wheat, barley, canola, soybeans, mung beans	June 2022
Farmvale & Paradise	New South Wales	Macadamia nuts	July & August 2022
Voss Road Macadamia	Queensland	Macadamia nuts	December 2022
<b>New Zealand</b>			
Lowburn	Otago	Cherries	October 2022
KeriGold	Northland	Kiwifruit	December 2022



# How we monitor our sustainability goals?

For each investment or property, a tailored Sustainability plan is made, under the supervision of an experienced local consultant. The plan is based on identified ESG risks and priorities.



Implementation of Environmental Management System\* (EMS) in cooperation with agricultural specialists and local practices



Detailing of KPIs in accordance with an agreed framework



Annual monitoring and reporting in cooperation with an accredited controller/auditor, in accordance with agreed framework



Certification of this sustainability implementation process is still in its infancy and is planned for the coming years

## AGRO.GES

collect, verify, measure, analyse

We work with the Portuguese agricultural agency Agro.ges to collect and monitor sustainability data from our projects.

Agro.ges is a long-established agricultural research company that has been providing rural development support services since 1989. The company is active worldwide in the fields of agricultural economics, rural development plans and environmental sustainability analysis, among others.

\* An Environmental Management System (EMS) is a set of practises and procedures designed to manage and optimise the environmental performance of a farm, with a focus on improving soil health, biodiversity and ecosystem resilience. It involves monitoring and measuring key environmental indicators to track progress towards sustainability goals.







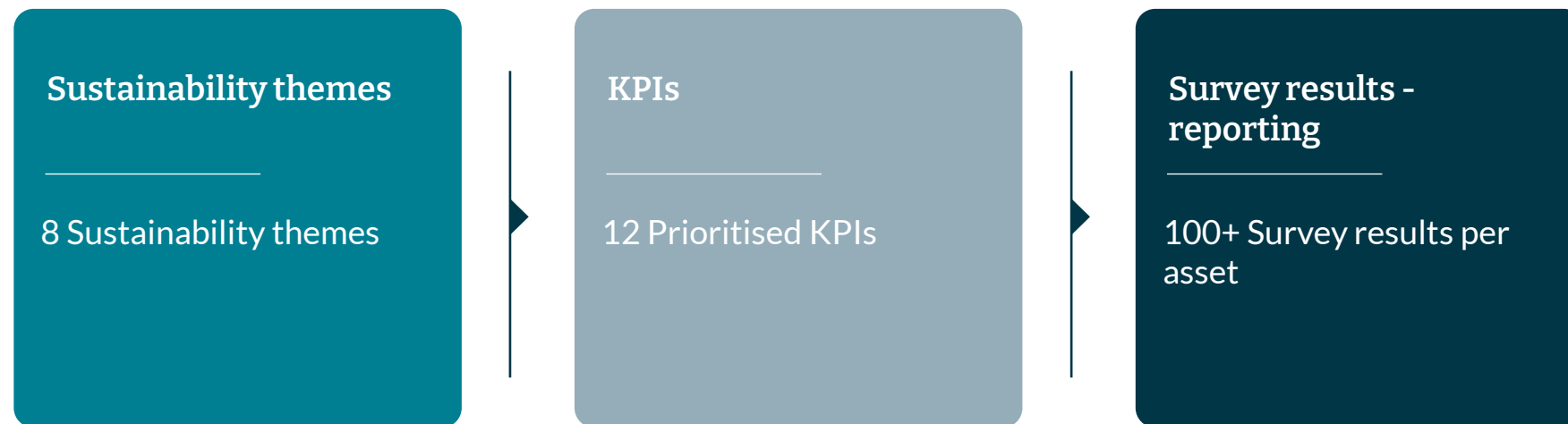
# Investment themes and results



# Our methodology: From themes to results

Our top priority is to implement sustainable agricultural and land management practises that address climate change, food security, water scarcity and biodiversity loss. Our sustainability philosophy is based on eight key themes, which we track using key performance indicators (KPIs) measured through two separate surveys conducted by Agro.ges, the funds sustainability consultant.\*

The surveys were conducted in early 2022 and focused on overall sustainability and regenerative farming practises and farm carbon emissions. The KPIs measured form the basis of our first sustainability report and we are committed to improving the results for all investment in our portfolio in the future.



\* The assets included in the scope of the surveys were Rio de Azeite, Herdadinha, Bica Velha, Darketgaard, Northflow, Whitten, Delavan, Stephenson, Mountain Top, Rocky Creek, Gragin and Watermark.

# Themes and prioritised KPIs

Our investment philosophy is based on eight themes derived from Leading Harvest, an innovative non-profit organisation committed to sharing and implementing better practices in agriculture. Please find the themes and the key KPI's linked to these themes below.

## 1. Sustainable Agriculture (governance)

### KPIs:

- Exclusion policy
- Integrated ESG policy including relevant conventions such as UN PRI
- Annual ESG reporting

## 3. Protection of Water Resources

### KPI:

- Water consumption reduced by >10% on a 5-year basis

## 5. Energy Use, Air Quality and Climate Change

- CO<sub>2</sub> emissions reduced by >20% on a 5-year basis

## 7. Conservation of Biodiversity

### KPI

- At least one of these practices: 3-year rotation with minimum of one 'rest crop', strip farming, mixed crop and/or varied cover crops
- Special eco areas over at least 5% of total area

## 2. Soil Health and Conservation

### KPIs:

- Based on at least 10-year history, no transformation of forest (high-quality natural landscape) into agricultural land
- Use of cover crops and policy established to minimise tillage
- Soil organic matter increased by >20% on a 5-year basis

## 4. Protection of Crops

- Pesticide, herbicide and chemical fertiliser use reduced by >20% on a 5-year basis

## 6. Waste and Material Management

- Employ composting at 80% of farming operations

## 8. Labour conditions

### KPI

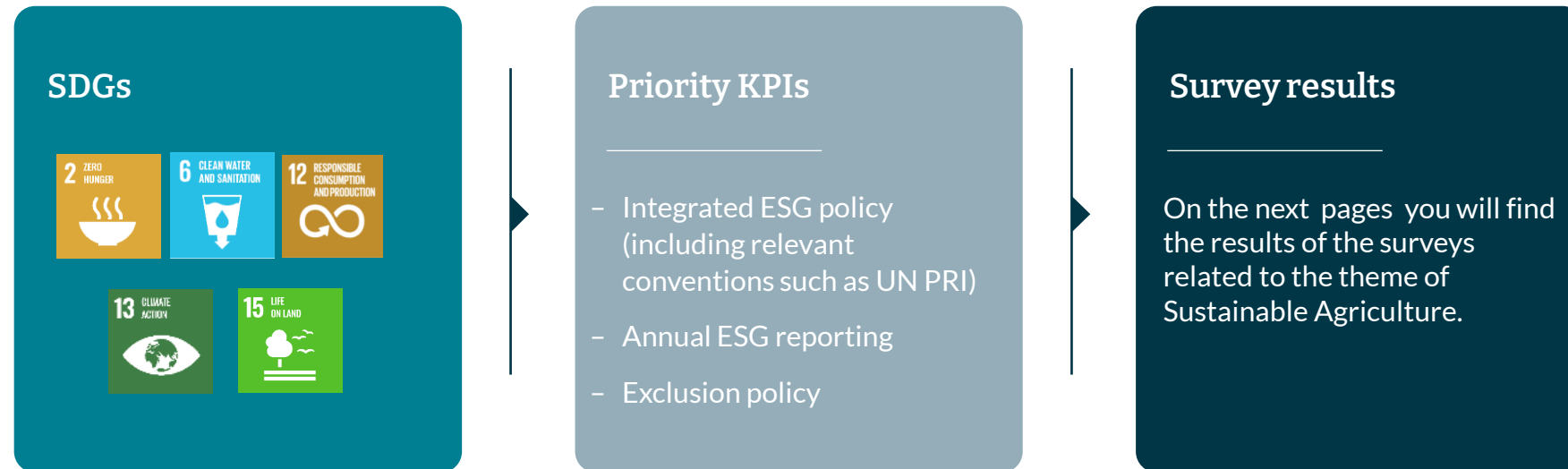
- 100% comply with legal minimum wage and certificate conditions





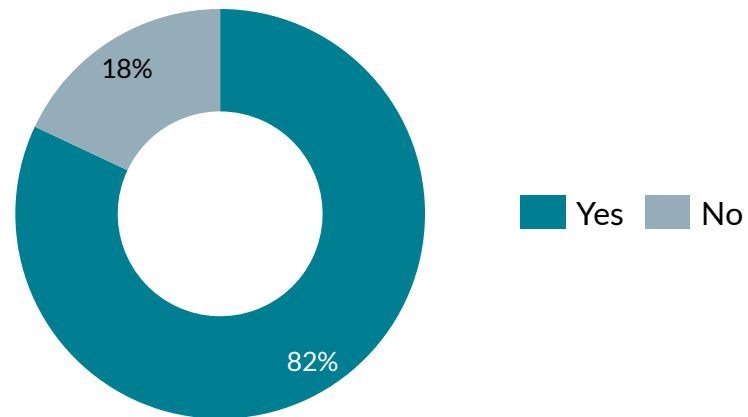
# Theme 1. Sustainable Agriculture (governance)

Sustainable agricultural management means working to manage agricultural land to ensure its long-term viability and sustainability. Therefore, this objective focuses on how we ensure sustainable agricultural practises. This includes managing the potential impact of critical external factors and maintaining prime agricultural land to avoid conversion to non-agricultural uses. Our local partners also need to adapt to and regularly identify external factors to ensure the long-term viability and sustainability of agricultural production.



