

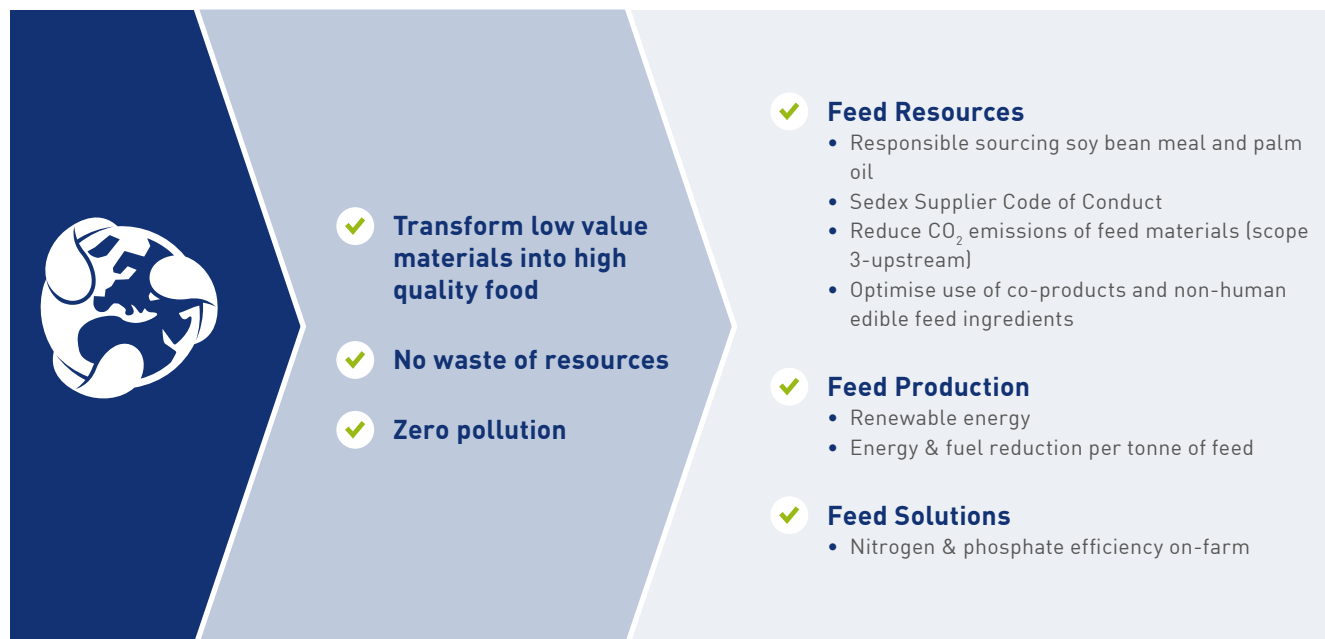
# Our sustainability agenda: Going Circular

Sustainability is a vital topic for ForFarmers. In the years ahead the worldwide agricultural sector will have to feed a growing global population while at the same time considerably reducing its impact on the environment. We work hard to make our business and our activities more sustainable and to contribute to making processes more sustainable both on-site at our customers and throughout the chain.

No food system can be truly sustainable without livestock farming and the products from this industry. For example, animals convert raw materials that are not suitable for human consumption into high-quality proteins. Such as dairy cows eating grass. In addition, ruminant grazing habits promote certain species of flora and fauna and manure from livestock is a valuable organic fertilizer that

improves soil health. As a result, arable farmers, for example, have less need for artificial fertilizer. At the same time it is crucial that livestock farming becomes more sustainable so that the industry does not overburden the planet. ForFarmers has adopted a circular approach to contribute towards making the livestock farming industry more sustainable.

## ForFarmers defines Going Circular as



## Going Circular

### Strategy, governance and implementation

Our approach is set out in our sustainability strategy, Going Circular. The core of the strategy is to convert low-value ingredients into high-quality food without wasting any resources or placing an undue burden on the environment. By doing so we enable farmers to achieve optimal returns with the lowest possible carbon footprint.

Our sustainability strategy contributes to creating long-term value for all ForFarmers stakeholders and is the responsibility of the Executive Board. Our sustainability activities are managed by the Sustainability Task Force, and overseen by the Sustainability Advisory Board, which is chaired by the CEO of ForFarmers. Progress with regard to sustainability is one of the qualitative targets for the long-term variable remuneration of the members of the Executive Board. All countries report on the KPIs in their quarterly updates to the Executive Team and propose initiatives for improving the results. An annual review of the forecasts and progress against the 2025 targets is held with all KPI owners.

To raise awareness of sustainability issues we have established our Ambassadors' Network, an informal network of internal colleagues with an interest in sustainability. Network meetings provide an opportunity to generate ideas and initiate projects in areas such as biodiversity and energy saving. These projects help boost our sustainability performance.

## Sustainable Development Goals

We have aligned Going Circular with three United Nations Sustainable Development Goals (SDGs): SDG 2 (zero hunger), SDG 12 (responsible production and consumption) and SDG 15 (life on land). The SDGs are subdivided into targets, some of which are applicable to ForFarmers.



### SDG 2 – Zero Hunger

**2.4** By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase

*productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.*

#### Our contribution

ForFarmers contributes to feeding a growing world population in a sustainable way. We support livestock farmers to improve their efficiency and resilience. We see to it that they can produce more with less feed. In addition, we focus on improving animal welfare and reducing emissions of greenhouse gases such as carbon dioxide and methane as well as of phosphate and ammonia. We only report on the percentage of nitrogen and phosphate efficiency in the various sectors in the Netherlands, because that is the only country in which there are enough available data to be able to draw reliable conclusions from.



### SDG 12 - Responsible production and consumption

**12.2** By 2030, achieve the sustainable management and efficient use of natural resources.

**12.3** By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.

#### Our contribution

Our target is to source all palm oil and soybean meal responsibly by 2025 and our ambition is to source all raw materials responsibly and transparently by 2030. Furthermore we reduce food waste by feeding animals low-value ingredients which they can convert into high-quality food for human consumption. Many ingredients in our animal feed are residual flows and co-products of primary processing in the food, drink and biofuel industries. Ruminants are able to eat forage which is grown on land that cannot be used for any other purpose. While cereals remain an important feed material for pigs and poultry in particular, we use cereal lots which do not meet the quality requirements for human foodstuffs. We have calculated that around 67% of the feed ingredients we use (excluding Poland) are non-human-edible according to FAO definitions.



### SDG 15 - Life on Land

**15.2** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded

*forests and substantially increase afforestation and reforestation globally.*

**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.

#### Our contribution

As part of the revised 2025 strategy, we are putting more emphasis on sustainable solutions that address societal themes, such as the use of alternative raw materials to combat deforestation. We are even more actively committed to cooperation between the chain parties in the various markets. This is important both ecologically and economically. ForFarmers endorses the Amazon Soy Moratorium of 2006, which ensures that the European feed industry refrains from using soy derived from lands in the Amazon which have been subject to deforestation since 2008. We have also signed the Responsible Soy Declaration of 2019 which allows European feed manufacturers to state their commitment to purchase responsibly produced soy.

Furthermore we are a member of the Round Table on Responsible Soy (RTRS) and the Round Table on Sustainable Palm Oil (RSPO). We are involved in research projects aimed at developing alternative proteins, such as using insects and algae in animal feed. These measures and research efforts are aimed at contributing to a reduction in the use of soy.



### Three central themes

Our sustainability strategy is focused on three central themes: feed resources, feed production and feed solutions. We have short-term objectives for 2025 and longer-term ambitions for 2030. We have formulated ten KPIs for these themes.



#### Feed resources

A large proportion of the CO<sub>2</sub> emissions associated with the production and supply of feed is caused by the cultivation, harvesting, processing, storage and transport of feed materials. We have linked four KPIs to this theme on the following topics:

1. Percentage of responsibly sourced soy meal and palm oil
2. Percentage of suppliers who signed the Sedex supplier code of conduct
3. CO<sub>2</sub> emissions from feed ingredients (scope 3 - upstream)
4. Percentage of ingredients not suitable for human consumption



#### Feed production

We aim to produce and supply feed with minimal adverse impact on the environment.

Emissions from our own activities are relatively limited compared to the overall emissions of the chain. We do, however, have the ability to influence the emissions in the chain. For 2025, we have formulated three KPIs aimed at

reducing carbon emissions per tonne of feed and we have the ambition to emit 75% less CO<sub>2</sub> per tonne by 2030 (compared to 2015).

In line with the ambitions for scope 1, 2 and 3, we are evaluating our next steps towards a net-zero commitment. The three KPIs are:





5. Largest feed mill carbon neutral as proof of concept
6. Renewable energy (50% in 2025)
7. Energy and fuel reduction (10% less per tonne in 2025 compared to in 2020)



#### Feed solutions

ForFarmers strives for balanced use of raw materials throughout the chain. A key on-farm sustainability objective is to improve nitrogen and phosphate efficiency in the animal chain. Livestock farmers use different production systems and set their own technical and financial objectives. The employees of the ForFarmers Nutrition Innovation Centre (NIC) combine laboratory analysis with on-farm feed testing to develop new feed concepts that help livestock farmers reduce emissions of nitrogen and phosphate without losing sight of animal health and welfare.

8. Take a leading position in phosphate efficiency
9. Take a leading position in nitrogen efficiency
10. Feed safety incidents

	Objectives 2025	Ambitions 2030
	100% responsibly sourced palm oil and soy bean meal	100% responsible and transparent sourcing of all ingredients
	85% suppliers signed Sedex code of conduct	
	Take leadership position on reduction CO <sub>2</sub> emissions of feed materials (scope 3 – upstream)	
	Take leadership position on % non-human edible feed materials in diets	
	Largest mill carbon neutral as proof of concept	75% reduction of CO <sub>2</sub> per tonne of feed (scope 1 and 2) compared to 2015
	50% renewable energy	
	10% energy/fuel reduction per tonne feed compared to 2020	
	Take leadership position on % phosphate efficiency	Take leadership position in circular livestock farming
	Take leadership position on % nitrogen efficiency	
	Lost Time Incident frequency rate @ 0.5 (pe 100 FTE) and a 50% reduction <sup>1</sup> in Number of Lost Time Incidents	Creating a Zero LTI Culture
	Reduction of 50% of Feed Safety Incidents <sup>2</sup>	Creating a Zero Feed Safety Incident Culture

<sup>1</sup> Baseline 2019

<sup>2</sup> Baseline 2017 Feed safety = External audit gaps, control authority warnings or fines

## Results for each KPI



### Feed resources

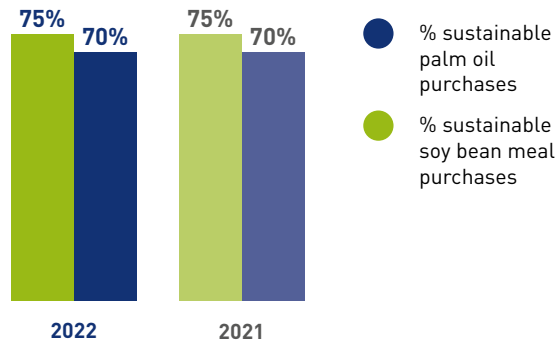
#### 1. Percentage of responsibly sourced soybean meal and palm oil

Growing raw materials such as soybeans and palm oil is associated with deforestation and conversion of natural

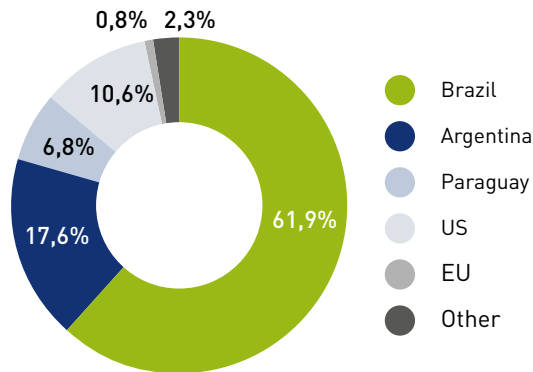
ecosystems. It is our objective to only purchase sustainable soybean meal by 2025. We consider soybean meal to be sustainable if it is certified based on the FEFAC Soy Sourcing Guidelines soy sourcing guidelines. In addition, by 2025 we will only purchase sustainable palm oil and derivatives. This means that we will buy RSPO certificates for the equivalent amount of sourced palm oil and derivatives.