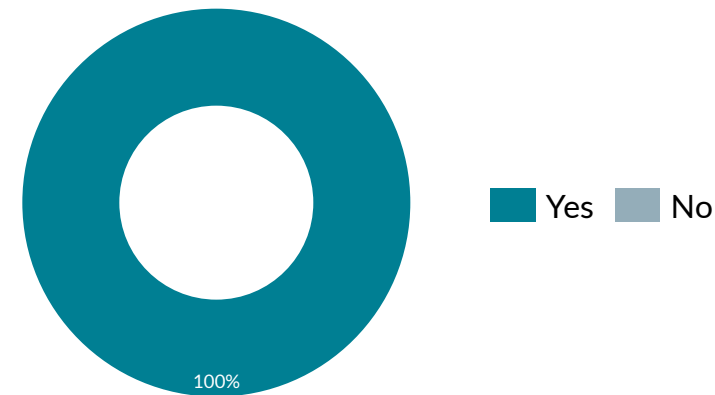
# Sustainable Agriculture Management – Survey results

Sustainability Plan Present?



- Herdadinha and Rio de Azeite have implemented sustainable practises such as life projects, solar panels, carbon accounting systems and water management.
- Northflow and Whitten are accredited by Leading Harvest and will also be accredited for the Carbon Accounting System program in 2022.

Participated In Carbon And SDG Survey



All of the Fund's investments for the full year 2022 participated in both the carbon emissions survey and the ESG+SDG survey. As the Fund has deployed a significant amount of capital in 2022, next year's report will include a larger number of assets.

# Theme 2. Soil Health and Conservation

Soil health is critical to maintaining and increasing crop yields and protecting long-term soil productivity on farmland. We strive to better manage nutrients (according to the 4R principle\*) and apply regional agricultural best practices to maintain or improve soil fertility and the physical and biological properties of the soil. Our aim is to improve on the main physical, chemical and biological soil characteristics towards optimum levels or ranges by means of soil testing or plant sap analysis and defining remedial actions with local consultants. In addition, we apply agricultural practices to minimise soil erosion and avoid degradation of agricultural land.

## SDGs



## Priority KPIs

- Use of cover crops and policy established to minimise tillage
- Soil organic matter increased by >20% on a 5-year basis
- Based on at least 10-year history, no transformation of forest (high-quality natural landscape) into agricultural land

## Survey results

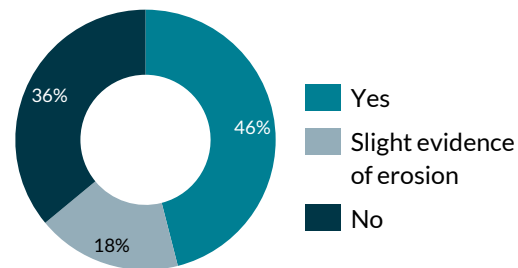
On the next pages you will find the results of the surveys related to the theme of Soil Health and Conservation

\* Source: [nutrientstewardship.org/4rs](https://nutrientstewardship.org/4rs)



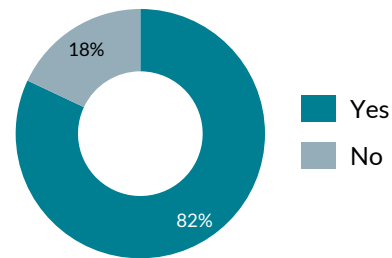
# Soil Health and Conservation– survey results

## Soil and Wind Erosion



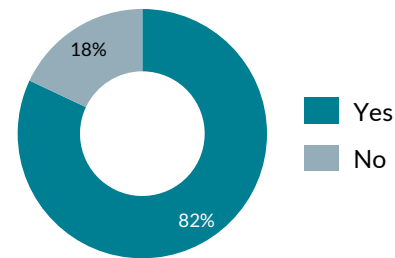
- There is evidence of soil or wind erosion in all Australian properties
- Erosion is absent in US Northflow and Whitten.
- It is reported on ridges in Herdadinha and Rio de Azeite.
- ‘Other’ means that there is slight evidence of soil erosion on ridges, but not on the productive fields.

## Soil Compaction



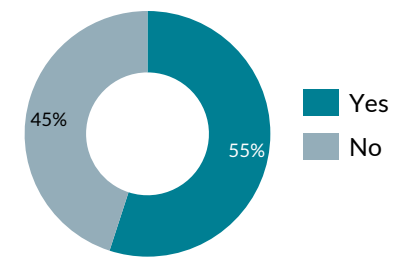
- Soil compaction is the process by which soil particles are compressed, reducing pore space. Soil compaction can affect air, water and nutrient retention, leading to reduced plant growth and increased runoff and erosion. Our aim is to reduce soil compaction
- through practises such as reduced tillage, limiting the use of heavy machinery on the soil (especially during wet conditions) and controlled traffic systems (GPS).

## Use Of Cover Crops



In addition to perennial plants, cover crops are also commonly used to cover the soil throughout the year. Cover crops are plants grown specifically to benefit the soil rather than for harvest. They can be annual or perennial and are usually planted between periods of crop cultivation. Our aim is to improve the cultivation of cover crops and cropping practices.

## Use Of Tillage Practises

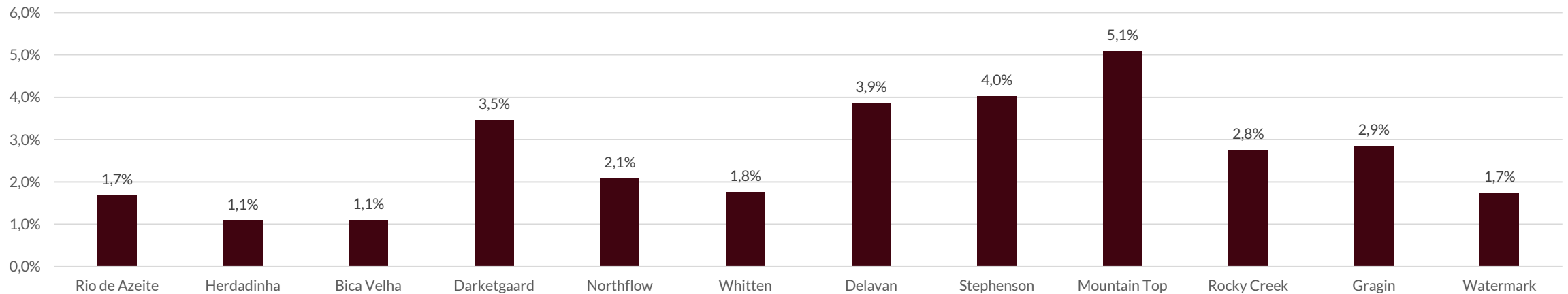


We aim for no-till in row crops, which means reducing or eliminating tillage practises and relying instead on other techniques for seedbed preparation and weed control. There are a number of potential benefits of no-till or limited tillage, both for soil health and productivity and for environmental sustainability. The only facility that uses traditional tillage is Northflow (for potato planting), while other assets use vertical tillage. This is displayed for all assets where typically tillage is only used at row crop farms.



# Soil Health and Conservation– survey results

## Average Soil Organic Matter



**Soil organic matter (SOM)** is essential for healthy soils and ecosystems:

- SOM supports nutrient cycling, water retention, soil structure maintenance and carbon sequestration.
- SOM plays a crucial role in releasing essential nutrients such as nitrogen, phosphorus and sulphur for plant growth and development and improves the soil's ability to retain water. This prevents soil erosion and surface runoff.
- SOM also helps maintain good soil structure, needed for healthy root growth and water infiltration and it can also store large amounts of carbon, reducing the amount of carbon dioxide in the atmosphere and mitigating climate change.