Certification is an effective way to incentivise and reward growers in source countries and ensures that verified quantities of raw materials have been produced in a responsible manner. We opt for certification because it is difficult for us to trace the soybean meal that we use to the land on which the soybeans were grown. We use processed soybean meal, a co-product of soybean oil extraction. At each stage of the supply chain soybean meal

**Percentage sustainable soy bean meal and palm oil purchases**



**Country of origin soy – 2022**



originating from different sources is mixed together. Certification is a way of ensuring that the soybean meal entering the supply chain has been responsibly sourced.

*What was done in 2022*

By 2022, 75% of all soybean meal purchased by ForFarmers was certified, as described earlier. The purchase of RSP0 certificates meant that 70% of palm oil and derivatives met our definition of sustainably sourced. Both figures meet our target for 2022 and are in line with our objective of 100% sustainable purchasing in 2025.

	g CO <sub>2</sub> eq per kg	
	product –g CO <sub>2</sub> eq per kg excluding LUC <sup>(1)</sup>	product – including LUC

Soy bean meal – Argentina	462	4,204
Soybean meal – Brazil	576	4,272
Rapeseed meal	353	596
Sunflower meal	523	637
Peas	649	983
Soybean meal – US	489	540

**2. Percentage of suppliers who signed the Sedex supplier code of conduct**

We aim to purchase raw materials in accordance with recognised social, ethical and environmental standards. We require our suppliers of raw materials to be members of Sedex, a platform that helps companies to operate in a responsible and sustainable manner and which strives to

improve working conditions in global supply chains. Sedex uses a risk analysis that takes into account both the industry and the country in which the supplier is operational. In addition, members of Sedex must provide information on their own policies on risks in areas such as working conditions and the environment. This information is used in assessing suppliers and helps to identify high-risk ingredients or origins. If suppliers are assessed on points with a 'high risk qualification', we ask them to address the points. If that does not happen, we will stop the relationship with the relevant supplier. This creates a foundation for transparent supply chains.

ForFarmers also has its own Supplier Code of Conduct, which was developed in conjunction with Sedex. This includes ethical standards aimed at preventing bribery, discrimination and fraudulent business practices as well as standards for matters such as transparency, environmental protection and working conditions. For example we demand that suppliers respect freedom of association and the right to collective bargaining, that they prohibit child labour and that they pay their staff a living wage. Our code of conduct serves as a reference for suppliers.

	2022	2021
Total	85%	85%

### What was done in 2022

Our objective for 2025 is for 85% of our raw materials suppliers to be members of Sedex and to have signed our supplier code of conduct. The remaining 15% are individual farmers and growers whose organisations are not large enough to be eligible for this, and with whom direct relationships are maintained, including in the field of corporate social responsibility. We have already achieved this objective in 2021.

### 3. CO<sub>2</sub> emissions from feed ingredients (scope 3 - upstream)

Producing and supplying animal feed to livestock farmers causes greenhouse gas emissions. A large proportion of these are scope 3 emissions which are generated

upstream in the chain, released for example by the growing of crops as well as during their harvesting, processing and transportation to our mills. Our objective for 2025 is to have a leading position in terms of reducing these scope 3 greenhouse gas emissions, for example by reporting on them annually. Our ambition is to have reduced these emissions by 30% in 2030 (compared to 2020).

In some cases, for example soy, the impact of land use change (LUC) is included in the calculation of the carbon footprint. The accounting methodology for this is set out in the Product Environmental Footprint Category Rules PEFCR. In order to rule out land having been deforested for the purpose of growing crops or producing raw

materials we must prove that the land has not been cleared in the last 20 years and that no native plants were cleared. The certificates that we purchase include a declaration that the certified farms have not deforested any land in the last 20 years.

### What was done in 2022

Customers and chain partners are increasingly interested in the carbon footprint of the feed that we supply. In some cases we provide this information for each batch of feed. In the year under review we purchased more certificates for 100% LUC-free feed materials. As a consequence scope 3 emissions were lower compared to the previous year.

	2022				2021			
	Excluding Land Use Change		Including Land Use Change		Excluding Land Use Change		Including Land Use Change	
	Kg CO <sub>2</sub> per tonne feed	Total Tonnes CO <sub>2</sub>	Kg CO <sub>2</sub> per tonne feed	Total Tonnes CO <sub>2</sub>	Kg CO <sub>2</sub> per tonne feed	Total Tonnes CO <sub>2</sub>	Kg CO <sub>2</sub> per tonne feed	Total Tonnes CO <sub>2</sub>
Netherlands	547	1,660,978	977	2,967,523	533	1,530,913	795	2,284,199
Belgium	577	170,073	1,077	317,336	548	204,583	850	317,095
Germany	580	390,557	934	628,919	571	423,570	854	633,545
Poland	628	433,189	1,386	955,484	620	381,882	1,357	835,317
United Kingdom	578	921,623	1,177	1,876,171	560	838,101	617	924,399
<b>Total/Average</b>	<b>569</b>	<b>3,576,421</b>	<b>1,073</b>	<b>6,745,433</b>	<b>554</b>	<b>3,379,049</b>	<b>819</b>	<b>4,994,554</b>

#### 4. Percentage of feed ingredients not suitable for human consumption

Livestock is able to convert residual flows from the biofuel, food and drink industries into animal proteins. This principle is at the heart of Going Circular: instead of going to waste the residual flows remain part of the food chain. In so doing the livestock farming sector makes an essential contribution to the circular economy and ecology. It also reduces the need for land to grow feed crops, which means that the land can be used for other purposes.

Land use is a major factor in the debate about the impact of meat consumption on climate change. Research by Wageningen University & Research shows that animals can provide a third of our daily protein requirement without causing competition for land use between feed and food production. ForFarmers is a frontrunner in terms of using residual flows and co-products, as is evidenced by the roughly 3 million tonnes of co-products and residual flows we supply to livestock farmers each year.

##### What was done in 2022

The collaboration between ForFarmers and Sedamyl in the United Kingdom illustrates how co-products can be used. Sedamyl buys wheat from local farmers and processes this into starch for industrial and consumer applications. ForFarmers sells the high energy and protein liquid co-product of this process to livestock farmers under the name SedaGold.

Last year we reported that as from September 2021 processed animal proteins (PAPs) are once again allowed to be used as a feed ingredient for pigs and poultry in EU


member states. PAPs are a protein-rich ingredient with an attractive carbon footprint that can be used as a substitute for soy in certain diets. We started using PAPs in our poultry feed in Belgium and Germany during the year under review.