The SOM values of the portfolio vary between the **different properties**:

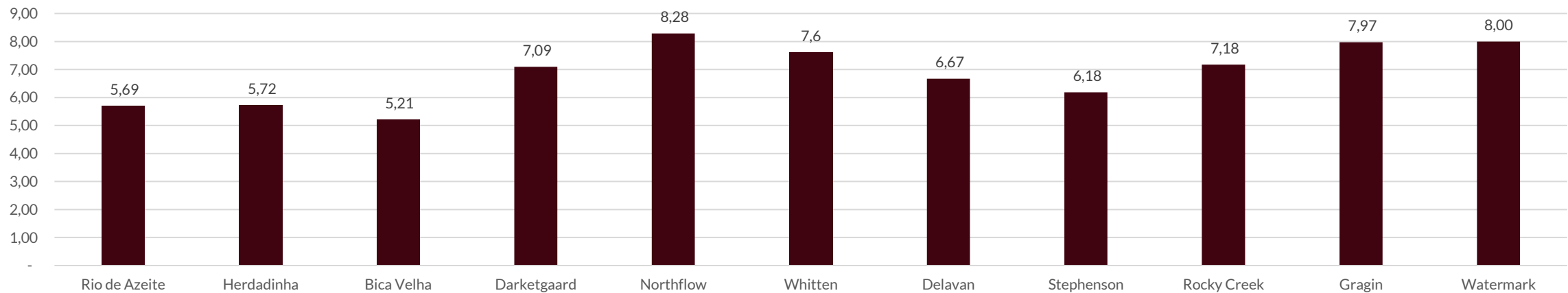
- Rio de Azeite and Watermark have the lowest values at 1.7%
- Herdadinha & Bica Velha and Whitten have slightly higher but still low values.
- Northflow, Rocky Creek and Gragin have moderate values
- Darketgaard, Delavan, Stephenson and Mountain Top have higher values.

Our general aim is to increase SOM and Soil Organic Carbon (SOC). In areas with low SOM levels, additional organic matter inputs may be needed to improve soil health and productivity.



# Soil Health and Conservation– survey results

## Average pH



**The pH value** influences the fertility of the soil and the availability of nutrients, which ultimately affects the growth and yield of plants.

- Soil pH determines the solubility and availability of important nutrients such as nitrogen, phosphorus and potassium.
- If soil pH is too high or too low, some nutrients may be less available to plants, resulting in nutrient deficiencies, stunted growth and lower yields. For most crops, the optimal range of pH is between 6.0 and 7.5
- Soil pH can also affect the activity of soil microorganisms, which play a crucial role in nutrient cycling and soil health. Therefore, maintaining the right pH in farmland is essential for optimal crop production and sustainable agriculture.
- Rio de Azeite and Herdadinha & Bica Velha, have a pH below the optimal range for olive plantations and are considered acidic. Possibly corrective measures would have to be taken

to raise the pH, e.g. by adding lime or other alkaline additives.

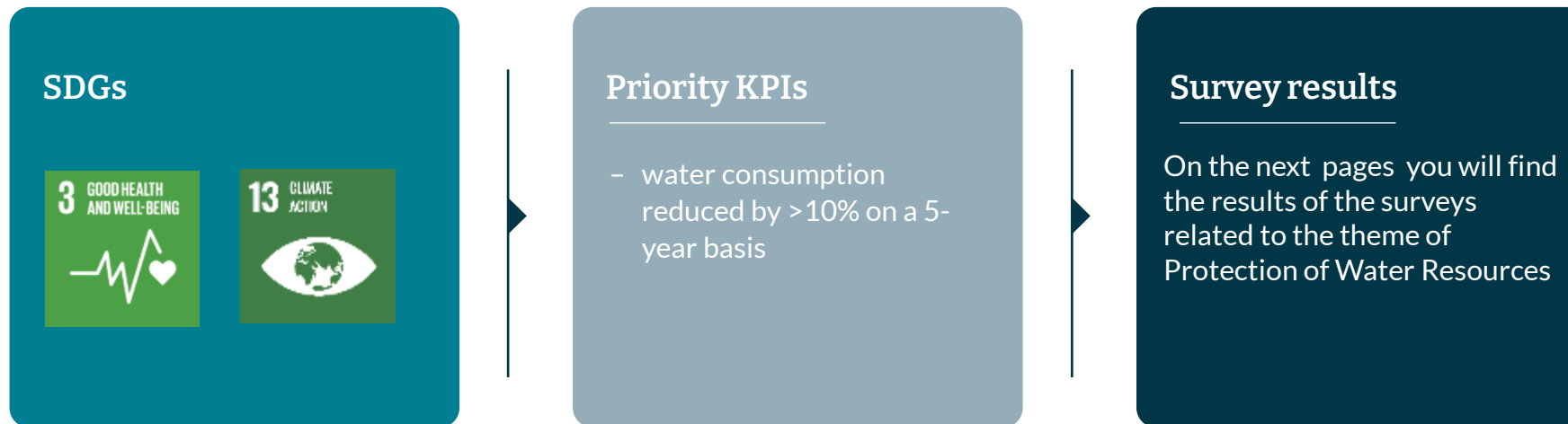
- In Darketgaard, Delavan and Stephenson, pH levels are in the optimal range for most crops. These areas are considered slightly acidic to neutral, and the crops grown there are likely to have optimal nutrient availability.
- Northflow, Gragin and Watermark have pH values above the optimal range and are considered moderately alkaline. Plants grown in these areas are at risk of nutrient deficiency due to lower availability of certain micronutrients such as iron and zinc. It may be necessary to take corrective measures to lower the pH, e.g. by adding acidic additives.
- Whitten and Rocky Creek have pH values that are within the optimal range but are slightly alkaline. These areas are considered moderately optimal for most crops and corrective action may not be necessary.





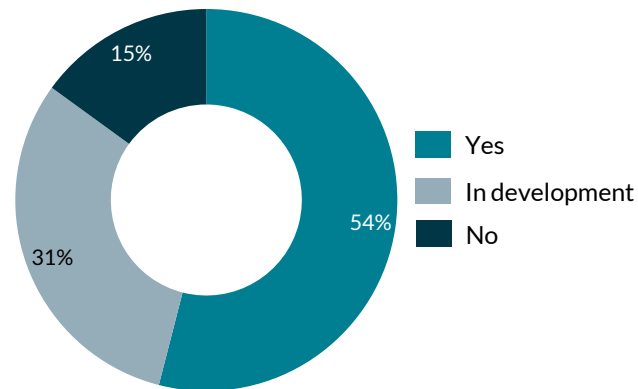
# Theme 3. Protection of Water Resources

The aim is to protect water resources and manage water for efficient agricultural productivity. Agricultural production is highly dependent on water and increasingly subject to water risks. Agricultural irrigation accounts for 70% of water use worldwide, and more than 40% in many OECD countries. In addition, agriculture remains a major source of water pollution: agricultural fertiliser runoff and pesticide use contribute to the pollution of waterways and groundwater. This can pose strategic and reputational risks in many regions. Water conservation is therefore a key issue for the sustainability of agriculture. Our aim is to use water more efficiently and reduce contamination of waterlines (run-off).



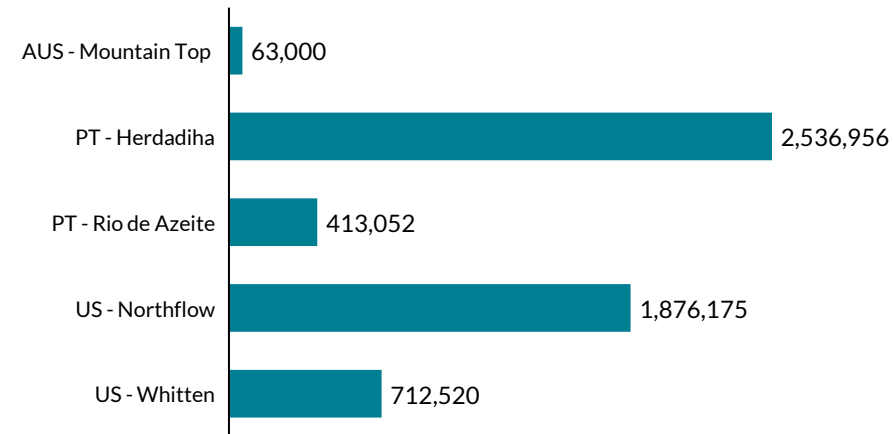
# Protection of Water Resources– survey results

%Assets with irrigation water plan



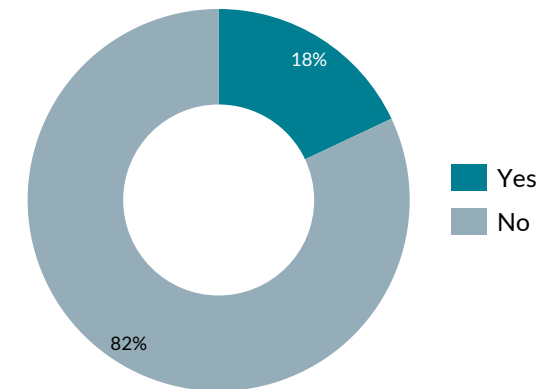
- All irrigated farms have a water management plan.
- Gragin, Rocky Creek, Watermark, Darketgaard, Develan and Stephenson are rainfed and therefore do not have such plans or are currently developing them.