67% of the ingredients we used this year in the Netherlands, Belgium, Germany and the United Kingdom were non-human edible as defined by the Food and Agriculture Organization (FAO). In 2021 this was 64%.

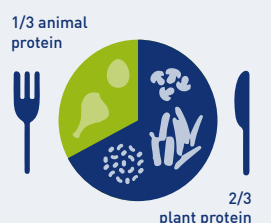
FAO Category	Edible/Non Edible
By products	Non Edible
Grains	Edible
Grass and Leaves	Non Edible
Oil Seed Cakes	Non Edible
Other Edible	Edible
Other non Edible	Non Edible

## The role of animals in a sustainable diet

**Required proteins**  
We need **50 - 60** grams of protein on average per day

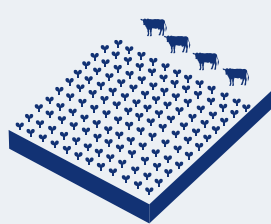


**Sustainable diet**  
Animals can provide **1/3** of our daily protein requirement, without causing competition for land between food and feed

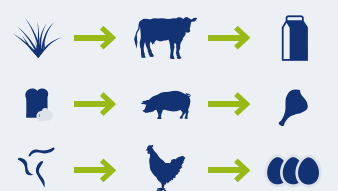


1/3 animal protein      2/3 plant protein

**Animals contribute to optimal land use**  
When **1/3** on the required proteins are of animal sources, **25%** less land is needed than with a diet that is fully plant-based



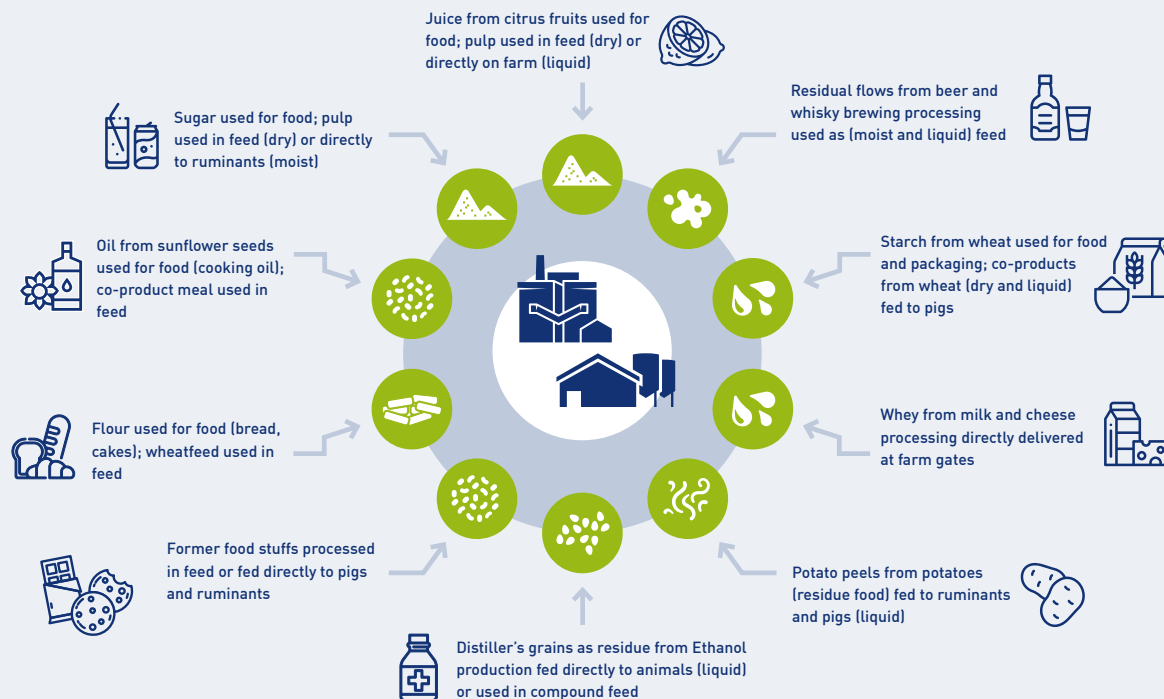
**Animals convert residual flows into high-quality proteins for us to eat**



**Animals graze land that is not suitable to grow crops**

**WAGENINGEN**  
UNIVERSITY & RESEARCH

## Going circular in feed resources



## Feed production

### 5. Largest feed mill carbon neutral as proof of concept

We aim to make our largest feed mill, which is located in Lochem, carbon neutral by 2025. This will serve as a proof of concept for other mills. The local management teams have initiated various other projects aimed at reducing our carbon emissions.

We have three key parameters for reducing our scope 1 and 2 greenhouse gas emissions: energy saving per tonne of feed produced, own generation of renewable energy, and access to renewable energy via the grid and green-energy certificates.

We monitor the greenhouse gas emissions of our activities at all our mills. First we measure the amount of gas, oil, diesel (scope 1) and electricity (scope 2) used in the production of feed and the operation of our vehicle fleet. Then we use published conversion factors to calculate the carbon emissions of our primary energy consumption.

#### *What was done in 2022*

In 2021 we installed solar panels on the roofs of the warehouse and office buildings at Lochem. We also initiated several energy-saving projects in our production processes, including for example more efficient use of the cooling systems, optimising the grinding and mixing lines, process control adjustments to optimise pelleting and the replacement of sieves. These projects, which were continued during the year under review, all help to reduce energy consumption.



In 2022 the conversion factors showed an increase in the share of renewable and nuclear energy we purchased, resulting in a considerable reduction in our carbon emissions per tonne of feed produced.

	2022	2021
Total CO <sup>2</sup>	3.20	20.06

### 6. Renewable energy

We aim to use 50% renewable energy in our transport and logistics operations by 2025. This will be achieved through

own generation of renewable energy via solar panels and, for example, through our biogas plant in Lochem. In addition, we work together with local producers. Part of the electricity and diesel that ForFarmers uses is already renewable.