Irrigation water use in m3



- The graph shows the total water consumption due to irrigation in cubic metres (m3) for the different assets. For example: Rio de Azeite used 413,052 m3 of water for irrigation.
- Darketgaard, Delavan, Stephenson, Rocky Creek, Gragin and Watermark, on the other hand, used rainwater and had no recorded water use.
- Converted to water consumption per hectare, water consumption is highest for Whitten with about 10,000 m3 per hectare and lowest for Mountain Top. The latter grows avocado's, but is located in a wet area.

Contamination of important waterlines

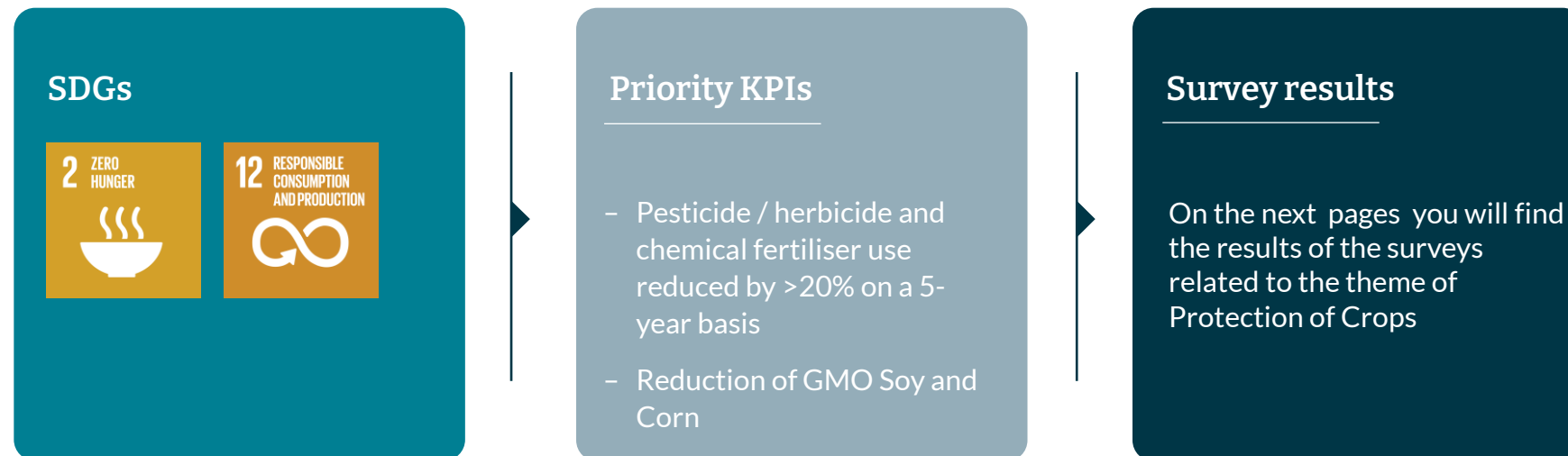


- The waterlines on the properties vary in the degree of contamination, with only two properties reporting contamination and erosion problems, while others are subject to very little disturbance.
- In addition, the percentage of properties affected by waterway disturbance also varies. Some properties report no disturbance, while others report up to 50%.



# Theme 4. Protection of Crops

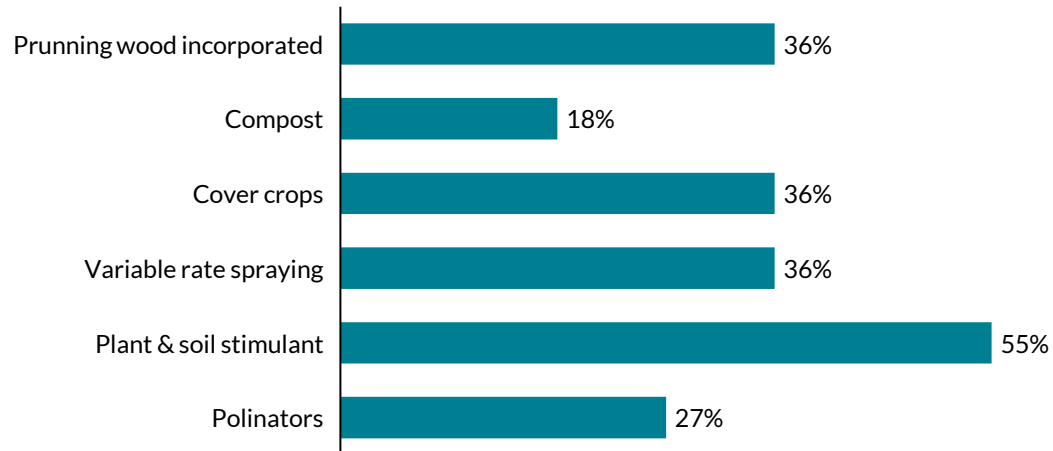
When appropriately used, crop protection and the use of crop protectants can enhance productivity and reduce crop losses. Crop protectants may have deleterious impacts to the humans and wildlife when poorly managed. Integrated Pest Management (IPM) has been shown to reduce crop protectant risk to humans and environment and enhance crop productivity while reducing costs. Our aim is to simply reduce the amount of (or oversupply of) chemical nutrients, stimulants and pesticides and herbicides.





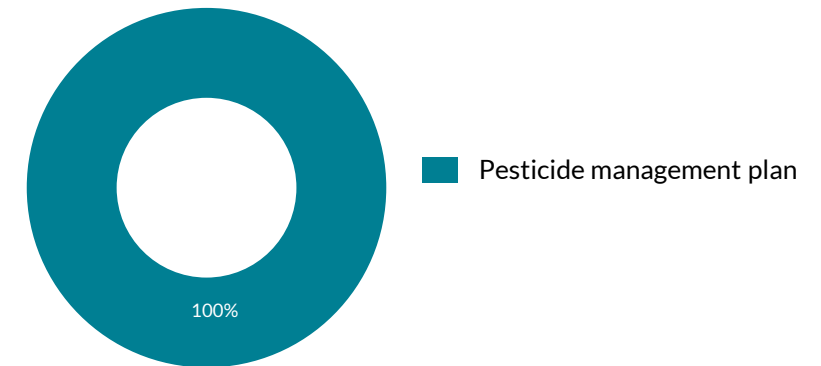
# Protection of Crops – survey results

Number of assets with regenerative crop protection practices



- Gragin: Cover crops, variable rate spraying, plant and soil stimulant.
- Mountain Top: Pruning wood incorporated, plant and soil stimulant, pollinators.
- Rocky Creek: Cover crops, variable rate spraying, plant and soil stimulant.
- The Watermark: Cover crops, variable rate spraying, plant and soil stimulant.
- Herdadinha: Pruning wood incorporated, plant and soil stimulant, pollinators.
- Rio de Azeite: Pruning wood incorporated, plant and soil stimulant, pollinators.
- Northflow: Compost, cover crops, low-tillage.
- Whitten: Pruning wood incorporated, compost.