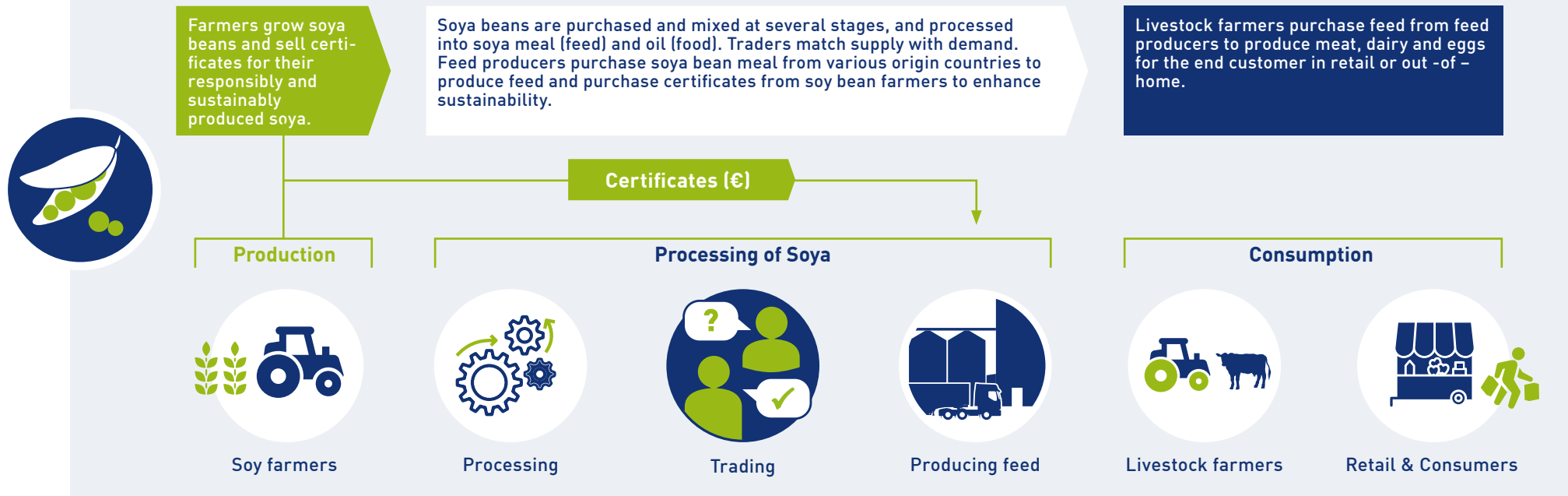
#### What was done in 2022

In December 2021 we joined forces with five dairy farmers in the Netherlands to start work on building a gas pipeline in Oxe, near the city of Deventer. The gas pipeline will supply our mill in Deventer and others with biogas generated on the farmers' farms using the manure from

their own businesses. We will use this biogas to generate steam for the boiler; the steam is needed to press pellets. This biogas is a good, sustainable and even circular alternative to the natural gas that we still use at present. In addition it will make a concrete contribution to our objectives to make our production more sustainable by using renewable energy. We hope to bring the pipeline on stream in the early months of 2023.

	2022	2021
Percentage Renewable Energy	15.54	11.48

### Physical soya supply chain



## 7. Energy and fuel reduction

ForFarmers has various environmental certifications. In Germany and the United Kingdom we are ISO 50001 certified; this helps us improve our energy performance using an energy management system. In the United Kingdom we are also ISO 14001 certified; this helps us improve our sustainability performance using an environmental management system.

We also use an energy saving matrix to reduce our energy and diesel consumption. The matrix comprises over 150 projects, many of which relate to optimising or replacing

existing equipment. We also conduct measurements to refine the process.

### *What was done in 2022*

Greenhouse gas emissions fell by 40% in 2022 compared to the previous year. This substantial drop is linked to an improvement in the carbon conversion factors, which provide a more accurate picture of the share of renewable and nuclear energy in the electricity that we purchase from the grid. Electricity consumption decreased marginally overall compared to 2021,

with increases in the Netherlands, and Belgium offset by improvements in the other countries. Gas emissions were similar to 2021. A significant decrease was reported in Germany, Belgium and the United Kingdom but this was offset by increases in Poland and the Netherlands, including the use of the biomass plant. Diesel emissions fell by 2%. We will continue to assess alternatives to diesel for our trucks but for the time being we still consider LNG to be the best option.

## Greenhouse gas (GHG) emissions (Kg of CO<sub>2</sub> per tonne feed)

	2022						2021					
	Scope 2						Scope 2					
	Production		Logistics		Production		Production		Logistics		Production	
	Gas	Kerosene	Gas oil	Coal	Diesel	Electricity*	Gas	Kerosene	Gas Oil	Coal	Diesel	Electricity*
Netherlands	3.81				5.47	1.22	3.57				5.34	13.91
Belgium	1.85					3.82	2.12					4.82
Germany	3.05					4.85	3.40				5.43	7.80
Poland	2.07		1.00	5.72	8.86	20.12	2.29		0.41	6.36	8.55	22.42
UK	4.69	1.40	0.07		10.98	13.11	5.07	1.03	0.13		11.00	15.47
<b>Total</b>	<b>3.64</b>	<b>0.35</b>	<b>0.14</b>	<b>0.67</b>	<b>8.00</b>	<b>7.24</b>	<b>3.72</b>	<b>1.03</b>	<b>0.21</b>	<b>6.36</b>	<b>8.03</b>	<b>13.91</b>

Greenhouse gas emissions in scope 2 are based on the market method.

## GHG emissions (total tonnes of CO<sub>2</sub>)

	2022						2021					
	Scope 1			Scope 2			Scope 1			Scope 2		
	Production			Logistics			Production			Logistics		
	Gas	Kerosene	Gas oil	Coal	Diesel	Electricity*	Gas	Kerosene	Gas Oil	Coal	Diesel	Electricity*
Netherlands	10,716				6,086	3,434	10,020				5,801	39,051
Belgium	530					1,094	769					1,753
Germany	1,964				1,659	5,155	2,451				2,305	5,627
Poland	1,427		688	3,941	4,272	13,853	1,417		253	3,934	3,849	13,872
UK	6,831	2,034	108		12,843	19,102	7,964	1,613	197		14,069	24,318
<b>Total</b>	<b>21,469</b>	<b>2,034</b>	<b>797</b>	<b>3,941</b>	<b>24,860</b>	<b>42,638</b>	<b>22,621</b>	<b>1,613</b>	<b>451</b>	<b>3,934</b>	<b>26,024</b>	<b>84,622</b>

Greenhouse gas emissions in scope 2 are based on the market method.

The conversion factors used to translate primary energy consumption into CO<sub>2</sub> in 2022 can be found in the sustainability appendix.