%Assets with irrigation and Pesticide management plan

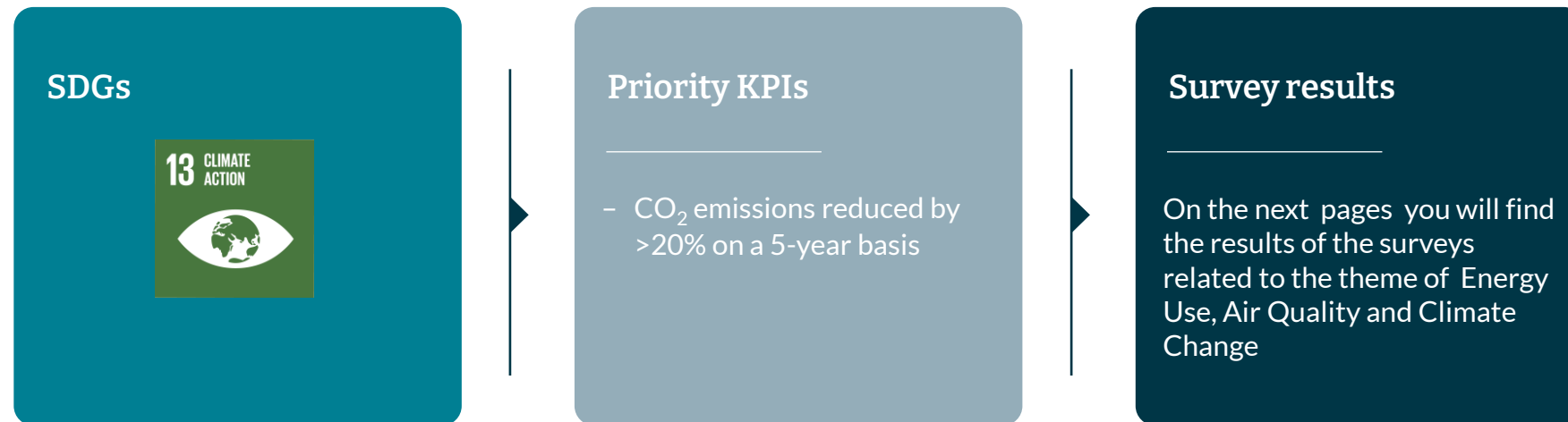


- All farms have an integrated pest management plan. It is encouraging to see that many of the farms are adopting sustainable practises and taking steps to reduce their impact on the environment.
- Most of the farms have an integrated nutrient management plan and apply organic nutrients, except for Darketgaard and Delavan.



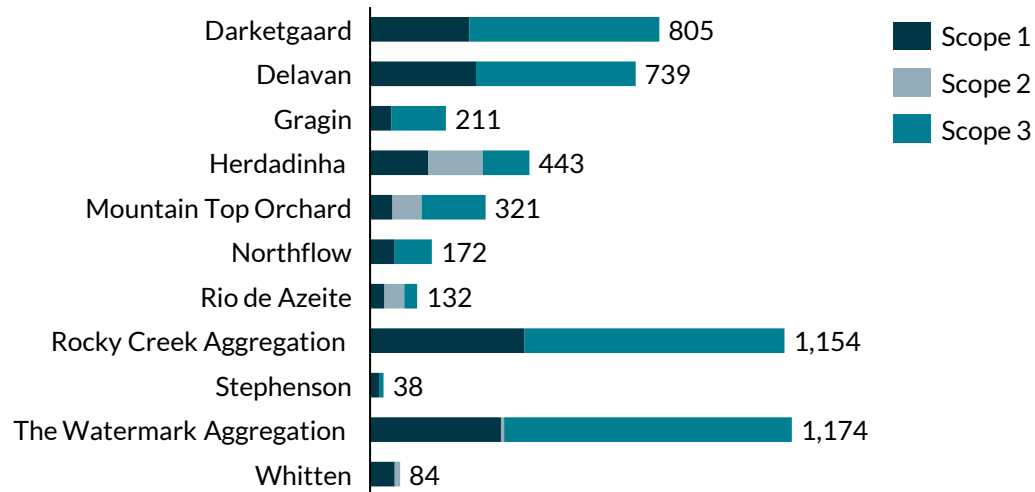
# Theme 5. Energy Use, Air Quality and Climate Change

Agriculture has a unique opportunity to help both reduce energy use and air emissions, which may affect climate and human health and increase resilience to climate change. Using soils to sequester carbon is a natural climate solution and can be achieved through regenerative farming techniques that allow for plants to store carbon in the soil, for soils to infiltrate water and for biodiversity to thrive above and below the ground. Our aim is to measure CO<sub>2</sub>e emissions and find ways to effectively reduce the amount of GHG reduction.



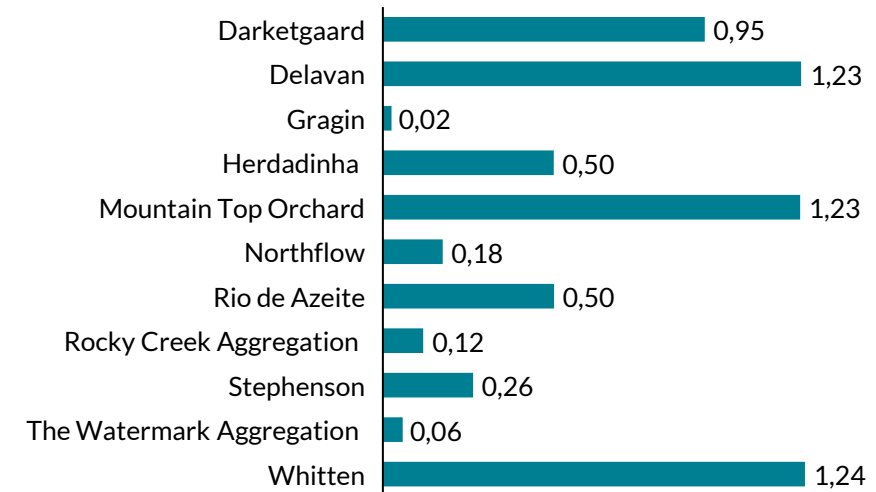
# Energy Use, Air Quality and Climate Change – survey results

CO<sub>2</sub>e emissions in tonnes over 2022



- We have calculated CO<sub>2</sub>e emissions by analysing survey data received from our operators and tenants. This information serves as a benchmark for future comparisons.
- Watermark has the highest total CO<sub>2</sub>e emissions, mostly from Scope 1 sources. Rocky Creek and Herdadinha have relatively high emissions, also mainly from Scope 1 sources. In contrast, Stephenson has the lowest emissions, with no Scope 1 or Scope 2 emissions at all.

CO<sub>2</sub>e emissions (scope 1 +2) in tonnes per hectare over 2022

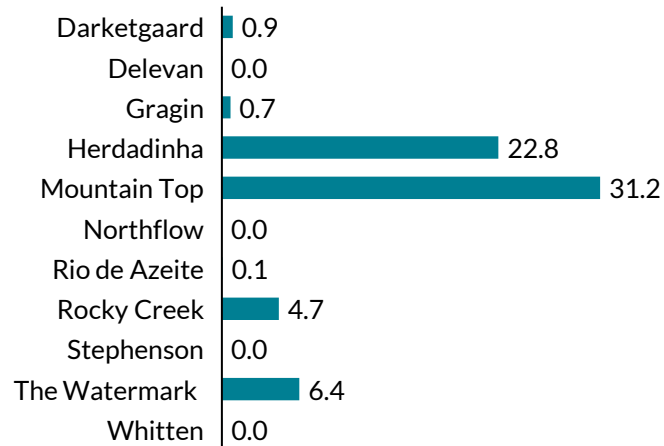


- Fertiliser application is the main source of Scope 1 CO<sub>2</sub>e emissions for most farms, with energy and transport ( farming operations ) from application also playing an important role. Scope 2 CO<sub>2</sub>e emissions are mainly caused by purchased electricity consumption.
- We are currently working on an initial measurement of sequestered carbon as well as further improving the accuracy of scope 3 carbon emissions. We have also compiled preliminary data on Scope 3 emissions, which includes upstream activities such as pesticide and fertiliser production. However, this data is still at an early stage.