## Energy (fuel and diesel) use

('000)

	2022						2021					
	Scope 1			Scope 2			Scope 1			Scope 2		
	Production			Logistics			Production			Logistics		
	Gas (KwH)	Kerosene (KwH)	Gas oil (KwH)	Coal (KwH)	Diesel (KwH)	Electricity (KwH)	Gas (KwH)	Kerosene (KwH)	Gas oil (KwH)	Coal (KwH)	Diesel (KwH)	Electricity (KwH)
Netherlands	58,977				2,460	101,611	55,150				2,345	99,621
Belgium	2,916					7,332	4,232					8,551
Germany	10,808				670	16,737	13,491				932	20,098
Poland	7,841		2,868	12,858	1,727	21,850	7,783		911	12,857	1,556	19,902
UK	37,432	8,240	422		5,021	57,580	43,001	6,531	710		5,687	64,505
<b>Total</b>	<b>117,973</b>	<b>8,240</b>	<b>3,290</b>	<b>12,858</b>	<b>9,878</b>	<b>205,110</b>	<b>123,658</b>	<b>6,531</b>	<b>1,621</b>	<b>12,857</b>	<b>10,519</b>	<b>212,677</b>



## Feed solutions

### 8. Take a leading position in phosphate efficiency

It is important to us to help our customers improve their phosphate efficiency. This reduces losses of and therefore the need for phosphate, which is an increasingly scarce raw material worldwide. Better phosphate efficiency can also contribute to reducing emissions to surface water, while too little phosphate can lead to health issues and poorer animal performance. Improving phosphate efficiency must therefore be done responsibly.

#### What was done in 2022

Phosphate efficiency results are always one year behind the current year due to the availability of data. Given that the data required to calculate phosphate efficiency are available and reliable only in the Netherlands, the scope is limited to the Netherlands.

The data shows a mixed trend for phosphate efficiency in 2021. Efficiency in the dairy sector was unchanged. The dietary fibres were of a lesser quality, meaning that more feed was needed per litre of output. The swine sector reported a slight improvement while efficiency in the broiler sector increased significantly.

#### Phosphate efficiency (only for the Netherlands)

	2021		2020	
	%	Number of farms in sample	%	Number of farms in sample
Dairy	38.3%	2,074	39.6%	2,211
Finisher pigs	56.2%	147	54.6%	197
Sows	41.8%	61	40.6%	75
Closed herds (sows and finishers) *	50.3%	31	48.2%	46
Broilers** - regular	72.3%	138	62.7%	203
Broilers** - animal welfare concepts	60.0%	539	53.1%	466
Layers** - regular	16.8%	31	15.4%	26
Layers** - animal welfare concepts	15.6%	16	14.0%	10

\* The results are one year behind the current year due to data availability

\*\* For broilers and layers the number of flocks in the sample (instead of farms) are included in layers a new outlier correction was introduced to make data more robust. This method is applied to all reported years, leading to some (small) changes vs. reporting in previous year.

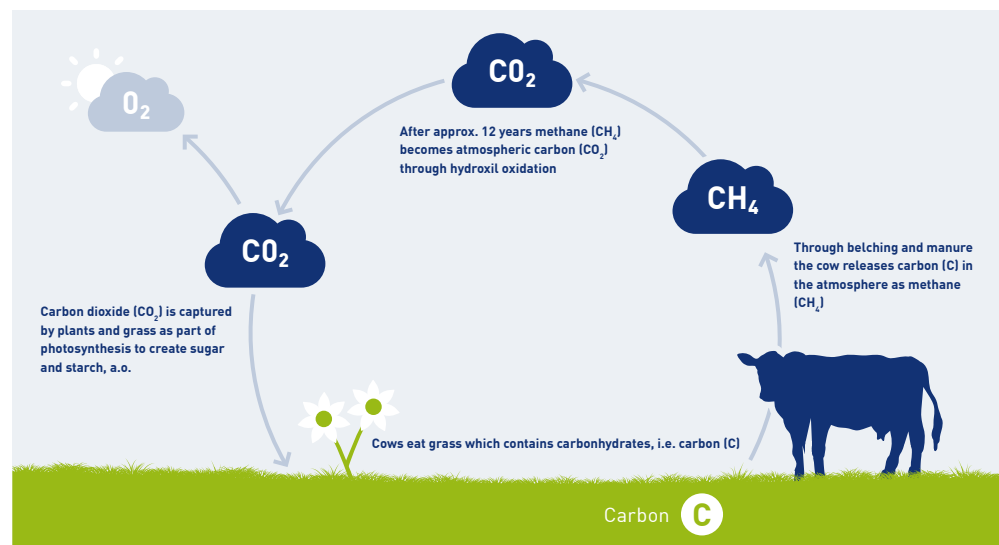
## Nitrogen efficiency (only for The Netherlands)

	2021		2020	
	%	Number of farms in sample	%	Number of farms in sample
Dairy	29.6%	2,074	29.8%	2,211
Finisher pigs	42.9%	160	42.9%	191
Sows	39.3%	65	38.5%	75
Closed herds (sows and finishers)	41.8%	29	41.1%	47
Broilers ** - regular	63.1%	138	61.3%	203
Broilers ** - animal welfare concepts	53.0%	539	51.6%	467
Layers ** - regular	35.3%	31	33.4%	26
Layers ** - animal welfare concepts	33.7%	16	32.0%	10

\* The results are one year behind the current year due to data availability

\*\* For broilers and layers the number of flocks in the sample (instead of farms) are included in layers a new outlier correction was introduced to make data more robust. This method is applied to all reported years, leading to some small changes vs. reporting in previous year.

## Biogenic carbon cycle



## 9. Take a leading position in nitrogen efficiency

Nitrogen efficiency is a key parameter for assessing the environmental impact of the livestock farming sector. High levels of nitrogen in the atmosphere result in the formation of pollutants such as ammonia which can impact biodiversity, soil and water courses as well as human health. Reducing nitrogen depositions near nature areas has become a major topic on the political agenda in the Netherlands. This follows a 2019 ruling by the Dutch Council of State which stated that the Integrated Approach to Nitrogen (PAS) was not compatible with EU nature legislation. One of our objectives is to take a leadership position in nitrogen efficiency.