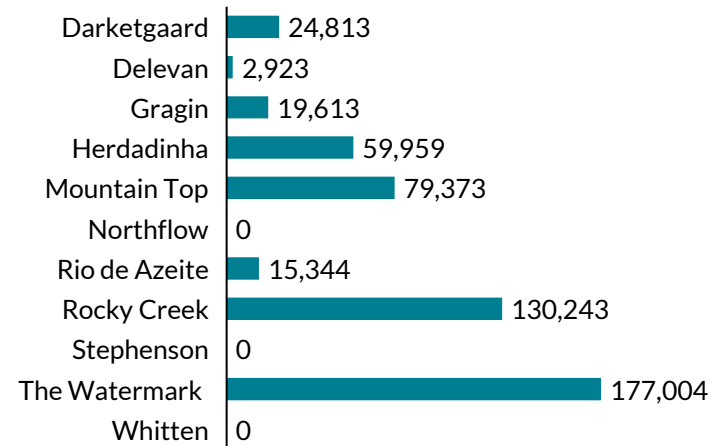
# Energy Use, Air Quality and Climate Change – survey results

## How much energy is consumed?

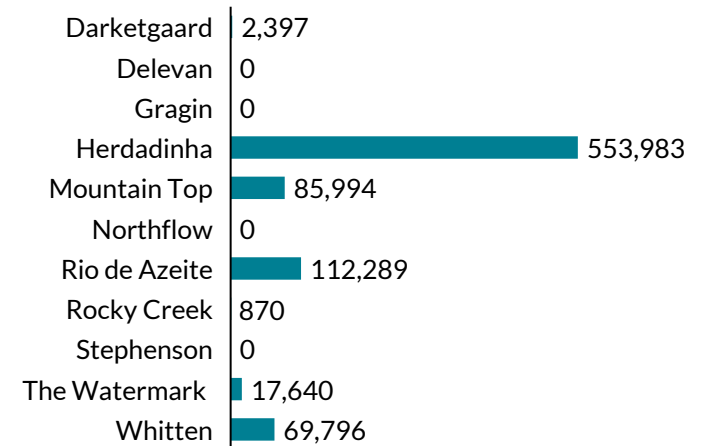
Energy consumption in GJ



Use of diesel in liters



Use of electricity in kwh



- Most energy is consumed in processing and storing the harvest of permanent crops and in running pumping stations for irrigation
- Energy consumption is calculated by converting diesel consumption to GJ using a conversion factor of 0.038 MJ/L and converting kWh to GJ by dividing by 3.6e+6.

We find that diesel consumption is highest in our row crops, especially in the larger plots in Australia, where a lot of energy-intensive work had to be done to convert the arable land into row crops.

In contrast to diesel consumption, the use of electricity is highest for permanent crops, where electricity-powered equipment is often used to process and store the harvest.

We have monitored Herdadinha's energy consumption and made changes by replacing diesel-powered pumping stations with electric ones. We have also introduced the use of solar panels from this year.





# Theme 6. Waste and Material Management

Waste management on farms has an important sustainability role because it can reduce farming and waste disposal costs, improve crop productivity, threats to human and environmental health, and reduce the environmental footprint of agricultural products, which is important to supply chains.



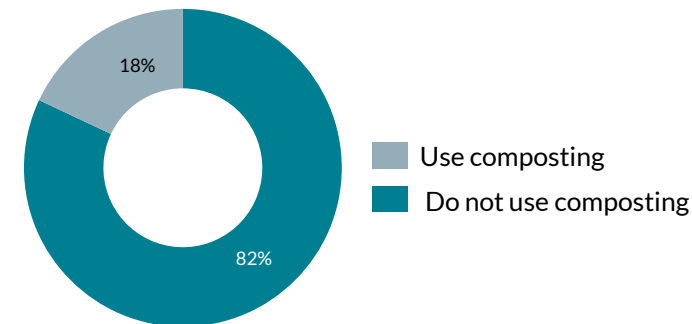
# Waste and Material Management– survey results

## Main type of waste per asset

- Delavan: Crop fodder waste
- Gragin: Packaging waste from fertiliser bags and chemical drums, and household waste. Crop residues are returned to the soil.
- Herdadinha: Waste from plastic and pharmaceutical containers
- Mountain Top: Packaging waste from farm inputs. Cut material and degraded fruits are recycled as mulch.
- Rio de Azeite: Waste from plastic and pharmaceutical containers
- Rocky Creek: Packaging waste from fertiliser and chemical containers.
- Stephenson: Crop stubble and crop waste
- The Watermark: Packaging waste from agricultural inputs and household waste.
- Whitten: Waste from chemical containers and tree pruning material

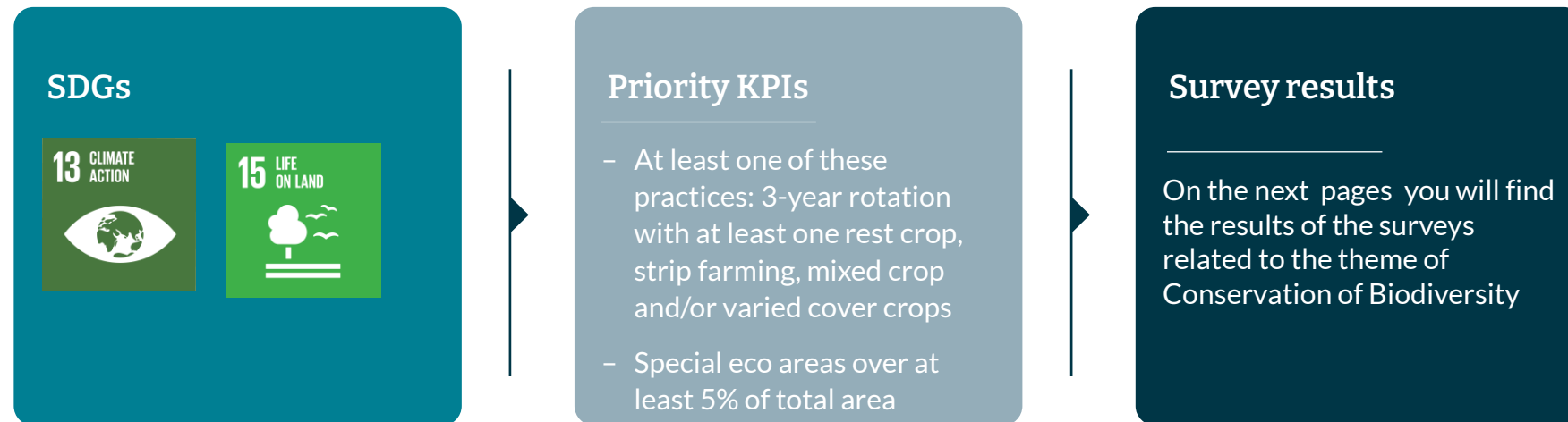
## % assets that make use of composting

Only Delavan and Gragin use composting to reduce waste and turn it into a fertiliser for the soils. We aim to improve it as it improves soil health and crop productivity in several ways. It is a rich source of nutrients, including micronutrients, which are released slowly over time and provide a constant source of nutrition for plants. Compost can also improve soil structure, porosity, water holding capacity and aeration, creating an ideal environment for plant roots to grow and thrive. It contains a variety of microorganisms that can break down organic matter, circulate nutrients and suppress pathogens.



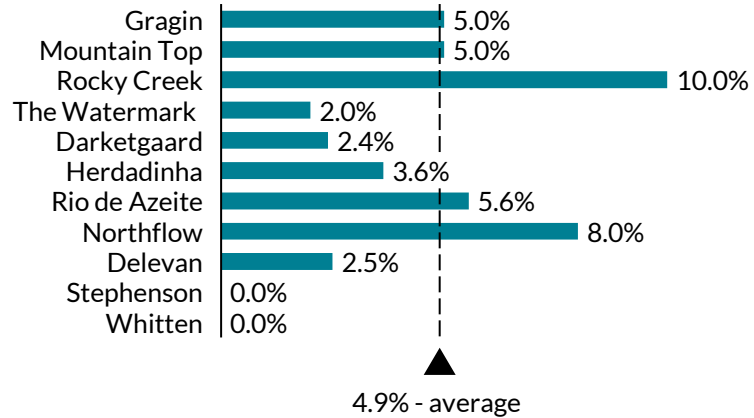
# Theme 7. Conservation of Biodiversity

We aim to manage farmland in a manner that maintains agricultural production while conserving and fostering biodiversity. Conservation of biodiversity in agricultural landscapes focuses on conservation of rare and at-risk species, ensuring nesting capacity for migrating birds, conservation of both natural and managed (e.g., farmed) habitats, avoiding habitat conversion to agriculture, and conserving genetic diversity of crops. The depletion of biodiversity can be combated by planting trees along field edges, creating nature corridors, drainage ditches and ponds etc. Nature-inclusive agriculture reduces the need for artificial fertilisers and pesticides and can lead to improvements to organisms in the soil. Switching and mixing crops are also important to biodiversity.



# Conservation of Biodiversity– survey results

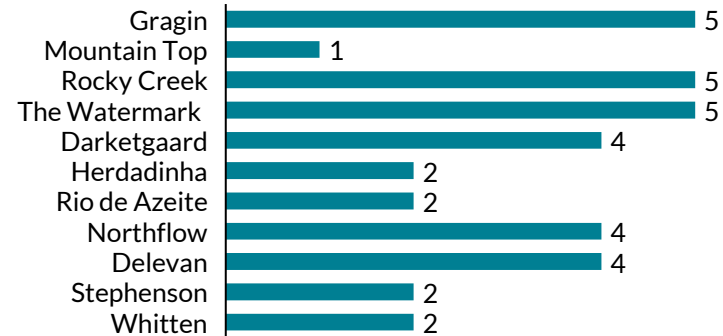
% land reserved for biodiversity



Our global portfolio aims to designate land to create biodiversity corridors or "green corridors".

- These corridors consist of contiguous strips of native vegetation that connect restored landscapes to areas of high biodiversity, promoting the revitalisation of watersheds where biodiversity can thrive.
- Our target is to allocate at least 5% of each asset value to biodiversity areas that provide habitat for local flora and fauna.
- The current average at asset level is 4.9% and we are working to increase this further.
- It is worth noting that the size of individual assets is not considered in this calculation.

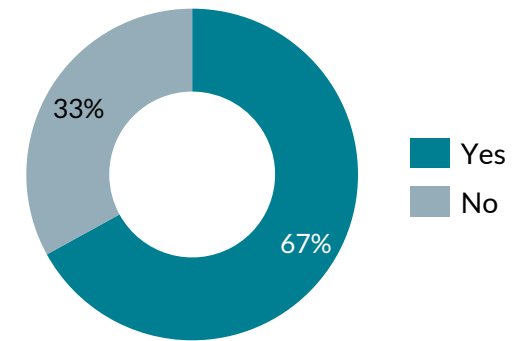
#crops in crop rotation



Our aim is to maintain a minimum level of biodiversity by using appropriate crop rotation, i.e. always growing several crops on one farm.

- The data presented shows the average number of crops used in rotation with row crops, as there is no crop rotation for permanent crops. This excludes the use of a cover crop or winter crop.
- From this information, it is clear that crop rotation in the United States needs to be diversified beyond corn and soybeans to increase biodiversity.

%assets with sensitive ecosystems



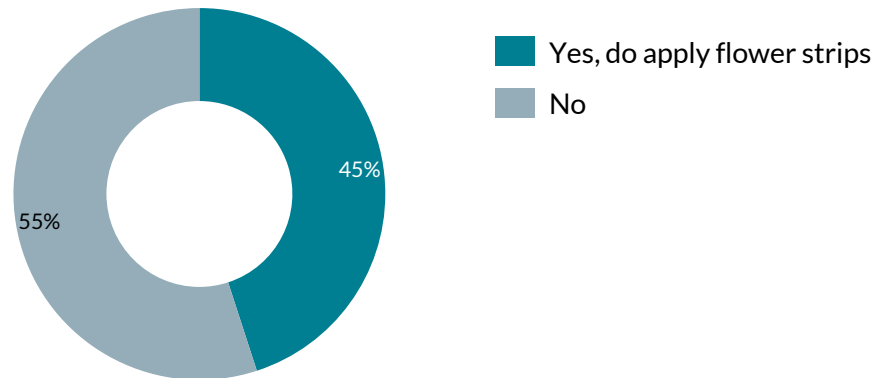
- The Gragin and Mountain Top properties have no identified sensitive areas, while Rocky Creek has some trees with biodiversity value.
- The Watermark has a boundary with a koala habitat, while Herdadinha and Rio de Azeite have cork oaks, a protected species in Portugal.
- Northflow has no designated sensitive areas but borders an Idaho State Park.
- Delavan and Stephenson apply crop rotation and have a minimum rotation period, but no designated sensitive areas.
- Whitten has land dedicated to conservation and habitat, with plans for planting pollinator habitat and an existing conservation easement.





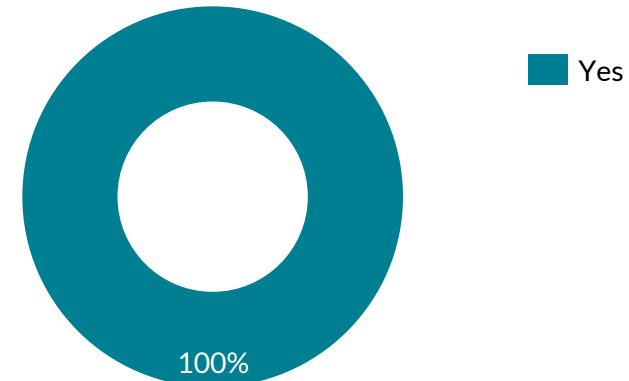
# Conservation of Biodiversity– survey results

% assets that apply flower/pollinator strips and strip farming



- Our aim is to promote strip cropping, a cultivation technique in which a field is divided into narrow strips and crops are rotated between these strips. This method allows for greater crop diversity in a small space.
- Regarding the presence of pollinator habitats at different sites, most plots (45%) have some form of pollinator habitat. However, a small number of plots (18%) either do not have a plan or do not have a specific area designated for this purpose. In addition, some properties have special conservation areas, protected species or sensitive ecosystems that could affect the establishment of pollinator habitats.

% deforestation free farmland



We are committed to preserving forests and will therefore not invest in agricultural land that has been converted from forests (or other areas of ecological importance) in the last twenty years (not a KPI but a survey result)



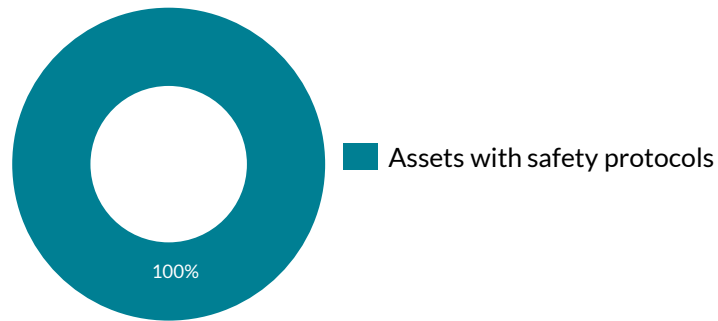
# Theme 8. Employees and Farm Labour

Agriculture presents a challenging work environment because it relies on employees to work independently and in teams in a dynamic yet casual environment with unique human health risks. We strive to provide a safe and healthy working environment, fair compensation and training for personnel, contract management company employees and contract farm labor necessary to improve the practice of sustainable agriculture.



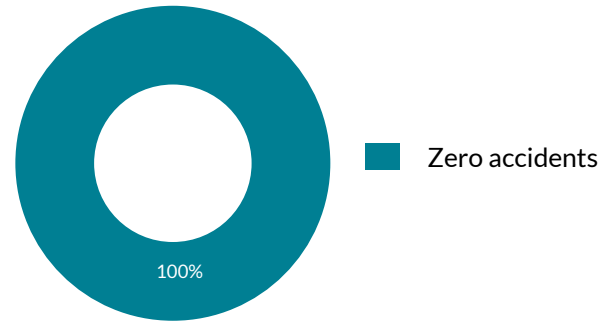
# Employees and Farm Labour – survey results

%of Assets protocols on Safety and Health (if relevant)



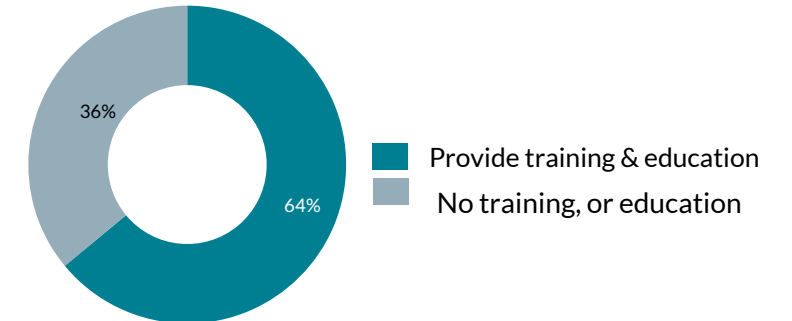
- All assets have protocols for the health and safety of their employees.

Zero Accidents



- The Fund reports zero accidents and is committed to continuing to improve safety protocols as we enter the operational phase with most of the assets.
- At The Watermark, the operator had a minor mishap with a welding flash. Other than that, there were no safety incidents.

%Assets that provide educations & training on the use of machinery



All assets except those in Portugal and the United States provide training and education for operators and tenants. Especially in Portugal, this is a point that the Fund should improve. In the US, training is the responsibility of the tenants themselves.