### What was done in 2022

Nitrogen efficiency results are always one year behind the current year due to the availability of data. Given that the data required to calculate nitrogen efficiency are available and reliable only in the Netherlands, the scope is limited to the Netherlands. The data shows a mixed trend for nitrogen efficiency in 2021

The trend was positive with the exception of the dairy sector, where nitrogen efficiency was unchanged from the previous years. The efficiency in the swine sector reported a slight improvement, partly thanks to the use of high-quality feed and additives. Efficiency in the broiler sector increased significantly. Given the new nitrogen rules it is important that efficiency continues to increase.

## 10. Feed safety incidents

Feed safety is not directly linked to Going Circular but it is connected to corporate social responsibility. A feed safety incident occurs when animal feed does not comply with the legal requirements and voluntary codes. All feed safety incidents are monitored and managed and our goal is zero incidents.

We check feedstuffs and compound feed in accordance with the requirements of EU legislation, GMP+ International, the Feed Chain Alliance, UFAS and QS quality standards, the SecureFeed control plan and our own risk analyses. In each country we ascertain whether the regulations are being complied with. This is done by means of our own inspections, audits by parties such as retailers, and external checks by the relevant competent authorities and external certification bodies.

In the United Kingdom there is an 'earned recognition' agreement between UFAS (the Universal Feed Assurance Scheme) and the national regulator, the Food Standards Agency. As a result there is a different emphasis on risk analysis in the United Kingdom compared to continental European countries, where the national control bodies play a more proactive role.

### *What was done in 2022*

There were five feed safety incidents in 2022, slightly more than in 2021. For each incident, measures have been taken to correct the reported imperfections. For each incident, approval has been obtained for the steps taken during follow-up inspection.

	Non-compliance with regulations resulting in a fine or penalty		Non-compliance with regulations resulting in warning		Non-compliance with voluntary codes	
	2022	2021	2022	2021	2022	2021
Netherlands	0	0	3	0	1	1
Belgium	0	1	0	0	0	0
Germany	0	0	0	1	0	0
Poland	0	0	0	0	0	0
United Kingdom	0	0	0	0	1	0
<b>Total</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>2</b>	<b>1</b>

## Water

The use of water was not identified as a material theme in the stakeholder survey in 2020. Nevertheless, as a responsible organization, we find it important to ensure that as little water as possible is wasted or polluted, both in our own processes and in the chain. In the production process, water is used to generate steam for pressing chunks. We realize that there must be a balance between the use of steam and electricity consumption during the production process. On the farm, we focus on improving efficiency by helping livestock farmers reduce their water consumption. The trend towards feed with less crude protein also translates into lower water consumption by livestock.

## Connectivity table

Theme	Focus area (link to materiality matrix) <sup>1</sup>	Link to SDG	Impact in the value chain	Objective 2025 <sup>3</sup>	Associated risks	Result <sup>2</sup>
<b>Feed Resources</b> 	Responsible and transparent sourcing of feed materials (5,6,7)	12.2 15.2 15.5	Supply chain, ForFarmers, Customers	1 100 % responsibly sourced palm oil and soy bean meal by 2030  2 85% van leveranciers heeft Sedex Code of Conduct ondertekend	Environmental legislation and regulations & Climate change	=
	Limit carbon emissions (1)	12.2 15.5	Supply chain, ForFarmers, Customers	3 Take leadership position on reduction CO <sub>2</sub> emissions of feed materials (scope 3 upstream)	Environmental legislation and regulations & Climate change	-
	Use of non-human edible feed materials (12)	2.4 12.3	Supply chain, ForFarmers, Customers	4 Take leadership position on % non human edible feed materials in diets	Environmental legislation and regulations & Climate change	+
<b>Feed Production</b> 	Reduction in carbon emissions (1)	15.5	Supply chain, ForFarmers, Customers	5 Largest mill carbon neutral as proof of concept	Environmental legislation and regulations & Climate change	+
				6 50% renewable energy		+
				7 Energy/fuel reduction per tonne feed: 10% compared to 2020		+
<b>Feed Solutions</b> 	Nutrient utilisation optimisation in the total value chain (10)	2.4 15.5	ForFarmers Customers	8, 9 Take leadership position on % phosphate and nitrogen efficiency	Environmental legislation and regulations & Climate change	=
<b>People &amp; Society</b> 	Food and feed quality and safety (17)		Supply chain, ForFarmers, Customers	10 Reduction of 50% of Feed Safety Incidents compared to 2017	Feed safety	-
	Ensure safe and good working conditions (19)		Supply chain, ForFarmers Employees, Customers	11 LTI <sup>4</sup> Frequency Rate <0.5 per 100 FTE; 50% reduction in number of LTIs compared to 2019	Health & Safety	+

<sup>1</sup> The Materiality Matrix is presented in the Chapter The dialogue with our stakeholders: the material themes  
<sup>2</sup> Explanation: (+) the results have improved; (=) the results are stable; (-) the results have deteriorated  
<sup>3</sup> Link to KPI  
<sup>4</sup> LTI means Lost Time Incidents



## EU Taxonomy

The EU Taxonomy regulation, which came into force in 2020 is a mandatory classification system to determine which economic activities are considered 'environmentally sustainable'. Accordingly, to classify an activity as 'environmentally sustainable', a distinction between Taxonomy-eligibility and Taxonomy-alignment is required. If an activity meets the description in the Delegated Regulations, it is considered Taxonomy-eligible. Activities can be considered 'environmentally sustainable' if certain criteria are met (Taxonomy-alignment).

The EU Taxonomy regulation covers six environmental pillars, of which in 2021 the Delegated Act was adopted for the first two environmental pillars (Climate Change Mitigation and Climate Change Adaptation), to be followed by the other four in the coming years (sustainable use and protection of water and marine resources, the transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems).

Our ambitions with regard to sustainability, such as our focus on circularity via the use of non-human-edible moist and liquid feeds, or our continued efforts to reduce energy consumption per tonne of feed are not yet covered under the first two environmental pillars of the EU taxonomy. As a result, the current eligibility of these activities of ForFarmers for revenues is still nil (2021: 0%). However, a part of our capex and operational expenses relates to

climate change mitigation and is eligible under the pillar of climate change mitigation in 2022, namely 7.0% of capex (2021: 7.4%) and 4.3% of operational expenses (2021: 2.8%).

In 2022 none of the activities of the EU Taxonomy are aligned. This is mainly the result of not performing human rights due diligence throughout the value chain. Nevertheless, ForFarmers considers human rights important and several measures, like the SEDEX code and supplier code of conduct, are in place to ensure human rights within the supply chain. Next to that, ForFarmers operates in North-Western Europe, complies with local regulations, has internal procedures against bribery and corruption and has a strategic objective to improve and ensure a safe working environment.

Furthermore, ForFarmers has currently no formal process regarding all the "Do no significant harm" (hereafter: DNSH) criteria in place and as a result is not yet able to evidence all detailed requirements. ForFarmers is currently implementing a task force to prepare for human rights due diligence and to evidence all DNSH criteria going forward. As no economic activities qualify as Taxonomy-aligned ForFarmers reports a condensed format of the tables for 2022, which are based on the standard tables as provided in the EU Taxonomy (Article 8 Delegated Act, Annex 2).

## Turnover

Total turnover under the EU Taxonomy equals 'Revenue' as included in the Consolidated Financial Statements. The proportion of eligible Turnover is calculated by assessing which portion of total turnover derives from products or services associated with economic activities included in the EU Taxonomy. Under the first two pillars of the EU Taxonomy, there is no economic activity that clearly matches the business of ForFarmers. It is expected that this figure will increase once the other four pillars come into force, if the production of animal feed will be included in the EU Taxonomy as an economic activity.



## Proportion of 2022 turnover from products or services associated with Taxonomy-eligible economic activities

Economic activities	Code(s)	Turnover (EURm)	Proportion of turnover (%)
<b>Taxonomy eligible activities</b>			
<b>Environmentally sustainable activities (Taxonomy aligned)</b>			
Total Taxonomy aligned		0.0	0.0%
<b>Taxonomy eligible, but not aligned activities</b>			
Total Taxonomy eligible, not aligned		0.0	0.0%
<b>Total Taxonomy eligible</b>		<b>0.0</b>	<b>0.0%</b>
<b>Taxonomy non-eligible activities</b>			
		3,315	100%
<b>Total</b>		<b>3,315</b>	<b>100%</b>

### Capital expenditure

Total capital expenditure under the EU Taxonomy corresponds to the following Consolidated Financial Statements line items:

- Additions, new lease contracts and acquisitions through business combinations in property, plant and equipment and right of use assets (note 18)
- Additions and acquisitions through business combinations in intangible fixed assets (note 19)
- Purchases of poultry livestock, feed and nurture (note 24)

The proportion of eligible capital expenditure is calculated by assessing which portion of total capital expenditure of ForFarmers relates to assets or processes associated with economic activities included in the EU Taxonomy or measures which enables our activities to become low-carbon or lead to greenhouse gas reduction. The conclusion is that eligible capital expenditure is

limited to a small portion of total capital expenditure, and mainly relates to investments in trucks (6.6 – freight transport services by road), IFRS16 additions for lease cars (6.5 – Transport by passenger cars), and investments in energy efficient equipment (7.3 – installation, maintenance and repair of energy efficiency equipment). The decrease in eligibility from 7.4% to 7.0% is mainly caused by a decrease in additions relating to new electric lease cars.

## Proportion of 2022 capital expenditure from products or services associated with Taxonomy-eligible economic activities

Economic activities	Code(s)	Capex (EURm)	Proportion of capex (%)
<b>Taxonomy eligible activities</b>			
<b>Environmentally sustainable activities (Taxonomy aligned)</b>			
Total Taxonomy aligned		0.0	0%
<b>Taxonomy eligible, but not aligned activities</b>			
Transport by passenger cars	6.5	2.2	2.6%
Freight transport services by road	6.6	1.2	1.4%
Installation, maintenance and repair of energy efficiency equipment	7.3	2.4	2.8%
Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings	7.5	0.1	0.1%
Installation, maintenance and repair of renewable energy technologies, on-site.	7.6	0.1	0.1%
<b>Total Taxonomy eligible, not aligned</b>		<b>6.0</b>	7.0%
<b>Total Taxonomy eligible</b>		<b>6.0</b>	7.0%
<b>Taxonomy non-eligible activities</b>			
		79.0	93.0%
<b>Total</b>		<b>85.0</b>	100%

### *Operational expenses*

Total operational expenses under the EU Taxonomy concerns includes the following categories of operational expenditure for ForFarmers: direct non-capitalized costs that relate to research and development, short-term leases and maintenance and repair. As an accounting policy choice, ForFarmers also included in the total operational expenses variable lease payments and low-value leases, refer to note 18 for the related amounts and to note 39 for the applied lease accounting policies.

The proportion of eligible operational expenses is calculated by assessing which portion of total operational expenses relates to assets or processes associated with economic activities included in the EU Taxonomy or measures which enables our activities to become low-carbon or lead to greenhouse gas reduction. The conclusion is that eligible operational expenses is limited to a small portion of total operational expenses, and mainly relates to variable and short-term lease payments for lease cars and the fuel and charging costs of the passenger cars (6.5 – Transport by passenger cars).

ForFarmers avoided double-counting in calculating the Taxonomy-eligible capital expenditure and operational expenses across economic activities by tracking capital expenditure and operational expenses items by their nature.

The increase in eligibility from 2.8% to 4.3% is mainly due to an increase in the variable and short-term lease payments for lease cars.

The innovation of ForFarmers mainly relates to reducing greenhouse gas emission in the production process and/or use of animal feed. As (the production of) animal feed is not included as an economic activity in the Delegated Act adopted for climate change mitigation ForFarmers does not expect to obtain alignment on innovation under the current EU Taxonomy regulations.

### Proportion of 2022 operational expenses from products or services associated with Taxonomy-eligible economic activities

Economic activities	Code(s)	Opex (EURm)	Proportion of opex (%)
<b>Taxonomy eligible activities</b>			
<b>Environmentally sustainable activities (Taxonomy aligned)</b>			
Total Taxonomy aligned		0.0	0.0%
<b>Taxonomy eligible, but not aligned activities</b>			
Production of heat/cool from bioenergy	4.24	0.1	0.4%
Transport by passenger cars	6.5	1.3	3.5%
Close to market research, development and innovation	9.1	0.2	0.4%
<b>Total Taxonomy eligible, not aligned</b>		<b>1.6</b>	<b>4.3%</b>
<b>Total Taxonomy eligible</b>		<b>1.6</b>	<b>4.3%</b>
Taxonomy non-eligible activities		36.7	95.7%
<b>Total</b>		<b>38.3</b>	<b>100.0%</b>