# Case studies





# The Watermark - New South Wales, Australia

The Watermark was purchased by the Fund in 2022 from a Chinese coal mining business that had acquired the grounds around 15 years prior. Following severe protests from farmers and environmentalists, the mining corporation was compensated for abandoning plans to build a coal mine here. The land was eventually put up for sale. The Kempen SDG Farmland Fund, in collaboration with the Clean Energy Finance Corporation and twelve farming families, successfully bid on more than a third of the land.

The SDG Farmland Fund joint venture acquired 6,000 hectares of the overall 16,000 hectares. Large parts of this land are in need of conversion. This included a significant amount of degraded land that will be revitalised for arable cultivation. Along with the other row crops (Rocky Creek and Gragin) that the Fund owns in New South Wales, we are launching a major soil carbon initiative on The Watermark.

Furthermore, some of the property will be used for environmental management, such as natural vegetation maintenance and replanting. The Fund, in particular, is overseeing the management of a new koala habitat that runs through the property in a corridor, allowing koalas to travel from one side of the property to the other, where a state forest is located. This is done in partnership with the NSW Government.



## Sustainable Farming Practices:

- Zero tillage
- Annual cash crops followed by diverse cover crops
- Integration of livestock for residue management, promoting grass regrowth & mineral recycling
- Allocating areas for environmental plantings
- Reducing inputs and moving to alternative (more biological) inputs

## Sustainability KPIs – what is measured:

- Soil Organic matter / Soil Carbon
- Soil fertility / biological activity
- % Ecological area: maintenance and increase in native vegetation areas
- Reduced use of chemicals
- Soil cover with green cover crops and residues.



# Stephenson Farm - Illinois, United States

When acquiring Stephenson Farm in Stephenson County, Illinois in the spring of 2022, we saw this as an excellent chance to assist an experienced regenerative farmer (a true pioneer, who started using multi-species cover cropping ten years ago) in expanding his operation and implementing a succession plan with the next generation who would continue to follow sustainable farming techniques. Several enhancements to the original investment were made later in 2022.

The tenant (known as 'High Plains') is a family consisting of a father and three children who farm 3,000 acres of predominantly non-GMO corn, soybeans, and wheat. To maintain soil health, boost organic matter, and control erosion, High Plains use cover crops, diversified planting, and shallow tillage. The integration of cattle on agriculture through grazing is a future objective.

Stephenson Farm's acquisition approach focuses on exploiting extensive knowledge of local markets and access to out-of-market prospects. SDG Farmland Fund investments helped High Plains to add roughly 575 acres of cropland to its land base in 2022. The goal for the next five years is to expand by another 1,500-2,000 acres.



## Sustainable Farming Practices

- Reduced tillage practices.
- Utilise cover crops and increase cover crop diversity.
- Maintain a living root in the soil for as long as possible.
- Increase native and pollinator habitat on non-productive farmland.
- Production of non-GMO crops.

## Sustainability KPIs - what is measured

- Level of organic matter
- Soil nutrition / fertility
- Fuel Consumption
- Utilisation of syntenic fertilisers and phytopharmaceuticals





# Rio de Azeite - Alentejo, Portugal

Between March 2021 and June 2022, the SDG Farmland Fund purchased the territories of Monte Branco, Herdadinha, and Alvalade (collectively: 'Rio de Azeite') in three distinct transactions. The assets lie close together and are administered as a single aggregation. At the time of acquisition, the properties were set up as very high-density olive orchards with a small almond patch. In addition, there were ample non-productive areas that could serve to promote biodiversity and local fauna. Since the purchasing of the assets by the fund, some considerable changes towards regenerative farming have been made.

While high-density orchards are very effective in terms of output, this increases the risk of monoculture and its consequences and it is difficult to manage them sustainably. Several initiatives have been launched towards our goal of sustainable management of the orchards, with enough designated ecological areas to ensure that production does not come at the price of local wildlife. Also, the use of cover crops between the rows of olives trees has been implemented to manage the soil more sustainably.

In order to meet our carbon storage targets, we launched a carbon accounting program. Non-productive land is now being used to promote natural plants and local biodiversity. The diesel engines in the pumphouses have been replaced by solar panels, and chemical fertilisers have been replaced by more biological inputs, with the goal of achieving zero residues on the end product. Olive pits and other residual goods are recycled. We have also prohibited night harvesting (which has a negative influence on local birds) and only harvest during the day. We are now able to participate in the EU's LIFE initiative and to use these properties as a showcase for sustainable olive farming.



## Sustainable Farming Practices

- Application of drip irrigation, water and nutrients can be supplied in correct quantities
- Reducing inputs; replace synthetic fertilisers by biological inputs
- Increase the inter row soil coverage
- Implement a zero-residue strategy
- Planting trees, pollinators, installing hives for bees and insects to increase biodiversity

## Sustainability KPIs

- Soil Organic matter / Soil Carbon
- % Ecological area: maintaining /increasing native vegetation areas
- Reducing use of chemicals
- Soil coverage
- Zero residues
- Fuel consumption; replace diesel by solar power



# Appendix



# Growing a Sustainable Future: Regenerative Farming for Achieving SDGs

Regenerative agriculture is an agricultural approach that prioritises soil and ecosystem health, seeks to minimise negative impacts on the environment, and often relies on sustainable and organic practises. Here you can see how regenerative agriculture relates to some of the United Nations Sustainable Development Goals (SDGs):

**SDG 2 - Zero Hunger:** Regenerative agriculture can contribute to this goal by producing nutritious food while conserving natural resources, improving soil health and promoting biodiversity. Through the use of sustainable agricultural practises, regenerative agriculture can help ensure food security for current and future generations.

**SDG 3 - Good health and well-being:** Regenerative agriculture can promote this goal by producing healthy and nutritious food that can help prevent chronic diseases and by reducing the use of harmful chemicals and antibiotics in agriculture. In addition, regenerative agriculture can help improve mental health by increasing access to green space and promoting connection to the natural world.

**SDG 6 - Clean water and sanitation:** Regenerative farming practises can help protect water resources by reducing chemical use and soil erosion, which can lead to better water quality and availability. In addition, practises such as cover cropping and reducing tillage can help improve soil health and reduce runoff, which can lead to less pollution of waterways.

**SDG 12 - Responsible consumption and production:** Regenerative agriculture is in line with this goal as it highlights the importance of sustainable and responsible agricultural practises. This includes reducing waste and improving resource efficiency, using non-toxic and environmentally friendly inputs and minimising negative impacts on ecosystems and communities.

**SDG 13 - Climate action:** Regenerative agriculture can contribute to climate action by sequestering carbon in the soil and reducing greenhouse gas emissions through practises such as cover cropping and reduced tillage. By prioritising soil health and biodiversity, regenerative agriculture can also help build the resilience of farming systems to the impacts of climate change.

**SDG 15 - Living on the land:** Regenerative agriculture is closely linked to this goal as it prioritises biodiversity, soil health and ecosystem protection. By adopting practises such as agroforestry and incorporating native plant species, regenerative agriculture can promote the health of local ecosystems and protect wildlife habitat.

# Uniting for Sustainability: Joint efforts for sustainable development on several levels

Van Lanschot Kempen has a number of corporate initiatives that focus on sustainability and social responsibility. These include memberships in organisations such as Global PRI, ILO, OECD, UN Global Compact and Climate Action 100+. The company also supports the Net Zero Asset Managers Initiative, Finance for Biodiversity pledge and the Global Impact Investing Network. In addition, Van Lanschot Kempen participates in ICGN and the Platform for Biodiversity Accounting Financials, demonstrating its commitment to environmental, social and governance (ESG) issues.

The Kempen SDG Farmland Fund, managed by Van Lanschot Kempen, has several initiatives to promote sustainable agriculture. The fund actively works with its portfolio companies to ensure that they meet the United Nations Sustainable Development Goals (SDGs). The Fund also works with organisations such as WWF and Climate AI to assess biodiversity and climate risks in its investments. These initiatives are in line with the Fund's focus on sustainable and responsible investments in the agricultural sector.

At the local level, there are several initiatives supported by Van Lanschot Kempen and the Kempen SDG Farmland Fund. The Walworth County Water Protection Project in Wisconsin, for example, focuses on protecting the lakeshore from erosion and runoff. Tucker Environmental's Biodiversity Stewardship Programme supports biodiversity and soil carbon projects. The Transforming Farming Platform, a partnership between the fund and the Clean Energy Finance Corporation, promotes science-based sustainable farming practises in Australia. These initiatives demonstrate Van Lanschot Kempen's commitment to sustainability and social responsibility at all levels of the company.



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